\$3.95 U.S. / \$4.75 Can. / £1.95 U.K.

Ε

S

The World's First Science Fiction Magazine

S





Bruce Bethke Ian Watson Jack Dann ^{and} Jack C. Haldeman II

Dangeons CDragons

The Dragon's Tomb A rousing tale of Arthurian fantasy and magic

Alas, all is not well in the land of Penhaligon. The legendary knight, Fain Flinn, lies dead, his ashes blowing in the wind.

An embittered Johauna Menhir takes up Flinn's fabled blade, Wyrmblight, and vows vengeance on the villains who wrought her master's death. But the squire's duty lies first to the house of Penhaligon. Jo and her comrades return to the Castle of the Three Suns bearing a mysterious package found in the lair of the dragon Verdilith.

Suddenly, the magic within the castle fails. All eyes turn on the malevolent mage Teryl



malevolent mage Teryl Auroch. Jo sets out to find Auroch and discovers instead the tragedy of an ancient race.

The Dragon's Tomb, Book Two of the Penhaligon Trilogy, by D. J. Heinrich, is available in April at book and hobby stores everywhere.

ISBN 1-56076-592-5 \$4.95/CAN \$5.95/U.K. £3.99

You'll also want to read The Tainted Sword



Book One in the Penhaligon Trilogy, by D. J. Heinrich, is on sale now.

ISBN 1-56076-395-7 \$4.95/CAN \$5.95/U.K. £3.99



DUNGEONS & DRAGONS and the TSR logo are trademarks owned by TSR, Inc. ©1993 TSR, Inc. All Rights Reserved.

Advanced Dungeons FOR THOSE WHO WOULD GIVE ANYTHING FOR A THIRD EYE.

THE GRAND FINALE OF THE MEANEST 3-D GRAPHIC ADVENTURE SERIES EVER!

If you thought it would be impossible to top the first two "Eye of the Beholder" adventures, you're in for a deadly surprise in **Eye of THE BEHOLDER III: ASSAULT ON MYTH DRANNOR.** Behold Eye III, with the hottest graphics, a devilishly deep plot, and more cinematics than ever.

This time you're transported to the ruined city of Myth Drannor in the



IBM CLUE BOOK AVAILABLE!



TO ORDER: Visit your retailer, or call 1-800-245-4525 with Visa/MasterCard orders (USA and Canada only).



FORGOTTEN REALMS® world, where you must wrest an artifact of divine power from the dread lich Acwellan. A massive monster bestiary awaits your journey through the forest, mausoleum, temple, and guilds.

The never-ending complexity with more character action, plots and subplots requires you to think on your feet or perish. The streamlined interface with the new ALL ATTACK button gives you the smoother moves you'll need to survive in combat.

Eye III is an assault on your senses, with three times more cinematic intermissions and five fully-scored music

pieces. Plus the ability to import your favorite characters from Eye II, along with weapons, treasure and experience levels. The way the developers of Eye III see it, if you're going to go out, you might as well go out in style. Who knows, 40-100 hours later, you might just see the light at the end of Eye III. Then again, you might not.



DUNGEONS & DRAGONS FORGOTTEN REALMS, and the TSR logo are trademarks owned by and used under license from TSR, Inc. @1993 TSR, Inc. @1993 Strategic Simulations, Inc. All rights









11



26



65



Kim Mohan

REFLECTIONS

Robert Silverberg 5

FICTION

- The Single-Bullet Theory by Bruce Bethke 7
- The Ghost in the Machine by Mark J. McGarry 11
- Mastermind of Oz by Lawrence Watt-Evans and B. W. Clough 20
- Dream World by Michael McCollum 26
- A Visit to the Farside by Don Webb 31
- The Boy Who Loved Clouds by Maya Kaathryn Bohnhoff 37
- Powers of Flight by James Sallis 46
- Thunder-Being (Part One) by Jack Dann and Jack C. Haldeman II 65





46

NONFICTION

30 Abou	it the Authors
---------	----------------

- **48** Negentropy Rules OK: The Refloating of New Worlds by lan Watson
- **53** Tomorrow's Books compiled by Susan C. Stone and Bill Fawcett
- 62 The Resources of the Moon by Stephen L. Gillett
- 94 Back Issues and Anthologies

LOOKING FORWARD

- 57 The Craft of Light by Ru Emerson
- **59 Glory** by Alfred Coppel



Cartoons by Scott Arthur Masear (pages 36 and 93)



8160-04

Volume 68, Number 1 (Whole Number 581) April 1993

Publisher

Lorraine D. Williams Editor

Kim Mohan Assistant Editor

Janis Wells

Editorial Assistant Lisa Neuberger

Design and Production Sarah Feggestad

Paul Hanchette Dawn Murin

Marketing Manager

Jim Fallone Advertising Manager

Cindy Rick

Circulation Manager Janet Winters

AMAZING® Stories (ISSN 1058-0751) is published monthly by TSR, Inc., P. O. Box 111 (201 Sheridan Springs Road), Lake Geneva WI 53147.

Subscriptions: The price of a subscription is \$30 for 12 issues (one year) sent to U.S. or Canadian addresses. For subscriptions sent to all other countries, the rates are \$50 for surface mail or \$90 for air mail. Note: All subscriptions must be paid in advance in U.S. funds only. Prices are subject to change without notice. All subscription orders should be sent to TSR, Inc., P.O. Box 5695, Boston MA 02206.

Distribution: Random House and its affiliate companies have worldwide distribution rights in the book trade for English language products. Distributed to the book and hobby trade in the United Kingdom by TSR Ltd.

Submissions: AMAZING Stories welcomes unsolicited submissions of fiction manuscripts. Guidelines for fiction writers are available by sending a #10 SASE to the Lake Geneva address. Illustrators and writers of nonfiction should query first and provide samples of published work.

AMAZING, the AMAZING logo, and FORGOTTEN REALMS are registered trademarks owned by TSR, Inc. RAVENLOFT, XXVc, and the TSR logo are trademarks owned by TSR, Inc.

Copyright ©1993 TSR, Inc. All Rights Reserved.

Printed in the United States of America. Reproduction or use of editorial or pictorial content in any manner without permission is prohibited.

Second class postage paid at Lake Geneva, Wis., and additional mailing offices. Postmaster: Send address changes to TSR, Inc., P.O. Box 111, Lake Geneva WI 53147.

Cover Art by Tim Hildebrandt

Loads of New Ideas

Kim Mohan

AMAZING[®] Stories begins the 68th year of its existence with this issue. The anniversary seems like an appropriate time to take stock of where we've been—and especially where we're going. So I sat down the other day and had a brainstorming session with myself. I decided it's important for the magazine not to show its age, not to become a creature of habit. We've done a lot of good things, but we can do more. We can not only be good, we can be revolutionary.

Planning to do something remarkable and actually bringing that plan to fruition are two drastically different things. But I'm here to promise you that the plans I'm about to reveal can and will be realized. For one thing, none of these ideas is especially difficult to follow through. All it takes is the strength to be different, the courage to do what other magazines haven't dared to do (or haven't thought of). And we have that courage. So, here are the ideas:

Rejecting stories is an unpleasant and unavoidable part of an editor's job, and there's nothing I can do to change that. But I can make slogging through the slush pile a little more exciting for me and for the hundreds of people who contribute to that pile every month. Starting sometime real soon, we're going to institute a sort of lottery: Once a month I'll pick a story out of the pile at random, and we'll clean it up as much as possible and publish it. After all, today's unknown could be tomorrow's celebrity—and how is that ever going to happen unless we force the issue?

It won't be easy to identify the lottery-winning story in every issue, thanks to another brainstorm of mine. In order to get published, the winner will have to agree to have his or her story published under a pseudonym—a pseudonym of my choosing, and one that just happens to be spelled the same as the name of a well-known writer I don't like very much. (I have several to choose from already, and the list keeps on growing.) I *really* like that idea.

Lots of studies have shown that magazine readers enjoy contests-as long as the contests aren't too tough. So I've thought of one that (a) isn't too tough and (b) doesn't take any extra work on my part. Once in a while, we'll assemble an issue just like usual-except that all the story illustrations will be mixed up: The artwork for story number three will be displayed on the title page of story number six, the art for story number four with story number two, and so forth. The first ten readers who figure out that the artwork is jumbled up and send in entries correctly matching the stories with their illustrations will win something. Anyone who sends in an entry for an issue in which the artwork is not jumbled up will be permanently ineligible to win anything.

Finally, here's the idea I'm most proud of, because it's the only one that has no chance of being seen as a gimmick.

One of the most effective ways of keeping reader interest high for a long span of time is publishing a series of related stories. I have an idea for just such a series, and one of these days real soon I'm going to start commissioning several famous writers to contribute to it. The central character, so to speak, is a futuristic straight razor that has been technologically enhanced so it never gets dull. (Never gets dull-get it?) It's also infused with a kind of temporal energy, so that every few days it blips out and reappears in someone else's bathroom in a new time stream. Kind of like Quantum Leap, but without the Dean Stockwell character.

Over and over again, the razor finds itself in new and unexpected circumstances. What will be in store for it in the next episode? Will it be used to clean someone's fingernails, or to hurt someone, or will it lead a fulfilling existence by being used for its intended purpose? Will the poor thing ever find its way back to its original owner? Personally, I think the "Shaver Mystery" has a lot of potential, as long as I can find some really sharp writers to pull it off.

Lest you think that any of the foregoing was written in seriousness, and if you haven't already figured out what's going on, go back and read the first letter of every paragraph . . . and have a nice month. \blacklozenge

Reflections

Robert Silverberg

Just in case you were starting to think that you didn't have enough to worry about, let me call Comet Swift-Tuttle to your attention.

Comet Swift-Tuttle is more your problem than mine, actually. I am, statistically, pretty far along the demographic curve, and if I am still around very deep into the twentyfirst century, I'll be doing quite nicely as current life expectancy tables go. You, though, are a lot younger than I am—according to the odds, anyway. You are almost certainly under fifty, very likely are under forty, may be only thirteen or fourteen. (*I* was thirteen when I started reading *Amazing Stories*. Harry Truman was President then.)

Since you belong to a later generation than I do, you have a fine chance of living on beyond the middle of the next century, which I probably do not. And if you can live that long-people who are thirty years old today should have an excellent shot at living to ninety, which would take them to the year 2053you may be offered a chance, thanks to the wonders of medical science in the mid-twenty-first century, to live to a virtually Methuselan old age. Let's say a life span of a hundred eighty years may be attainable for some people who are now alive.

If that's so, then those people had better start worrying about Comet Swift-Tuttle now. Because there is, it turns out, a high probability that Comet Swift-Tuttle is going to strike the Earth on the fourteenth of August, 2126, and if it does it might very well wipe out all life on this planet.

What a miserable ironic twist! Here you are, moving along nicely through your second century and beginning to think you might just live forever, and a little chunk of cosmic debris comes along and deprives you of immortality!

Will it happen?

One chance in ten thousand, the astronomers say. That sounds pretty slim. On the other hand, your local state lottery pays off at odds of several hundred thousand to one or worse, and that doesn't stop a lot of people from plunking down actual legal tender cash every week to buy those one-in-several-hundred-thousand tickets to instant wealth.

The news on Swift-Tuttle came forth last October from the International Astronomical Union, the global astronomy authority, in its otherwise quite routine Circular No. 5636. Circular No. 5636 offered a fairly abstruse set of calculations, covering about a page, for the orbit of Swift-Tuttle. Hidden away in the sober mathematical text was the observation that the comet might just collide with the Earth on August 14, 2126, and therefore it would be "prudent" to begin tracking Swift-Tuttle more closely than we have been doing, in order to learn whether it is in fact really going to hit us.

Swift-Tuttle, which is heading this way at a speed of 37 miles a second, is a nifty six miles in diameter—that

is, the chunk of ice and rock that makes up its body is. Its tail is a lot bigger, which is why we know about Swift-Tuttle at all. An astronomer named Lewis Swift first sighted it in the sky over upstate New York on July 16, 1862, and three days later an independent sighting was made at Harvard by Horace Tuttle. In September of that year the new comet became bright enough, briefly, to be visible with the naked eye, and it was known for a while as the Great Comet of 1862, though now, of course, it bears the names of its discoverers.

An object six miles in diameter traveling at 37 miles a second will make a considerable bang if it hits the Earth. The impact will be approximately that of the entire combined nuclear arsenal of the United States and Russia exploding simultaneously in the same place. The crash isn't going to split the planet apart, or anything like that, but it will raise a considerable cloud of dust, enough to blot out the warmth of the sun for quite a long span of time. Those of you who are around to witness the event are going to experience some very hard winters thereafter, possibly on the order of those that apparently wiped out the dinosaurs and many other life forms on Earth 65 million years ago after what seems to have been a lesser collision. Another round of mass extinctions, this one including us, is a reasonable consequence of the arrival of Swift-Tuttle in, let us say, the middle of Kansas (or Bordeaux, or Tadjikistan).

Will it happen?

One chance in ten thousand, the astronomers figure.

But that is only a guess, because Comet Swift-Tuttle has not been very carefully observed since Civil War times. Its orbit was so imperfectly understood that its return was expected in 1981, which turned out to be eleven years off the mark. A Japanese amateur astronomer named Tsuruhiko Kiuchi finally spotted the tardy Swift-Tuttle in September 1992, using only binoculars. The comet remained visible in the northwestern sky throughout most of the fall of 1992. (And helped to replenish the annual summertime Perseid meteor showers, which apparently are made up of cosmic junk shed by Swift-Tuttle in previous passes through our vicinity.)

Last year's new sightings of Swift-Tuttle provided the information that led to the conclusion that the comet's next visit to these parts-now pegged for the ominous August 14, 2126, date-will bring it disagreeably close to Earth. This time around, it missed us by 110 million miles. The 2126 pass will be closer, although the current calculations indicate a strong probability that no collision will actually occur. But, say the astronomers, the possibility exists that "nongravitational perturbations"-by which they mean eruptive forces at work on the comet's surface, which increase as the comet approaches the sun and are capable of shifting its orbit-may dump Swift-Tuttle right into our laps on the fateful 14th of August.

When something along these lines happened to the dinosaurs, they had no choice but to stand there and take it, of course. The giant reptiles were apparently smarter than they used to be given credit for, but they didn't have much in the way of technology. And so the cosmic collision brought a long global winter upon them and the poor things, it seems, froze in their tracks.

We have other options. We are capable of causing some "nongravitational perturbations" of our own, and swatting incoming comets away before they hit us.

It isn't an easy job, you understand. One possible solution would be to land a nuclear or chemical reactor on the comet's surface that would turn its ice into rocketlike jets of steam and nudge it into an orbit safer for us. But that would require decades of advance planning and would create political problems besides. Is it imaginable that Congress would appropriate billions of dollars right now to deal with a calamity still more than a century in the future? Are there not pressing needs that must be met right away, people would say, et cetera, et cetera-the homeless, the Bosnians, the savings and loan institutions . . .

Given humanity's tendency to procrastinate, that sort of fine-tuning of Swift-Tuttle's orbit won't get done on time. In which case, what we will have to do if we wait until the 22nd century is upon us is to swat the comet with a great wad of high explosives and knock it out of our way. For that, we would need to assemble a fleet of rockets with nucleartipped warheads powerful enough to knock a six-mile-diameter comet off course, and send them up there early enough so that the blast, when it came, didn't take place right over our heads. Getting rid of Swift-Tuttle might require a nuclear explosion 100,000 times as mighty as the one that destroyed Hiroshima-and, says Dr. Brian G. Marsden of the Harvard-Smithsonian Center for Astrophysics, who issued last October's Swift-Tuttle alert, "If we have to take evasive action, the place to do it is out beyond Saturn. But we can leave that to our descendants. Now we have to figure out whether there is really any threat."

Some scientists don't think so. Dr.

Alan W. Harris of NASA's Jet Propulsion Lab in Pasadena says that he sees at most a "tiny" chance that the comet will hit us. But even he hedges that by noting that gravitational forces of which we are presently unaware may interact with Swift-Tuttle in the remote reaches of the Solar System. "It could be subject to major perturbations in the outer planets," he says. "It's hard to make predictions that hold up for 134 years."

Indeed. Which means that we will have to watch Swift-Tuttle closely from now on, especially as it makes its re-entry to the outer reaches of the Solar System in the early twentysecond century. Binoculars will not be sufficient: sophisticated new tracking techniques will be required so that we can better calculate the odds. We will not want to spring for the expense of assembling that gigantic space armada and setting off colossal nuclear explosions in space if Swift-Tuttle is going to zip harmlessly by.

Our astronomers, let us hope, will keep us informed. Our politicians and our military leaders, let us hope, will react in appropriate ways if they are told that a comet is going to smack into us in another twenty years—or ten, or five.

Those of you who expect still to be alive and ticking a century and a quarter from now should keep all this in mind; and I'm sorry if I've spoiled your day.

I do, at any rate, have good news from another corner of the scientific world. The next ice age, which was feared to be likely to fall upon us in a piddling few centuries, is now thought still to be perhaps ten thousand years away. So those of you who are planning on *really* long lives can forget about laying in that extra cord of firewood just yet. But we can talk about that some other time. ◆

The Single-Bullet Hard the second sec

Bruce Bethke

Illustration by Jill Bauman

was a musician before I joined the Extermination Squad. Good guitarist, fair singer, moderate to competent on the piano; a tolerable drummer in a pinch. My band was touring Iowa when I met a little blue-eyed girl with hair blonde like cornsilk and tits sweet as sugar. She claimed she was a virgin, and that night, in my motel room, she was clumsy enough for me to believe it.

The next morning she told me she was only a virgin in spirit, and that she was infected with HIV.

I cried. I raged. I tested positive three months later, and spent a year in utter screaming sleepless hell before the doctors finally decided it was a false reading. When the men from the Extermination Squad came to recruit me, I was ready.

"How'd you like to get back at that little bitch who tried to infect you?" Smith asked.

"With a Winchester," I answered.

"You can't," Jones said. "She's dead. But there are thousands more like her out there; people who *know* they carry the disease, and don't care who they pass it on to. Men and women who are dying and angry and want to drag the whole world down with them. We're taking them out of circulation, one by one."

"With Winchesters, when necessary," Smith said.

We shook hands. I noticed he was wearing surgical gloves.

Two years in the Squad: eighteen missions, twenty-six confirmed kills, sixteen of them bloodless no-inquiry "accidents" and one of those a prominent televangelist. That's when they finally dropped all pretense of being a radical fringe group and set me up for a clandestine meeting with the President.

The President.

"So you're David Clark?" he said, grinning broadly and offering me a handshake. His hands were doublegloved. He reeked of antiseptic. "They tell me you're the best of the best."

"They're right." His handshake was weak-wristed, nervous. For a moment I wondered . . .

His smile faded. "You've been on the front lines for two years," he said, as he led me out of earshot of his handlers. His voice dropped to a conspiratorial whisper. "Tell me honestly: how goes the war?"

I stopped walking. "Honestly?" He nodded.

"We're pissing against a river," I said. "For every vector we retire, ten more go into circulation. There are five million infecteds in the U. S. . . ."

"Fifteen million." He shrugged. "So we lie to the public. That's news?"

"Fifteen million, then," I continued, "every one of them a potential loose cannon. Most people act responsibly once they learn they have the disease, but we have no way of spotting the irresponsibles before they turn into transmission vectors, and by then it's too late."

The President looked pained, and thoughtful.

"We're losing the war," I said.

He sighed and looked away.

I waited.

"Mr. Clark," he said at last, "what would you say if I

told you there was a way to save all fifteen million? Good, bad; responsible, irresponsible; gay, straight; Republicans, and yes, even Democrats. We have it in our power to save them all. Today." I started to speak; he waved a hand to stop me. "There's just one catch." He turned and looked me straight in the eye. "*You* would have to die."

I barely hesitated. "Then I'd die."

He smiled. "I thought that would be your answer." He turned away again, took a step, clasped his hands behind his back. "Have you ever heard of Cheyenne Mountain?"

"That big, supposedly secret, SDI base in Wyoming?"

"That's another lie," he said. "SDI was a lie. The superconducting supercollider was a lie. The Reagan/Bush administration spent ten years and forty billion dollars building a Time Portal under Cheyenne Mountain." He looked over his shoulder at me and locked me with a stare. He seemed completely serious.

"Time Portal, sir?"

"The ultimate preemptive strike against the Evil Empire," he continued, looking away again. "Kill Marx and Lenin when they were children. The mission was on hold for technical reasons when the Berlin Wall fell." He took another step.

"The Portal is still there. Still operational. Still ready. Still in daily use, in fact." He paused, to let that sink in. "We've been scanning the past for years, and are now confident that we've identified the one promiscuous bisexual man—in your terms, the one *radical vector*—responsible for first bringing the HIV virus into the United States."

He turned around and smiled sadly at me. "It'd be a one-way trip, Dave. We can send you, and we can monitor you once you get there, but we'd never be able to bring you back to the present. You'd live out your life and die there, a stranger, marooned in a strange and hostile past."

"But fifteen million lives would be saved?"

He nodded.

"When can I leave?"

He held up a hand. "Not so fast. There's one other catch: we can only send *you*. No weapons. Once you step through the Portal, you'll be completely dependent on what you can beg, borrow—or steal—in the past."

"You mean, I go through naked?"

The President laughed. "Don't be a moron, Dave! If the Time Portal burned off all your body hair and fingernails, you'd be just one *bell* of an inconspicuous assassin now, wouldn't you? No, the problem is there's enough microwave radiation inside that thing to flambé polyester and make metal zippers spark like a pie tin in a Radarange. We don't want to risk damaging the *Portal*! You'll have to get your silver dental fillings drilled out, of course, but you'll go through in a button-fly Brooks Brothers worsted wool suit and oxblood leather penny loafers. You can find pennies once you get there."

After the Novocaine wore off I reported to Cheyenne Mountain, where I spent the next two months studying my target. The Time Portal was a fantastic machine: the lab boys loved to show me how they could bounce around the planet like Robin Leach, change viewpoints like a bad French film director, and roll history backwards and forwards like so much videotape. They had the most *incredible* home movies of Marilyn Monroe....

But after a few weeks we got settled down, and by the end of week six I knew my target better than his proctologist did.

Name: Basil Walker. Age at time of death: 42. Occupation: bad theatrical producer/director/agent/impresario. Sexual preference: yes. Window of opportunity . . .

Ah, now *that* was the problem. As far as we could tell, Basil contracted the virus in the summer of 1961, while on a vacation safari to western Africa. In late August he returned to his home town of Liverpool, England; a few days later he went down to London and boarded a BOAC flight for New York, where he visited his many dear friends in the fashion business and began gleefully exchanging fluids with anyone with a bodily orifice. Three years later he was dead of a mysterious ailment that baffled his doctors and became a footnote in medical textbooks.

My first thought was to nail him in Africa, but it turned out that the Portal was built with a decidedly Northern Hemisphere bias and its power tapered off rapidly south of the equator. Jones then put forward the idea of materializing an eighteen-pound Butterball turkey inside one of the engines of the BOAC jet, but Smith ruled that out for technical reasons. After reviewing Jayne Mansfield's Acapulco weekend a few times and sending a pound of buttered popcorn back to ourselves through the Portal (two minutes of negative time and it's done to perfection the very instant you thought you wanted it), we settled on the time in Liverpool as the best opportunity. After spending a few days confirming that Basil didn't exchange bodily fluids with anyone except his left hand during that period, we narrowed our focus and began to search for the right time and place. I needed an opportunity, a method, a place without witnesses or innocent bystanders, and a ready escape route. . . .

"Look," I said after one particularly fruitless afternoon, "you thought you could stuff a turkey in that jet engine. Can't we just materialize a chicken bone in his throat or something?"

Smith looked at Jones. Jones shook his head.

"Well, why not?"

Jones looked at Smith. They both nodded, then turned to me and said in unison, "Technical reasons."

A week later, we had our solution. Leo Spinelli was an officer in the Home Guard during the war; in 1961 he still kept a very illegal Enfield rifle and a box of shells in the bedroom closet of his second-floor apartment. On Sunday, September 3, Spinelli would be off visiting his mum for the entire afternoon; at precisely 13:27 GMT Basil would round the corner, cross the street, and stop directly opposite Spinelli's dining room window, to lean against a red brick wall and light a cigarette. True, I'd be using a forty-year-old rifle and twenty-year-old shells, but hell, at that range I could bag him with a Carcano. We sent ourselves some more popcorn, watched the Elizabeth Taylor honeymoon montage one last time, then shook hands all around and switched the Portal to transmit mode. As Smith locked me into the booth and started the spin cycle I heard Jones begin screaming at one of the technicians:

"No, dammit, I need an *exact* altitude on the TMI geosynch reflector! If it's off by so much as a foot he'll materialize waist-deep in the floor or with his head stuck through the—"

No lightning. No thunder. Not even a good loud thump to disturb the downstairs tenants. With just the slightest *whuff!* of displaced air, I manifested in Leo Spinelli's dining room.

I checked the newspaper on the table. September 3, 1961. I checked the clock on the mantelpiece. It wasn't working.

I checked the clock in the bedroom. 1:15. There was a pile of loose change on the bedside table; the pennies were much too large, but the sixpence fit my shoes rather nicely. Opening the closet door, I pushed aside some *nasty* raincoats and a pile of nudist magazines and found the rifle. There was a loaded magazine on the top shelf; I snicked it into place, put the gun to my shoulder, and squinted through the sights.

Ugh. At least Leo could have *cleaned* the thing.

I went back into the dining room, set the rifle on the table, and began working on getting the window open. The sash was painted shut; the screen was bolted on from the outside. Soon as the mission was complete, I decided, I was going to have to invent combination storm windows. I got down on my knees by the radiator, to get leverage on a particularly sticky latch.

There was the slightest *whuff* of displaced air behind me. I spun around.

I was standing there.

"The mission's scrubbed, Dave," he—I—whoever said.

"Parallel universe?" I asked.

"Alternate timeline," he answered. "There's an HIVpositive west African exchange student waiting on standby down at Heathrow, hoping to catch a flight to New York. In your timeline he didn't make it, and died a day later in a traffic accident. In my timeline he got Basil's seat and met the chairwoman of the Vassar Girls for Kennedy at a pot party in Greenwich Village. HIV hit the heterosexual population a decade early, at the very peak of the Sixties sexual revolution."

"So?" I went back to working on the window latch. It came free with a *pwanng!*

"So virology is in its infancy, Dave. Designer drugs don't exist. They don't even have the scanning tunneling electron microscope, for God's sake."

"So?" I levered the sash up about eight inches and started working on the screen.

"So if you pull that trigger, forty million die."

That did give me pause.

There was the slightest *whuff* of displaced air.

There was a third me in the room.

The Single-Bullet Theory

"Aw, don't let him give you that crap," Number Three said. "I've been studying up on this African. There's a Jaguar down the block with the keys under the floormat; if you nail Basil we can steal the car, leadfoot it down to London, grease the African, and still have time to close the pubs."

That sounded reasonable. I went back to cutting a hole in the screen.

There was the slightest *whuff* . . .

I dropped the screwdriver, stood up, and confronted the fourth me. "*Now* what?"

"Don't do it," he said. "If you kill Basil and the African, you *will* minimize the HIV epidemic in the U.S., but you won't do a thing to stop it in the Third World. It'll take a few years, but the Ugandans will eventually decide it's deliberate genocide and retaliate."

"With *what*?" Number Three said. "Pointed sticks?"

"With mycotoxins," Number Four answered. "Uganda is the world's second largest producer of coffee beans. Two hundred million coffee-drinkers die in screaming agony, and the Sri Lankan tea cartel takes over the world economy."

"Omigod," Number Two gasped. "We never saw that!" He dropped the oversized English pennies he'd been trying to fit into his shoes.

There was the slightest . . .

We all turned to the newly arrived Number Five. "Yes?"

He shrugged. "I dunno. I was just getting lonely uptime, with all the rest of me back here."

Number Three came back from the bedroom with a handful of loose change and started passing it around. "Well, it's 1:25, Dave. You'd better make a decision. What are you going to do?"

"Yeah, man, what are you going to do?"

1:27 came. Basil came around the corner, crossed the street, and walked right into my sights.

I let him live.

"Now what?" Number Four asked. "We're stuck here forever."

"In *Liverpool,*" Number Two said, sticking out his tongue and grimacing.

"With no job, and no place to live," Number Four added.

Number Five's face lit up in a smile. "We could write science fiction!" he said. "Just type up the history of the next fifty years. We'd clean up!"

"Yeah, right," Number Two said.

"No, seriously." Number Five rubbed his hands together. "We could start by writing up our own story."

"And call it *The Ex-Exterminator*? Think again, dirtball." Number Two grabbed Number Five and gave him a noogie.

"There's a guitar shop down the street," Number Three chimed in. "We *could* form a band, y'know."

None of me had a better idea, so we left a note for Leo Spinelli apologizing for the mess, climbed out the fire escape, and set off for the guitar shop. There we found a couple of awful Vox planks, a Trini Lopez-model Gibson marked down for quick sale, and a drum set that was better than any of us were. We were still arguing about who would be the lead singer when Basil swept in.

"Oh, darlings, I saw you walking down the street and I just had to tell you, I *love* the look!"

"My God," Two whispered to Three. "In *my* timeline he never came here!"

"The unruly hair!" Basil crowed, patting Five on the

head. (He was still showing the effects of Two's noogie.) "Nor in mine," Four whispered back. "Whose timeline *is* this?"

"The tight pants!" Basil goosed Three, who jumped, then tried to stab Basil in the back with a drumstick and missed.

"I have to know, darlings: who are you?"

We couldn't help it; it was reflexive. We all answered with our real name: "David Clark."

"Hmm." Basil leaned back, stroked his chin, and squinted at us. "The Five David Clarks, you say?" He broke into a broad grin. "Well, we'll just have to work on that! Maurice?" He waved at the shop clerk. "Give these darling boys whatever they want! I'm going to make them *stars*!" Ignoring us as if we'd suddenly turned to smoke and blown away, he swooped down on the phone and started dialing madly.

Number Three sidled up to me, still holding the drumstick like a bayonet. "Are you *sure* it's too late to kill him?"

"Oh, yes," I sighed. "It's just a little bit too late. And from now on, that's going to be the story of our lives." I picked up the Vox guitar, strummed a chord, and resigned myself to the future. I had a sudden craving for buttered popcorn.

It never appeared. \blacklozenge

The Ghost in the Machine

Mark J. McGarry

There was blood on the bars of Ulysses's cage again, oily rivulets glistening under the glow of the fluorescents. Alex Varneke touched the wetness and, wincing, pulled his hand away. Bits of tooth enamel clung to his fingertip. "God *damn* you," he said under his breath.

A howl answered, a piercing scream that split the sour air and sent him reeling back from the cage.

Ulysses came hurtling out of the shadows at the rear of the enclosure in a long, flat arc, the product of lunar *g* and the strength of madness. The bars bowed outward under the impact of meat and bone and matted fur. Bloodied snags worked at one of the aluminum rods, but above the crinkled muzzle the chimpanzee's eyes were flat and dead.

"Boshze moy!" someone muttered from close behind him, and Varneke's heart stum-



Illustration by Jean Elizabeth Martin

bled again. But it was only Pittman, with his wild white hair and lunie pallor, wrinkled lab coat draping a tall, thin frame. He helped Varneke to his feet and looked him over, frowning. "All right?" he said.

"Yes . . . okay," Varneke got out, his mouth dry. "Just a bit startled, Jon." He shoved his hands into his pockets and stepped back from the cage, the black stones of Ulysses's eyes following him as he moved.

Two weeks ago, as Varneke had watched Pittman strap the ape down inside the patterning grid, those eyes had been filled with fear. But there had been trust, too, as the matter transmitter powered up. Now there was nothing: no fear, no trust, no intelligence. Just blood on the bars of the cage.

"Surprised to see you here," Pittman said.

"I think I was the one who was surprised." Varneke grinned without feeling.

It was a big room, its padded walls painted with pastel landscapes and a smiling sun and happy planets decorating the high ceiling. In one corner, climbing ropes and gymnasts' rings lay in an untidy heap. Children's desks and toy boxes were stacked precariously along one wall. A Raggedy Ann and a teddy bear lay among scattered puzzle pieces.

The row of aluminum bars bisecting the room had been crudely set in place. Ulysses moved across them fitfully, the breath rasping in his throat. Then he pushed off with hands and feet, soaring ten meters to the back of the enclosure, and disappeared into the pool of darkness under the sleeping shelf.

"He's no better," Pittman said. "Heard about yesterday, at feeding time? Tsao could have lost his arm."

"I heard," Varneke said. "I want you to run another comprehensive brain scan—SQUID, SPECT, GRI. But no tranquilizers this time. I want a picture of him just as he is now."

"Like this? Look at him."

"Tsao can use the gun and trank Ulysses while he's still locked up in there. He'll wake up on the table. Castiglione and Taylor can work up a new restraint system. We'll knock him out again when it's time to move him back here."

"It's still dangerous."

"Tsao will stand by with the tranquilizer rifle. Everyone in the lab will wear hardsuits. It'll be awkward, working with them in close quarters, but it's one hundred percent protection."

"I was thinking of Ulysses," Pittman said. "We can't help what's already happened—the damage is done but we could hurt him when we're transferring him to and from the lab. He could injure himself against the restraints. And he'll be terrified. Let it go, Alex. We've already run all the tests."

"We'll run them again," Varneke said. "And again, until you can tell me what damage was, in fact, done." Pointedly, he glanced at his watch. "Kay Kaplan is running another transmission in ten minutes—the AI they sent up from the Minsky Institute."

"The automatic chimp," Pittman said sourly. "I'll go with you."

Varneke frowned, but Pittman had turned toward the enclosure and did not see. "I'll be back tonight, Ulysses," he said.

"Do you think he understands you?" Varneke asked. Pittman paused in the corridor outside, his keycard dangling loosely from two fingers. "No," he said finally. "But I would have to be *sure*." He locked the door behind them.

The tunnel, wide enough to accommodate pedestrians and two lanes of vehicular traffic, echoed to their footsteps. The catacombs under Mare Imbrium stretched for thousands of meters, the very scale of the complex reminding Varneke of the expectation that it would soon evolve into something more than a research facility.

"We should put him down," Pittman said, startling him again.

Varneke glanced at him. Pittman had been head of Bifrost's life sciences field section since the start of the project. Before that, chief of U.S. Surgical's research center at Ptolomaeus. When Barbara Rosenthal was named chairman of the National Science Foundation, Pittman expected to replace her as Bifrost's chief administrator. Instead, they had shipped Varneke up from Pasadena. Pittman should have known better: Rosenthal had come up through the hardware side of the operation, and so had Varneke.

But Pittman, he thought, might want the job still.

"I'll do it myself," Pittman was saying. "Least I can do for him."

"And then where do you go with the project?" Varneke said sharply. "Eight years, an annual budget bigger than the GDP of any number of Third World nations, four people killed during the construction phase...."

Pittman shook his head. "All right, Alex," he said wearily.

"And how would you make the case to Rosenthal? 'I'm sorry, Madame Chairman, no matter transmission during this administration, the chimpanzee simply hasn't been the same since we sent him across.'" Varneke felt the heat in his face. "It's nothing but soggy sentimentality. If Ulysses were another rat, you wouldn't have suggested it."

"It killed the rats outright," Pittman said. "The goats may as well have been dead: autonomic functions intact, higher functions erased. All the primates ended up like Ulysses. It'll kill a man, if you let it."

The corridor dead-ended into another, wider tunnel that curved out of sight in both directions. Ahead, the door of a cargo lift gaped. It irised shut behind them; the car descended.

"We do have a functioning matter transmitter," Pittman said.

"For robots, instrument packages, cargo—it's not enough. We have to send a man across, and get him back. All of him, as he was."

The elevator opened onto a broad walkway running high along one wall of a natural cavern. Better than a hundred meters across and nearly a kilometer long, the cave was filled with brilliant light and an almost subliminal hum. A handful of electric runabouts and many-legged robots crawled across its basalt floor, dwarfed by the matter-transmitter array. Roughly cylindrical, wreathed in a faint haze of condensation, the gleaming construction stretched the length of the cavern, a fallen skyscraper of glass and composites and steel.

Against the ceiling, a holographic projection counted the minutes and seconds down to zero.

The cantilevered shelf of the operations center thrust out into the air fifty meters above the floor of the cavern. The room was low-ceilinged and dimly lit, banks of flatviews and holotanks casting a muted carnival glow across banks of instruments manned by intent technicians. The director's station was set on a low dais at the front of the room, silhouetted against a wall of polarized glass that stretched from floor to ceiling. Kay Kaplan leaned forward in the chair, her eyes bright in the semidarkness, studying the flatview displays arranged in a horseshoe around her.

Varneke watched her for a time—the long, slender neck and high cheekbones, her long, glossy black hair. She gestured, and a holotank sprang into existence in the air before her. Undulating waveforms and torrents of alphanumeric data spilled through the image volume.

"Operations area is cleared," said Blankenship, the technician to Kay's left. "We have power to the patterning grid."

"And fingers crossed," Varneke said.

Kay turned to him, grinning. "Do you think we need luck? That's not much of an endorsement." She looked at Pittman. "No sacrificial lambs today, Jon—MIT manufactured today's subject, not Mother Nature."

Pittman nodded, his smile more of a grimace.

She moved her right hand through the tank's interface and the view changed to the interior of a burnished metal cylinder, its slotted walls etched with a tightly woven grid pattern. A metal table stood at the bottom of the cylinder, and on it sat the AI package: a sphere a little over a meter in diameter, its alloy skin studded with sensors and the transceiver net. The twin ports of the coolant ports were closed, as if the probe were sleeping, its eyes shuttered by heavy lids.

The AI had been Kay's idea, an alternate means of getting a chimp's-eye view of the matter-transmission process. Most of the sphere was taken up by a Cray-Fujitsu stack, smaller cousin to the installation's mainframe. It was running a fairly standard AI, a moron with enhanced verbal skills. Varneke wanted to hear what it had to say about an hour from now.

"Grasers on-line," Blankenship said.

Outside, the floating display went to 59 seconds.

Another tech, a woman named Margolin, sat to Kay's right. She stood when Varneke gestured to her. Varneke slid into her seat and took the headset she handed him: throat mike, bone-conduction phones, rose-colored specs for the HUD. He put it on and jacked in.

The AI's inputs rocked him back in his chair. The visual feed painted across the heads-up display—the walls of the cylinder stretching above him, the black pools of shadow behind the slots, where the scanning guns waited—was sharper than any holotank view. He heard the rush of air evacuating from the cylinder, felt the trembling of the table as the big pumps labored, caught the dwindling scent of ozone. Digital readouts flickered along the periphery of the image: diminishing atmospheric pressure, systems integrity, power levels, steadily rising internal temperature as the stack warmed its bath of liquid helium.

Varneke adjusted the throat mike. "Minsky AI, what is your identifier?" he said.

"I am called Jaunte," the AI replied in a wintry voice. "You are not Trudy Margolin."

"Jaunte, this is Doctor Alexander Varneke. I will be uplinked to you during today's procedure. This will be a passive uplink—I'm just along for the ride."

"I understand, Doctor."

Varneke put his hands flat to the instrument panel before him, feeling its cool hardness only distantly—then, in the dimmer reality of the operations center, saw Pittman standing close by. He found the interrupt switch and the feed from the AI attenuated, becoming a pale mirage.

"We can find you another workstation if you want to ride it in with me," he said.

"And see what Ulysses saw?"

Varneke shrugged. "It should be a good simulation of what the chimpanzee experienced."

"But it's not frightened now, as Ulysses was."

"The AI can't *feel* anything. The point is to see how it interprets the sensory input with a chimp's reasoning ability."

"You should have sent the robot across first, then, instead of Ulysses. And send a simulated human, now, instead of a simulated ape."

Varneke just looked at him. "Jon, the chimp cost less than \$100,000, including transit from Earth. We're paying MIT close to \$12 million for this probe. And the AI hasn't been written that can give us a close approximation of a human reaction to a situation like this, when we don't know what it will face."

Pittman shook his head. He walked up to the glass wall and stood, hands behind his back, shoulders hunched, staring out into the cavern. Varneke felt a quick surge of anger.

"Hey," Kay said from behind him. She put his hand on his shoulder and bent close, the scent of her filling his nostrils. "This is going to be a wild ride," she said, her voice low, "but if we get through it all right, it's only your first of the day."

"I'll hold you to that," he said, and watched the play of cloth across skin, of light against shadow, as she moved back to her station.

And then he took his finger from the interrupt switch. The AI flooded him with the stillness of vacuum, the silence, a taste of expectation as its internal clock counted down to zero.

Across the gulf, Varneke heard Blankenship report, "Green across the board."

Kay's voice: "Kick it."

The cylinder filled with a fog of coruscation-not light,

The Ghost in the Machine

but the detonation of charged particles against the AI's photosensors. Through the fog, the walls of the cylinder closed in, becoming too small to hold him. Data cascaded across the telemetry feed, a jumble of conflicting reports; he let it wash over him. In the rush and rumble came the voice of Jaunte, a chorus of voices—"I am not aware this is I do not know what I am I am not now the dark now the dark"—terminated by a speed-metal scream of interference.

Suddenly it was gone, all of it: the telemetry, the sight and sound, and Jaunte's cool presence.

Varneke fumbled off the headset, shook his head and looked left. Kay stared into the holotank, where the probe's image grew indistinct—a smear within the glittery cloud, a shadow across the fog, a breath of darkness, nothing. The cylinder was empty.

Sweat glistened on her face. "Everything okay?" she asked.

It was a moment before Varneke realized she was speaking to him. "Reasonably," he said, raking his hair back from his forehead. "Looking forward to the next ride." He smiled, but it felt strained. His hands were trembling.

"Molecular scan complete," Blankenship said in a voice as cool as Jaunte's.

"Stage one," Kay said, "annihilate the payload." She leaned forward. "Is the Crayfishu getting it all down, Blink?"

"Analysis continuing," Blankenship said.

"We've done all this before," Varneke reminded her. "Many times."

"But that doesn't make it routine," she said.

Over the past six months, there had been nearly a hundred tests of the system: the scanners that analyzed the payload and, in so doing, destroyed it; the mainframe that churned and encoded the raw data; the transmitter on the surface that sent the data outward as modulations in a stream of focused gamma rays; the relay station on Mount Pico that bounced the signal back to Mare Imbrium. Then signal decompression, reprocessing, and reintegration on the patterning grid.

The entire process took the better part of an hour, terabytes of molar storage, the entire output of a small fusion generator, a staff of eighty technicians. A vast, clumsy device—but once the Bridge was perfected, it would open up the Solar System and, in time, the regions beyond. Chemical and nuclear rockets would be relegated to hauling matter-transmitter arrays out to the frontier. Once they were in place, it would be one step to Mars, to the moons of Jupiter, the Oort Cloud.

"This is where it happened to him," Pittman said, turning from the window. "In this place, after we killed him and before—"

Varneke's mouth set. "Damn it, Jon, we didn't kill Ulysses—we moved him."

"The robot is *gone*," Pittman said, his hand slashing through the volume of Kay's holotank. "It has ceased to exist. When that happens to a living organism, we call it 'death.'"

"The probe still exists," Kay said evenly. "It's a stream

of information now, an algorithm recording the nature and placement of all its component molecules." She gave a quick grin, but her eyes were cold. "A place for every molecule, you know, and every molecule in its place."

"That's not existence," Pittman said. "Or maybe it is, for a machine. A blueprint to reconstruct the device. Destroy one, assemble another like it. But you can't do that with a living thing."

"We already have," she said.

"Have we? Ulysses is alive—but is it Ulysses?" He turned away again.

The minutes slid by. One of the support staff brought Varneke a mug of oolong; he sipped the black tea absently. Time crawled, the air growing heavy, suffocating conversation.

Then came Blankenship's dry voice—"Signal processing complete"—and Varneke slopped a bit of cold tea on his sleeve. The clock read 45 minutes, 12 seconds. "Reintegration underway," Blankenship said.

In Kay's holotank a storm gathered, a funnel of undifferentiated matter—leptons, mesons, baryons. Spirals formed, stretched across a pinpoint of harsh white light. Black clouds raced along the walls of the cylinder, tattering and recoalescing. Sparks fountained from the metal slab at the center of the vortex.

The shifting mass collapsed, rushing in on itself, choking the sun to blue, to amber, to a suffused glow, then it was gone. The sphere took on substance, solidity, familiarity. Varneke jacked in and heard silence, empty even of the rhythm of an empty carrier wave.

"I don't know if—" he started to say as, across his field of view, a splash of light; in his ears, a clash of static. From a jangle of shape and color, the patterning grid came into focus around him.

"The dark the—"

"Jaunte?"

Silence. Then the icy voice: "I am, Doctor. I am Jaunte."

"Yes." Varneke's hand slapped the console. "*Yes.*" Confirmation poured across the telemetry feed: all readings within normal parameters.

A spattering of applause swelled. Pittman said across it, "It's just a machine, Varneke. It's not a man, it doesn't—"

Kay stood and stretched. "You're right," she told Pittman, smiling tightly. "Maybe it's time for one of us to go."

The amphitheater was dark. Down in the laboratory, the AI slept snug in the arms of the coolant umbilicals. The pumps muttered to themselves, sending liquid helium coursing through the pipes. Margolin, ghostlike in her white cleansuit, moved through the darkened room, taking note of readings, neatening cables, humming a Cole Porter tune to herself. The open mikes caught every note.

Up in the gallery, Varneke frowned slightly.

"She's in there eighteen hours a day," Kay said, sliding into a seat in the front row. She put her elbows on the padded railing and rested her chin in her hands, her face reflected in the lab's clear polycarbonate roof. "I think she's going to miss him." "We'll get her one for Christmas," Varneke said. He passed his hand over a small communications panel set in the wall. "Trudy?" The technician looked up. "How's the device?"

"He's still nominal to nine nines, Doctor Varneke," she said. "I'll be right up."

"Thank you, Trudy."

Margolin set her noteboard down alongside the pumps and, on her way out, let her hand brush the AI's shell. Varneke's frown deepened.

Kay saw the look. "Jaunte is very personable," she said.

"Why shouldn't it be? It was programmed to be cooperative. She forgets that."

"Does it matter? They're doing good work together." Varneke opened his mouth, heard footsteps on the

stairs, and closed it again. Margolin came in, pulling off her white cap and shaking her hair free.

"If you're looking for problems, Doctor Varneke, I'm afraid I can't help you," she said. "We've been at Jaunte a week now and haven't turned up a single mismatch in his experiential stores. No anomalies in his Turing responses. His psychological profile is spot on." She grinned and spread her hands. "Same old Jaunte."

"Has he verbalized any reactions to the transmission itself?" Kay asked.

"Nothing new, Doctor. Actually, it seems not to have made much of an impression on him. But why don't you ask him yourself?" Margolin reached past Varneke and tapped the comm panel. "Jaunte, time to wake up."

The response was instantaneous: "I am awake now, Trudy," the AI said. "Are you working late again?"

"Just making sure you're tucked in. You have two visitors."

Varneke cleared his throat. "Jaunte, do you remember me?"

"I recognize your voice, Doctor," said the AI. "Is Doctor Kaplan with you?"

"Yes, she is," he said slowly. "How did you know?"

"She is usually with you when you visit."

Kay smiled. "That's very good, Jaunte."

"Hello, Doctor Kaplan."

"Jaunte," Varneke said, "I want to ask you about your experience with the matter transmitter."

"It was frightening," said the machine.

Margolin's eyes widened. "He's never said *that* before," she whispered.

Varneke nodded. "Explain why you were frightened," he said.

"The scanning began and I was being destroyed," Jaunte said. "First I could not see. Then I could not hear. It was dark all around me. My systems were failing. My contact with you was lost, Doctor. It was dark all around and I was alone."

"And this frightened you," Varneke said.

"I was being destroyed."

"But you're here now, Jaunte. You were not destroyed." "I was," said the AI. "I have been thinking about my destruction. I have been thinking about death."

Kay came up alongside Varneke. "Jaunte," she said,

The Ghost in the Machine

"what if we wanted to send you through the matter transmitter again?"

"I think you will."

"But if you could *choose*," she said. "Would you go?" A pause, time enough for a million calculations. Then

the AI said: "I would not do it. I would die with the dark all around me. First I could not see. Then I could not—" "Iaunte!" Varneke said. The AI fell silent.

Varneke stood and put his hand flat to the comm panel. "Jaunte," he said, "we will talk about this again." He closed the link.

"I don't understand it," Margolin said. The words came out of her in a rush. "We've talked about it, since the first debriefing, and his reaction never varied from the first time, absolutely everything nominal, there was no emotional reaction—"

"There still isn't," Varneke said. "It's rhetoric—a different vocabulary for expressing the same concept. At first it said, 'I was not self-aware.' Now it says, 'I was dead.'"

"But he doesn't want to do it again," Kay said.

"It doesn't *want* anything," Varneke said. "You presented it with a simple binary decision—go or not go but it has nothing to support a decision to go. It doesn't want to explore, it doesn't want to help advance the project, it doesn't have a sense of adventure."

"But he sounds like he wants to live," Margolin said.

Varneke turned on her. "It's not a pet, or a child. It's a million lines of code running on a stack I can turn off like a light bulb."

Kay stood. "Alex . . ."

"It's a goddamn machine," Varneke said, "and Pittman's been all over it."

Pittman lived in the old construction crews' dormitories, just beneath the surface. The bulk stores and greenhouses were up on the older levels, too, along with the motor pool and fusion plant, far from the lower floors where most of the project's personnel lived. The elevator rose smoothly, the panel display counting down.

"We can still salvage something," Varneke said. "Minsky may be able to write a tapeworm, something that can chew through all of Pittman's contamination. If that doesn't work, we can erase the program from the stack, reload it, and send it across the Bridge again."

"I don't think he meant to interfere," Kay said. "He may have just been trying to . . . I think he wanted to find out what happened to Ulysses."

"I wish to hell he had."

The car stopped, the door opening onto a narrow, shadowed corridor. The gloom deepened as the elevator door closed behind them.

Varneke cursed under his breath. Most of the ceiling panels were dark—malfing or off-line—and the air carried a sour, vaguely familiar taint. Debris littered the hall: streamers of hardcopy, heavy tools, stacks of furniture, blackened light fixtures piled against a long row of closed doors. Graffiti capered across the walls.

"It didn't used to be this bad," she said.

Varneke looked at her. "When were you here?"

"Two years ago," she said. "I didn't like coming up.

It's too far from everything that makes the Moon livable: lights, people, noise." She shrugged. "It wasn't serious, though he was. And you were still in Pasadena."

Varneke's face felt hot. "Pittman?"

She kissed him lightly on the cheek. "You can imagine what *be* thinks."

She led him around a corner. Far down the corridor, a door stood open; faint bird cries and the rolling whisper of the surf flowed out from it. Closer, and Varneke caught the warm scents of cinnamon and wildflowers. He hung back in the doorway. Inside, candles flickered in the breeze from the ventilators and shadows capered across walls softened by drapes of coarse, heavy cloth. Vines twisted along the ceiling; the shadows rustled.

Kay stepped past him. "Jon? Jon, are you here?"

Nothing, then a muffled thump from behind the drapes; the cloth parted and Pittman looked in, smiling but wary. The smile faded when his eyes fell on Varneke. "I thought you'd come," he said. His look softened as he turned back to Kay. "But I wasn't sure you would."

"We know what you've done to Jaunte," Varneke said. "When Rosenthal—"

"You don't have any idea what's been done to Jaunte," Pittman said mildly. He held the curtain aside for them. "Come in."

They followed him down a narrow passage, into a room lit by the glow of a holotank fully two meters on a side. The Toshiba workstation below it was as powerful as anything in the life sciences labs. Black vines crawled up its sides and along the walls, where pale, deformed flowers bloomed. Varneke thought of the ionizing radiation pouring down onto Mare Imbrium, the thin shield of regolith overhead, and his jaw tightened.

Pittman went to the workstation and conjured shape and color from the tank, oblate spheres revolving slowly within its volume. Only the MRI cross-section bore obvious resemblance to a brain, but Varneke recognized the other views easily enough: SQUID and SQUASH, SPECT and EEG, GRI and PET—a gallery of images painted with positron emissions, quantum interference, the sparks generated by simple electrochemical reactions.

"This is what we can measure," Pittman said. "Brain structures. Brain activity. The seat of consciousness. But we can't measure consciousness itself, Alex, because we still don't know what it is. Are all those chemical reactions *you*? If so, is that all *you* are?"

A muscle jumped in Varneke's jaw. "What did you do to Jaunte?"

"Asked him to think about things," Pittman said. "About destruction and resurrection—since he's the only one who's had the benefit of the experience."

"So you just broke through the ice?" Varneke said. "Opened a line in and started rummaging through the stack?"

"I've been with the Bridge from the start," Pittman said patiently. "I'm not a veterinarian, Alex, and the mainframe doesn't have many secrets from me. But I didn't directly access Jaunte's programming. We just . . . talked."

"You set us back weeks," Kay said.

"I wish it were longer," Pittman said, "but the project

will go forward regardless. There's too much money behind it, too many careers invested. Jaunte is limited—a chimpanzee's senses, a chimp's cognition. But I asked it to think like a human being, as much as the program would allow, because it was the only tool available."

"And when you did, it was scared," Kay said, and Varneke felt a fresh surge of anger.

"Scared of death," Pittman said. "But not dead."

Varneke's chest got tight. "Ulysses isn't dead, either, God damn it. Ulysses is alive."

"His mind is dead, I think," Pittman said. "His consciousness. The part we can't measure"—he thrust his hand into the holotank—"with all this."

"The ghost in the machine," Kay said. The holotank's luminescence streamed across her face.

"Descartes is dead," Varneke shot back. "So's his philosophy."

Pittman nodded. "It was Ryle who killed it—he was the one who came up with 'the ghost in the machine,' not Descartes. Three hundred years of thought, killed with a clever phrase. Descartes said the mind was an entity separate from the body. Ryle, Dennett, Huang— Jaunte's grandfather, Minsky—said consciousness is a mechanism of the brain. But a hundred years later, and we still don't know how the mechanism operates. Neurotransmitters fire, blood flow increases, magnetic fields fluctuate, and out comes, 'That apple is red.' Or, 'I remember how the grass smelled after I mowed it.' Or, 'I miss her.'"

"You think we're losing that," Kay said, her eyes still on the holotank.

"I only think it's possible," Pittman said. "Since we don't know what consciousness is, it may be destroyed when an organism is torn apart, molecule by molecule. Or maybe it's merely displaced, existing independently once the body is disintegrated, but can't find its way home when you put the body back together again on the patterning grid."

"Does a rat have consciousness?" Varneke snapped. "Does a chimpanzee?"

"You tell me, Alex," Pittman said. "In Ulysses's brain, all the chemical reactions are still going forward, all the synapses still firing. Everything is functioning precisely as before, according to all our tests, but *Ulysses* is gone. And since Jaunte reflects only what we know about consciousness, he was not damaged in the experiment. It is the part we can't engineer that we're fucking up somehow." He smiled faintly. "You could have saved your \$12 million, Alex—you didn't need an automatic chimp. You need a machine that will commit suicide, and come back from the other side to tell you what it was like."

Varneke was silent, the blood pounding in his head. Then he said steadily: "I'm going to have all this equipment dismantled."

"You'll find it's all been properly authorized," Pittman said.

"I'm revoking that authorization. I'm also barring you from all the labs, including life sciences." Varneke heard Kay's sharp intake of breath, but he continued steadily: "Taylor can take over your administrative duties for now, and you can come live down below with the rest of us. And while we don't have any police, Jon, I could find someone to enforce that."

"That won't be necessary," Pittman said. "I assume you'll want to have me reassigned."

"If anyone will have you. I will recommend that the chairman remove you from this project. I don't care where you go after that."

Kay stepped forward. "Alex . . ."

Pittman touched her on the shoulder. "It's all right."

"I know why you did it," she said. She looked into the holotank, her expression unreadable.

"No, that's not Ulysses in there," Pittman said. He let his hand fall from her shoulder. "It's you, Kay."

In the darkness, Varneke heard her breathing, felt her comforting weight, so gossamer in the lunar *g*, the spray of her hair across his chest. He waited, listening; then he said: "You're still awake."

"I've been thinking about the Bridge." He could barely hear her. "About going across."

All the breath went out of him. When he could, he said: "Pittman believes it's suicide."

"But you don't."

"No," he said. And then he added, "But it is dangerous, Kay. It's clear there's something happening that we don't understand."

She pulled away from him and sat up, a darker shadow against the shadows in the bedroom. The sweat began to grow cold along his skin.

"Jon was right about one thing," she said. "The simulations, the animal testing, the AIs, can tell us only so much. We still don't know what the device will do to a human being."

Varneke sat up, too, but he did not move to hold her. "With more sophisticated testing . . ."

"Not with any tests available to us," she said. "Can you tell Rosenthal we have to put the project on hold until we have an AI that can perfectly simulate a human response to the unknown? Even that might be inconclusive. Would be, if Jon's right."

He reached to the side of the bed and punched up the lights. In their soft glow, she drew the sheet around her, not looking at him.

"There are eighty people up here who would volunteer to go across," he said.

She smiled humorlessly. "Not nearly that many."

"More than a few," he insisted. "And if we go to Earth for volunteers, the pool is limitless. It's not suicide. It's the chance to become the next Yeager or Gagarin."

She made a sound that was not quite a laugh. "It still sounds as if we should be giving out blindfolds and cigarettes."

"I can make the case for a human subject now," Varneke said. "The animal testing shows no physiological problems. Jaunte's faculties emerged intact. It's very possible that the act of scanning itself induces some sort of psychological trauma—something an animal can't prepare for or understand. But a human being would be more resilient. A man would understand that no matter what happened during the process, he would come out of it alive and whole."

"Do you believe that?"

"It makes as much sense as anything Pittman's come up with. Pittman knows it, too, or he would have presented his arguments to me or—"

"Would you have listened?"

"—or Rosenthal. Yes, I would have listened. I have. But I don't agree with him."

"Then you would go across, too," Kay said, her back still to him.

"Yes. If there were someone who could take over right away if something did happen to me."

"But Rosenthal wouldn't allow it."

He paused. "Probably not."

"But she'd allow someone else to volunteer. The project has to go forward, and there's no other way to do it." She finally turned to look at him, her eyes shining in the light from the overheads. "What if you don't send a person across?"

"We can continue testing. . . . Send Jaunte across again, to start. But, ultimately, a man has to go. And if I don't send him, Rosenthal can find someone who will." He put heat in his voice: "Damn it, Kay, it doesn't have to be you. There are a hundred reasons it *shouldn't* be you."

"Only one or two," she said. "But I do fit the specifications: I'm a human being. I'm not integral to the project, but I know what to expect . . . as much as anyone does. I don't mass any more than Ulysses, so the scanning process won't take very long." He flinched as she patted his soft stomach. "It'd take half the day to send you to Mount Pico and back, sport."

"You've narrowed the field to half the people up here."

"I'll narrow it down some more. Jon has obviously been studying all my physiological scans. You'd have to duplicate all that work for any other test subject."

"That takes a week, maybe two. You're still not in the field all by yourself."

"I'm as qualified as anyone, and I have more motivation than most. I want this to *work*, Alex. If it doesn't, Rosenthal will take you off the project and your replacement will just send someone else anyway. Meanwhile, your career will be over and I'll have missed my chance at the history books."

"Those are the worst reasons so far."

"They're the best," she said, "because they're what I care about."

Varneke looked into her eyes, and saw in them nothing he could read. Behind the eyes, beneath the smooth. helmet of the frontal bone, a double handful of gray jelly, all she was. Synapses squeezed out feeble sparks, capillaries dilated, magnetic fields snapped and twisted, and out came . . . We have to save the project, perhaps. Or, My career will be over. Or, I love him.

Kay took a breath. "Let me be the one who puts it to Rosenthal," she said. "A calculated risk, a willing volunteer, and we're out of options anyway. She'll buy it. She has to."

The Ghost in the Machine

She came into his arms, her face against his shoulder. "If you see another way," she said, her voice faint and somehow distant. "If you don't think I can find my way back . . ."

"Kay . . ."

"If you don't want me to go, Alex, just say the word." He gathered her in, her so warm against him, and held her tight.

"Molecular scan complete," Blankenship said.

In the holotank, the patterning grid was empty, the metal table bare. Varneke sat back in the operations director's chair. "Analysis?" he said, his voice a bit hoarse.

"Analysis continuing."

Varneke put his hands on the arms of the chair, absently wiping his palms across the coarse cloth. The view in the holotank had changed, displaying algorithmic webs, encryption rates, error-correction results, compression ratios. *Kay*.

He stood abruptly. "I'll be in . . . I'll be back shortly," he said. "Page me if there are any anomalies."

Blankenship turned in his seat and looked at him steadily. "Yes, Doctor," he said. Varneke felt the technician's eyes on him as he left the operations center, felt all of them look as he went out into the corridor and the door closed behind him. He took a half-dozen steps, then stopped, putting his back to the wall, letting it take his weight, the smooth basalt stinging like ice through his coat and shirt, both damp with sweat. He sucked in a deep breath, letting his eyes close.

He saw her eyes, the play of the light across her hair, felt her breath on his face. *If you don't want me to go, just say the word.*

"Is it over?"

His eyes snapped open. Pittman stood across from him, hands in his pockets, shoulders slumped. Varneke catalogued the red-rimmed eyes, the stubbled face. He wondered how long he'd been standing there.

"Is it over?" Pittman said again.

Varneke stood away from the wall. "The scan is finished," he said. "The signal is on its way to Mount Pico. I'm surprised you weren't there for it."

Pittman smiled thinly. "Wasn't that brave." He nodded toward the end of the corridor. "I saw it from there—saw nothing, really, just the clock counting down. A good view of the apparatus from there, but it looks the same whether it's in operation or not. No bolts of electricity, no roar of machinery. The lights didn't even dim—I watched for that. There was just the clock, counting down to zero."

"There's no drama to any of this, Jon."

"There *should* be," Pittman said. "Life from death. But you'd say it's not death if you don't stay dead. To which I would say, 'I'm afraid it won't be much of a life.' Ask Ulysses."

"You knew she'd volunteer."

"We both did. But at least I tried to see if there was a way she could come through it—looking for some clue we were missing, studying the brain scans, trying to get Ulysses to go beyond—" "Jaunte," Varneke said. "The AI is called Jaunte."

The cords stood out in Pittman's neck. "I tried to help her."

"In the end, it may have been all your tests that convinced her to go," Varneke said flatly. "You knew she'd do it, or expected her to, and she saw that. You tried to find out if she'd be safe, you ran all the tests, and when you were finished, you could have told her not to go. But you didn't."

"Did you, you son of a bitch?"

Varneke remembered the warmth of her. "It was her decision," he said.

"And your career."

"And yours . . . no matter what happens. Pittman explains the mechanism. Ryle, Dennett, Minsky all follow Descartes off the field. That's worth a Nobel, isn't it?"

"I never thought-"

"Well, no one knows what anyone thinks," Varneke said. "That's the point, isn't it?"

Pittman stood there, his face a mask, until the door to the operations center opened behind him. "Doctor Varneke," Margolin said. "The signal processing is almost finished."

Pittman followed him in.

"Reintegration underway," Blankenship said as Varneke took his place at the director's station. "No mismatches in the signal. No deviations in the patterning sequence."

Varneke called the image up in his holotank. Within the grid, a storm of elemental particles rushed across the face of a miniature sun. The clouds gathered, blotting out the harsh incandescence, taking on first substance, then form: a muzzy-edged cylinder of about the right height and breadth, the suggestion of bone wrapped in a haze of flesh, a tangled skein of blood vessels, mercifully occluded by the shadowy outline of her hardsuit.

Pittman took a step back, his face pale.

"I have to go down there," Varneke said. His hands worked at the arms of the chair. "Blankenship, take over."

The technician looked over his shoulder. "But you—"

"Do it," Varneke said, standing. "We've done all this before." To Pittman: "Are you coming?" But he saw the answer in Pittman's face.

Varneke brushed past him.

The elevator was waiting—Blankenship's work, maybe —and descended with agonizing slowness. He put his hand to the door and pressed, fingertips white, forearms trembling. Her eyes. Her hair across his chest. *I love him*, perhaps.

Kay.

The door opened abruptly. The floor of the cave stretched ahead of him, the slab of the operations center hanging overhead; the apparatus, wrapped in a thin fog of condensation, stretched out of sight.

Castiglione waited in the shadow of the device, by an open access door. "Everything's going very smoothly, Doctor," she said as she followed him in. Steep metal stairs led downward. "The reintegration should just about have gone to completion by now."

He hardly heard.

They passed through a second door, into a dismal room with a floor and walls of foam-clad rock. The underside of the device pressed down, a ceiling of metal and ceramic wreathed with cables, and coolant hissing from conduits white with frost. The floor of the patterning grid, marked with red and yellow legends, was still retracted into the belly of the apparatus. Technicians and a camera crew milled around. A medical team waited in the background.

"Reintegration complete." It was Blankenship's voice, echoing from the walls of the gray room. "Repressurizing the grid now." The pumps started up; Varneke felt their throbbing in his gut.

"Everything still nominal, Doctor," Castiglione said. Tsao came up alongside them, a dark look on his face. The pumps fell silent.

"Opening access to the grid now," Blankenship said. A warning light strobed overhead, casting swaths of red light across the room. Locking mechanisms slid aside with a series of muffled thumps. A circular section of the apparatus began to descend on the end of four telescoping columns, spilling the brightness inside. The glow played across the floor of the patterning grid as it was lowered into the room. The hardsuit on the table, like a sarcophagus on its slab, seemed to suck up the light.

The platform grounded onto the rough floor with a rasp and a pneumatic sigh. Tsao and Castiglione were already there, reading the status display off the suit's chest panel, then popping the helmet seals. Varneke shouldered one of the medics aside.

"Kay?" he said. Her eyes were tightly closed. But a faint smile touched her lips.

"Dark," she whispered. "Dark all around."

"Kay," he breathed. He laid his hand against her damp cheek, touched the corner of her mouth. "Kay, thank God."

She opened her eyes, the smile fading.

"Kay, if anything had—"

Then she turned her head to look at him, her eyes flat and dead. And then she opened her mouth, her teeth stained red with blood, and screamed.

He was startled when the door signaled there was a visitor: no one came down here anymore.

Varneke dropped the last of his clothes into the shipping pod that lay open on the bed, pushed his hair back from his forehead, and went into the living room. It looked about the same as it had the day he arrived—just a few photographs up on the walls, and a scattering of keepsakes on the shelves. Stereo shots of the Channel Islands, Yosemite, the old team in Pasadena, Kay on Mount Pico; seashells off Laguna Beach, a fist-sized chunk of anorthosite from somewhere in the Apennines, and a Cole Porter disc, one of the first items they'd sent across the Bridge. No danger he'd go over his weight allowance.

The door sounded again. When he opened it, Margolin was standing in the hall outside, arms folded across her chest. "The *Clarke* was late pushing off from Galapagos Station," she said in clipped tones. "Your departure time's slipped by six hours."

Transit time from the station, in geosynchronous orbit over the Pacific, was close to twelve hours. "You could have told me that last night," he said, but there was no heat in his voice.

"Nobody thought of it," she said. "You might use the time to get some sleep—doesn't look like you've been getting much lately."

Varneke let the door close. The empty hours stretched before him.

He went back into the bedroom, instructing the comm panel to buzz him in four hours, then pulled the travel pod to the floor and fell onto the bed. When he lowered the room lights, the panel's white indicator floated like a miniature sun in the darkness. Varneke closed his eyes.

"If you don't want me to go . . ."

He sat up, the breath caught in his throat. But the room was silent except for the sigh of the ventilators, the roar of his pulse. Then something moved across the comm panel, briefly eclipsing the indicator lamp—a darker shadow against the shadows in the bedroom.

"... just say the word."

He fumbled for the light switch, and blinked in the sudden glare.

The room was empty.

He lay back and put his hands to his head. The voice had been with him for weeks. Somewhere within the bowl of the cranium, in that heap of gray meat, neurotransmitters fired, blood surged, and out came *her* voice. The strain, perhaps—the project at a standstill, the congressional investigation, his recall to Washington. Guilt, perhaps. Sloppy wiring inside the mechanism.

Or that he missed her, perhaps.

Then he felt her gossamer weight upon him, the spray of her hair across his chest, her breath on his shoulder.

"This is going to be a wild ride," he heard her say, and he knew that he should not miss her, that somehow she had found her way back to him. \blacklozenge

Mastermind of Oz



Lawrence Watt-Evans and B. W. Clough

MEMO TO: All Staff FROM: Glinda, Witch of the North 12 April 1939 RE: New Image

I am advised by my campaign consultants, Skaldeen, Meelit and Bodge, that a different spin must be put on public perception of the North in general and myself in particular.

I therefore decree that henceforward in all official correspondence and press releases my name shall be followed by the phrase "the Good." References to "Glinda the Good Witch of the North" are also acceptable.

Please note that omissions or errors shall be punished by flogging.

(signed) Glinda "the Good"

MEMO TO: Polamore Skaldeen, Zone Blue FROM: G the G 29 April 1939 RE: Your complaints in re Phase One, Operation Dorothy

1). Your objection overruled. I don't care how difficult they are, what do you want from Wicked Witches, cordiality? *Both* Wicked Witches, West

Illustration by Nick Smith

and East, have received magical invitations (ostensibly) from you. The rivalry between Griselda and Mesmerelda dates back to their childhood. One of them is sure to buy the Ruby Slippers from you, if only to thwart the other. And remember—you stole them from the wizard!

2.) I have the cyclone spell perfected and the house from Kansas selected. As soon as one of the sisters (I don't care which) takes the Ruby Slippers out for a test flight of their supposed "invulnerability aura" I'll drop it on her. I *quite* understand that the remaining Witch is likely to be "pissed," as you put it. You're a slick talker, it's your job. Tell her the shoes need a new battery.

Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Polamore Skaldeen, Chief of Staff, Operational HQ, Zone Blue

0930 hrs. 1 May 1939

Your Magnificence:

Phase One of Operation Dorothy, Sub-Operation Red Stone, is complete. Slippers have been accepted by Subject East with zero reservation detected regarding authenticity. My assistant, Kistemar, handled the transaction; his demonstration of supposed capabilities was totally convincing, and his show of reluctance to give up the slippers was taken at face value. Request highest possible posthumous honors for Kistemar.

Propaganda has been exceptionally effective in preparing the local populace for our coming victory. Even Subject East accepts epithet "Wicked" as applied to herself, and Your Magnificence is universally referred to locally as "Glinda the Good" less than a month after the start of the campaign.

Humbly request initiation of Operation Whirlwind immediately, before Subject East has time to get suspicious. Yr. obedient slave, Polamore Skaldeen

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Polamore Skaldeen, Chief of Staff, Operational HQ, Zone Blue

1400 hrs. 2 May 1939 URGENT!

Your Magnificence:

House impacted dead on target; Subject East definitely deceased. Munchkin City Coroner reports subject not merely dead, but really most sincerely dead. Locals delighted. However, there are complications. There's someone *in* the house! Locals are crediting occupant of house with destruction of Subject East. Is this according to plan? Is this Subject Dorothy? Please advise.

Anticipate arrival of Subject West shortly. Request your personal attention to situation. This is more than I can handle, Magnificence!

> Yr. obedient slave, Polamore

MEMO TO: Polamore Skaldeen, Zone Blue FROM: G the G 1500 hours 2 May 1939

Of course I knew about the brat Dorothy. Don't worry about Mesmerelda. I have the perfect distraction to keep the Wicked Witch of the West chasing her tail until she's disposed of. Dorothy is going to be very useful to us. Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Polamore Skaldeen, Chief of Staff, Operational HQ, Zone Blue

1730 hrs. 2 May 1939

Your Magnificence:

Your appearance here very effective. Subject Dorothy now proceeding west on Yellow Brick Road. All calm. Beginning preparations for North/East anschluss.

Assume the alleged invulnerability aura prevents Subject West from summarily disposing of Subject Dorothy?

My only other concern is that Subject West may now have it in for me, personally, when she's had time to think things over. May I be assured of your continuing protection?

> Yr. obedient slave, Polamore

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Chalkins Meelit, Acting Chief of Staff, Operational HQ, Zone Blue

1000 hrs. 3 May 1939

Your Magnificence:

Enclosed you will find our firm's bill for funeral expenses and family compensation for the late Polamore Skaldeen. The surviving members of our firm stand ready to serve you faithfully. Hail Glinda!

> Your servant, Chalkins Meelit

MEMO TO: Chalkins Meelit, Acting Chief of Staff, Zone Blue FROM: G the G 1300 hrs. 3 May 1939

Nonsense! I have a bottom line to consider, too. Death in the line of duty is part of the cost of doing business. Don't tell me your firm isn't doing very well out of the Munchkin City takeover. However, when I'm Supreme Ruler of the Land of Oz there should be plenty of gravy for all my faithful supporters.

Now as to Phase Two. I encouraged Dorothy as much as I could. A roving target, traveling across Oz, should drive the Wicked Witch of the West crazy. But the little squirt will wimp out on the journey to the Emerald City, I know it. Submit to me a short list of possible yes-men and flunkies to keep her mind on the road, immediately. MEMO TO: Chalkins Meelit, Acting Chief of Staff, Zone Blue FROM: G the G 1000 hrs. 4 May 1939 RE: Possible flunkies for Dorothy

No, I don't think one of your staffers would do! The wizard would smell a rat right away. After all, a munchkin needing help would come to *me*, the Good Witch of the North, right?

Instead I've cast a vivifying spell on that scarecrow in the cornfield that Dorothy's passing this afternoon. Very astute of you to suggest it, or him, as I suppose we must say now. I've also sent a raven to drop a hint about the need for brains. These animated objects are *tabula rasa* —you can tell them anything and it's gospel.

Keep up the campaign of psychological intimidation of the Cowardly Lion. I want him to be a complete wreck, desperate enough to ask even Dorothy for help. Let me know if your operatives run out of electric cattle prods.

Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Chalkins Meelit, Chief of Staff, Operational HQ, Zone Blue

1800 hrs. 4 May 1939

Your Magnificence:

Thank you for your compliment in regard to suggesting the Scarecrow. It is a pleasure to serve such a distinguished client, and we do our best.

My apologies for leaving the Tin Woodman so far from the road, but despite his rusted condition he was fully conscious—any movement on our part would have been felt, perhaps seen.

I think that the Cowardly Lion is as ready as he'll ever be; any more pressure might cause him to collapse completely, and I don't suppose a catatonic would be much help in your campaign. Dorothy's party should encounter him very shortly, if they haven't already. Hail Glinda! Your servant,

Chalkins Meelit

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Chalkins Meelit, Chief of Staff, Operational HQ, Zone Blue

1130 hrs. 5 May 1939 URGENT!

Your Magnificence:

Agents report entire party entering huge field of red flowers on border of Zone Blue and Zone Green that *was not there* when advance scouts checked the route! Are you aware of any dangers that might result from flowering plants? Please advise!

Hurriedly, C. Meelit MEMO TO: Chalkins Meelit, Chief of Staff, Operational HQ, Zone Blue FROM: G the G 5 May 1939 1300 hrs.

Poor pathetic Mesmerelda—it's delightful to see her wasting her magic like this. She must be using up juice at a prodigious rate. She never was original—the old Poppies of Death trick, what a hoot! And they're summer flowers, too, so vulnerable to weather from the north! Even little Dorothy should be able to thrash her soon.

Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Chalkins Meelit, Chief of Staff, Operational HQ, Zone Green

1800 hrs. 5 May 1939

Your Magnificence:

Your prompt action regarding the poppies was much admired by myself and my crew.

Please note that we have now moved our base of operations into a farmhouse just outside the walls of the Emerald City. Something inside the walls would be preferable, of course, but it's proven difficult. Munchkins are simply not appreciated in the city.

Incidentally, the Widow Skaldeen has been compensated from our corporate funds, as you suggested. This will be added to your final bill as a covered expense and of course, like all our charges beyond immediate operating costs, is contingent upon the success of the operation. Hail Glinda!

Your servant, Chalkins Meelit

MEMO TO: Weecon Bodge, Acting Chief of Staff, Operational HQ, Zone GreenFROM: G the G5 May 1939 2330 hrs.

I must offer your firm condolences concerning the melancholy demise of Chalkins Meelit. That's what happens to uppity munchkins. I trust that he left no widow, orphans, or near relatives? Continue to submit your invoices—but in a humble spirit, remember!

Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, Operational HQ, Zone Green

0800 hrs. 6 May 1939

Boss:

No problem on the funeral bills; I figure we'll make out okay without trying to nickel-and-dime you. After all, we've cut down the overhead by losing our front man, Skaldeen, and that PR expert, Meelit. No word yet on that inside job you asked for. I'm on it; will let you know.

Yrs. Bodge

MEMO TO: Weecon Bodge, Chief of Staff, Operational HQ, Zone Green FROM: G the G 1000 hrs. 6 May 1939

It's most unsatisfactory, the way your teams have been totally unable to infiltrate the Palace of the Wizard in the Emerald City. Does the man have no servants? Does he never buy from door-to-door salesmen or order in Chinese food?

Glinda

MEMO TO: Weecon Bodge, Chief of Staff, Operational HQ, Zone Green FROM: G the G 6 May 1939 1300 hrs.

I wouldn't expect you to understand Magic. No—the Wizard would *not* use his magic to wash windows and dry laundry. The fact is, magic is hard work. One tries to accomplish as much as possible with nonmagical methods. I believe my innovative policy of importing useful technology from other places is the most effective use of magic to date in the Land of Oz. (By the way, a crate of billyclubs, riding whips, and aviator sunglasses is being shipped to Munchkin City under separate cover. The Lollipop Guild Booster Club is ideal. Convert them into the secret police force instantly—tell them I want to exchange their lollies for sjamboks.)

I am forced to conclude that the Wizard does his own cooking, mending, and cleaning. The burning question then arises: Is he really a wizard at all? Compile a file on all magical feats the Wizard has done in front of reliable witnesses, and send it to me soonest.

Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, Operational HQ, Zone Green

1800 hrs. 7 May 1939

Boss:

I'm sending the file you asked for on the Wizard—I'm not promising it's final, but here's what we've got so far. It looks to me like a lot of this stuff could be sleight of hand. Other stuff I'm not sure about. The one that really threw everybody was this sailing-down-out-of-the-clouds number when he first appeared—I don't know how he could have pulled that off without the real stuff.

We've got one of the local characters, a cabbie with a fancy horse, on the payroll, so we're getting some pretty good feed on what's up in the city, even if we can't get into the Palace itself.

And here's the big news—Dorothy and the whole gang

Mastermind of Oz

came out of the Palace a few hours ago looking like death warmed over, with some story about how the Wizard said he'd do what they wanted if they brought him the broomstick of the Wicked Witch of the West. They leave in the morning. This is what you set up with all those rumors you planted here, right? The Wizard must have bought the whole yarn.

Me and the boys are figuring to give Dorothy a little help; the road west goes through some pretty rough turf. We'll be moving out into Zone Yellow tonight to help clear the way a little. That suit you?

> Yrs. Bodge

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, in the field, Zone Yellow

1420 hrs. 9 May 1939

Boss:

Bad news. The Winged Monkeys did the hit on the whole gang. Wasn't anything my boys could do—they were too fast. Your girl Dorothy's gone, and her little dog, too. There's scarecrow all over the highway here, the lion ran for it, and the metal guy is hanging in a tree.

If you planned this part you're way the hell ahead of me. If you didn't—hey, we did our best, honest. Guess old Mesmerelda wasn't quite as easy as I hoped.

I've got a man in the castle guard—not a munchkin, an old personal friend of mine. Maybe he can tell you what's going on in there. I can put you in touch if you want him to handle anything. There's not much else I can do at this point.

I did get that bucket of stuff delivered where you told me, up on the ramparts, but I don't know what good it's supposed to do. Is that just water?

Anything else you want, just let me know.

Yrs. Bodge

MEMO TO: Weecon Bodge, Chief of Staff, in the field, Zone Yellow FROM: G the G, Headquarters, Zone Red

1600 hrs. 9 May 1939

Damn! I was hoping Mesmerelda wouldn't use the Winged Monkeys—not to trash Dorothy's whole team! Well, the little brat's just going to have to hang on somehow until she's rescued. She's had her hand held all this way, now she'll have to wing it.

Flush that lion out somehow. Whips and prods should do it. Knock the Tin Man out of the tree. The scarecrow won't need reanimating as long as most of him is assembled again. Pull part of him together to give the other two the idea, and let them do the rest. I'll exert the magical influence in my vivifying spell, so that he'll be driven to *find Dorothy*. If they can't figure out how to do it you'll have to help them along discreetly. But the party *must* be reunited. Is your friend in the castle guard venal or foolhardy enough to turn traitor and leave the gate open for them? Or will some scam be necessary?

We've got to hurry on this. Mesmerelda might waste valuable magic on murder. But then again, she might not! She'd get the same effect if all those guards just stab Dorothy with their fancy halberds. If she's smart enough to realize that, Operation Dorothy is down the drain. Glinda

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, Forward Base, Zone Yellow

1820 hrs. 9 May 1939

Boss:

No problem with getting those guys back on track. The tin man and the lion never seemed to notice that the scarecrow wasn't torn up as bad as he said—not too bright, that pair. The dog, Toto, showed up, and everybody followed him back to West's place. My man's ready to get 'em in, but not just by opening the gate. He's on our side, but he's not dumb. He's going to take two buddies and "patrol the perimeter" during the fancy ceremony at the end of the shift, and make sure that when they find Dorothy's crew they lose the fight. If that straw man of yours doesn't figure it out for himself that they can get inside in the guard uniforms, my man will try and hint.

As for what they do when they're in there, I hate to say it, boss, but I think it's out of my hands. All my people know where the bucket is, and they'll do what they can to get Dorothy and West together in the right place, but that's it.

Guess it's up to the kid, then.

Yrs.

Bodge

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, Castle West, Zone Yellow

2330 hrs. 9 May 1939

Boss:

Hot damn, it worked! Was that stuff really just water? Old West just folded up like a dealer holding the fifth ace—if water does *that* to witches, God help 'em when it rains and the roof leaks! You juiced it up somehow, right? Nice work, Boss.

Well, anyway, we've got this place secured. The guards are handling it well—I mean, these guys were mostly draftees, and West wasn't exactly Miss Congeniality, so the big surprise isn't that they're glad she's gone, it's that they haven't stripped the place to the walls and scattered.

I've got my people pitching for you right now—side with a winner, unity for peace, all that stuff. Should be no problem.

Oh, yeah, the kid—she and the gang figure on heading back to the Emerald City first thing in the morning. We're letting 'em walk, give you time to get everything set back in Zone Green.

You want anything else, let me know.

Yrs. Bodge

MEMO TO: Weecon Bodge, Chief of Staff, Castle West, Zone Yellow FROM: G the G, Headquarters, Zone Red 1000 hrs. 10 May 1939

I'm so glad you approve of my concentrated sulphuric acid. I plan to arrive this afternoon to inspect the castle and cull through Mesmerelda's magical equipment. I will just mention that the Winged Monkey cap had better be there! You may parade the troops and broach a cask so that toasts may be drunk to my health.

Now, as to the conquest of Emerald City. Dorothy is now (or will be, as soon as you crank up the propaganda) hailed as a mighty sorceress. You and I know she is no such thing. Furthermore, I'm pretty sure the Wizard himself is a fraud. If she and the Wizard confront each other they should cancel each other out. Ideally, they fight each other to the death. Alternatively, they could form an alliance so that Dorothy can return home to Kansas. If the Wizard can actually do this it will be very informative, and we will be rid of Dorothy. If he can't, I'll step in—Dorothy has to go—and be sure that the Wizard is exposed.

Our job now is to pump up the pressure. Dorothy will be spurred on by the Scarecrow to demand that the Wizard fulfill his bargain. You marshall the populace to back her. Send munchkin delegations to demand justice for their savior. Meanwhile I'll turn the screw, too.

Glinda

To My dear brother in the Arts Magical, OZ, the Wizard, the Great and Terrible

From Glinda the Good Witch of the North 10 May 1939

Great changes are afoot in our beloved little land, and I understand that you, dear Wizard, have instigated some of them. I refer to your hiring Dorothy the Kansas Witch. How astute of you to import a magician powerful enough to crush both Wicked Witches! Such a deed has been beyond my poor powers.

Of course I am not cognizant of the details of your agreement, but allow me to proffer a word of advice. So powerful an adept may be dangerous if crossed. I urge you to scrupulously fulfill your part of the bargain with Dorothy. If we adepts do not keep our bargains, who will?

Now that the Wicked sisters are no longer among us I dare to hope that sorcerous society in Oz will be more harmonious. Perhaps when Dorothy has settled in (does she plan to reside in Emerald City?) you and she will join me for tea.

Sincerely, (signed) Glinda the Good

Dear Mr. Bodge:

You asked me to let you know if I heard or saw anything unusual around the Great Wizard's palace. Well, right after Glinda's letter went in this morning, I heard somebody pacing around muttering in the garden. I didn't hear everything, but I thought I heard him say, "Maybe it's time to close the show, before the rubes catch on." And something about, "She's just a little girl."

And several times he said, "Oh, dear." It's probably nothing, but you said to tell you everything.

> Sincerely, Silnus R. Ouidget

NOTE:

The Great and Terrible OZ hereby commands that the Sky Chariot in which he first made his miraculous Appearance in the Land of Oz be brought forth to the City Plaza at once. The wondrous Device must be handled with the Greatest of Caution at all times! If any tear or puncture occurs, the consequences to all those involved will be dire indeed.

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, Operational HQ, Zone Green

2100 hrs. 11 May 1939

Boss:

The kid's back here, with the whole crew, and they got their little talk with the Wizard. Story is that he delivered on the brains, heart, and guts, and that in the morning he's going to settle the Kansas thing by taking the kid there himself. Sounds good, if it's the real article, but you might want to check it out yourself, just in case. I'll set up an observation post on a handy rooftop for you.

This might be for real-there's a proclamation been issued about setting up the gadget that the Wizard showed up in in the first place.

If they do both take a powder it might be real convenient for you to be here-the locals will be upset, and there'll be a real power vacuum, just waiting for you.

Oh, yeah-sorry we couldn't find that Winged Monkey cap. Maybe she was wearing it under her regulation witch-topper when the kid doused her? If she was, I guess that's the end of it.

See you tomorrow.

Yrs. Bodge

MEMO TO: Glinda "the Good," Supreme Commander, Headquarters, Zone Red

FROM: Weecon Bodge, Chief of Staff, Operational HQ, Zone Green

1100 hrs. 12 May 1939

Boss:

Not a bad show you put on. That stuff with the slip-

Mastermind of Oz

pers, though-you think anyone really bought that? We all saw you waving your wand behind the kid's head.

Guess you had to move fast to cover up when that thing the Wizard was riding in got away ahead of schedule. Hell, maybe the suckers did buy it. I don't know. Didn't fool me or my boys, though.

So the kid's gone back home to Kansas, right? Or at least she's gone-I guess I won't ask whether she's really back in Kansas.

The kid gone, the Wizard gone, both sisters dead, your straw man's running the city, and you're clean as a whistle. Nice work all around.

It's been a good time working for you, but it's all done now, so I'll take my pay and I'm out of here.

In case you have any disagreements about the bill, I think you should know that I have a habit of keeping real good records, in a safe place. Just to substantiate my accounts, you understand. And who knows, maybe that Winged Monkey cap will turn up somewhere after all, right?

> Yrs. Bodge

Aerial Battle Over Emerald City! Stuka Squadron Strafes Winged Monkeys

MEMO TO: Weecon FROM: G the G 16 May 1939

Guess your cap is just a beanie now! I'll expect you back at work on Monday. Someone's got to head up the Secret Police!

-(signed) G

Proclamation by His Excellency, the Scarecrow Regent of the Emerald City

*

WHEREAS the People of this City deserve to be aoverned by one who is not only wise, but experienced, and WHEREAS the Emerald City is the Capital of a Fairyland, and as such is suited to the Use of Magic, and WHEREAS I, your Ruler, though possessed of Excellent and Magical Brains, have had very little time to acquire experience and have no knowledge of the Arcane Arts whatsoever,

THEREFORE I, your Ruler, in the interests of doing what is best for my people, do hereby ABDICATE in favor of the noted Sorceress, Glinda, also known as the Good Witch of the North, who has already united under her rule the realms of the East, West, and North. Thus shall peace be assured throughout the Land of Oz. I abjure you all to honor and obey her in Every Way.

All hail Glinda the First, Empress of Oz!

Dream World



Michael McCollum

Paula Kaplan was tired and irritable, a natural consequence of having been on the road for the past ten days. It wasn't traveling that she disliked, but rather the endless string of snotty department store managers and purchasing agents with whom she spent her days. Her nights were no better. During her five years as district sales representative for Dream World Cosmetics, she had developed a routine for passing the hours between dinner and bedtime. Often in a strange town she would search out the local cineplex and take in a movie or two. When nothing on the marquee appealed to her, she stayed in her motel

Illustration by Terry Lee

room and watched cable TV. Once or twice each trip, especially when she didn't have to travel the next day, she would find a local tavern and get quietly drunk. Occasionally she would encourage one of the local Lotharios to buy her a drink and then take him back to her motel. Even these rare adventures had a dreary sameness to them. Almost without exception, her lovers sported an untanned strip of skin on the third finger of their left hand.

This particular night she didn't feel like the movies, and the television didn't work in the seedy motel her bosses had booked her into. There was a bar next door, but it was a country-western place. If there was anything that irritated Paula more than purchasing managers, it was shit-kicker music. Bored, she hopped into her Hertz rental and sought out the little town's main drag. There she found a quiet bar in a residential neighborhood.

The bar was a small white structure with a blank front wall adorned by a red neon sign that spelled out *Bob's*. The lot behind the building was filled with cars parked more or less at random among the potholes. The entrance on the side was framed in blue neon lights. Inside she found the usual dimly lit drinking establishment whose air held a whiff of stale beer. The bar stretched along an interior wall to her left, while a row of booths hugged a yellow-painted, windowless concrete block wall. To her left was an open doorway leading to a short corridor that fronted the restrooms and led to a back room with tables. Soft rock music floated from speakers precariously balanced on plywood shelves mounted high on the walls.

The booths were filled with couples and small groups. There were several empty stools at the bar, but Paula ignored them, not wanting to be mistaken for the new prostitute in town. After a momentary pause while her eyes adjusted to the gloom, she made her way down the corridor, past the restrooms, to the back room.

The back was more brightly lit than the front, courtesy of a clock surrounded by an illuminated sign advertising Coors beer. Here, too, the tables seemed to be fully occupied. As Paula turned to leave, she noticed one table placed slightly apart from the others in the far corner of the room. A single figure sat there contemplating his surroundings while a half-full glass of beer adorned the table in front of him. He wasn't looking in her direction. He seemed preoccupied by the conversation of three Japanese businessmen and their caucasian counterpart at the next table over.

"Excuse me," she said to the short, balding man after threading her way through the crowd to his table. "Would you mind if I sat with you? There doesn't appear to be an open table in the room."

He turned to face her. In addition to being bald and overweight, he possessed a receding chin and thick, Coke-bottle glasses.

Paula was aware of the figure she cut in her business suit with the paisley scarf. She expected him to jump to his feet and fall all over himself welcoming her. His reaction surprised her. For fully five seconds he stared as though he were having trouble focusing. The dilation of his pupils, along with the drooping eyelids, told her that the beer on the table wasn't his first . . . or even his fifth. Finally, as though in slow motion, some unidentifiable emotion crossed behind his eyes and he gestured toward a chair.

"Sure, why not? It might be interesting."

"Thank you," she replied. She removed her coat and draped it over one of the empty chairs, then pulled another from beneath the table. It came out with a loud scraping noise. She settled into it and immediately kicked off her shoes. It felt good to wiggle her toes and feel the cool air waft across her soles through the nylon of her pantyhose.

When she was settled, she looked at her tablemate, put on her most sincere smile, and extended her hand. "My name is Paula Kaplan."

"Morris Cramer," he replied listlessly, shaking her hand. She noted that his palms were as soft as her own. Obviously not a mill worker.

"Is there a hostess in here, Morris, or do I need to go to the bar for my drink?"

"Kerrie should be right over."

Less than a minute later a young blonde with a perky manner and a low-cut blouse materialized from out of nowhere. "Whattaya have, honey?" she asked in a Texas twang that was misplaced this far north.

"White wine spritzer, if you have one."

"Sure enough. Morris?"

"Another beer."

"Coming right up."

A minute later she was back with the order. Paula reached into her purse and pulled out a five, received change, and left a tip on the hostess's tray. She noticed that Morris didn't bother to pay.

"I take it you have a tab here?"

"Something like that," he grunted.

She sipped her wine and decided that it matched the rest of her expectations of this sleepy little town.

"Well, what did you think of the game today?" she asked as a means of breaking the uncomfortable silence that had arisen.

"Game?" Morris responded dully, staring at her. From this range it was possible to smell the beer on his breath. She sighed and decided to leave soon. He struck her as a sloppy drunk, another thing she hated in life.

"The Dolphins against the Cardinals."

"I'm not much of a baseball fan."

"I should say not," she replied with a laugh, "since those are football teams."

"Oh, right."

"What do you do for a living, Morris?"

"I'm a writer."

"Really? That sounds exciting. I'm regional sales rep for Dream World Cosmetics."

"Figures."

"Beg your pardon?"

"Nothing. Just thinking aloud."

"What do you write?"

"Science fiction mostly. Also a few detective novels and westerns to put bread on the table." "Science fiction? Do you mean like *Star Wars* and *To-tal Recall*?"

"Something like that."

"Tell me, Morris. Is there any money to be made in sci-fi in 1993?"

Being in sales, Paula considered herself a fair judge of people. She noted Morris's reaction with professional interest. He seemed to be struggling with some inner decision. Evidently he resolved his problem because, a moment later, the corners of his mouth turned upward in a tiny smile. The expression was so fleeting that she doubted anyone else had seen it.

When he finally spoke, it was in a voice soft enough that the music nearly drowned him out. "What makes you think this is 1993?"

She blinked in surprise, wondering if this was his idea of a joke. She laughed out of politeness and pointed to the tattered calendar hanging on the wall next to the storage room door.

"Because it says so right there."

He turned to look, causing the fat rolls on his neck to pile up in an interesting pattern. "So it does." He turned back. "It isn't, you know. The date is October 12, 1956. I don't expect you to believe me, of course. Not that it matters."

"Why doesn't it matter, Morris?"

"Because you aren't really here. None of you are." Nuts were another thing that she hated about life on the road. No matter how normal a guy might seem on the surface, they were all a little twisted inside. Looking at Morris, she had trouble thinking of him as dangerous, but then that's what people had said about Ted Bundy. She considered leaving and then thought about how good it felt to have her shoes off. Rather than go back to her room and spend the night staring at the walls, she decided to give him the benefit of the doubt. After all, Morris was a science-fiction writer and they were all supposed to be eccentric, weren't they? Besides, there were enough husky men in this bar that all she needed to do to get help was scream.

"If I'm not here, where am I?"

"You're a figment of my imagination. Everyone is. This world"—he made an expansive gesture with his right hand—"is one I imagined as the background for my next book."

Paula took a sip of her spritzer. "It sounds to me like you are losing your grip on reality, Morris."

"You don't believe me?"

"Of course I don't believe you."

"What if I can prove it?" he asked in a tone that was less belligerent than challenging.

"How?"

"By logic. Take you, for instance."

"What about me?"

"You're a knockout."

"I try to keep myself in shape," she replied noncommittally. A compliment was always good for a woman's ego, even when delivered by a dweeb like Morris.

"Would someone like you ever come and sit with someone like me in a bar?" She shrugged. "All the other tables were occupied. Besides, if I'd taken a table by myself, I would have spent the night fending off men trying to hit on me. I just came in here for a quiet drink."

He shook his head. "No, you just think you did. You came in here because I imagined you would. The other tables were full because that's the way I set the situation up. You sat down here because I wanted you to. *Cogito, ergo sum.* 'I think, therefore, I am.'"

"What about me?"

"The principle doesn't apply to figments of my imagination."

"Is that your proof?" Paula asked with a laugh. "You know you imagined this world because I happened to sit down at your table?"

"Want more? Why didn't I pay for my beer?"

"You have a tab here."

"Sorry. I've never been in this place before tonight." He took a sip of beer and laughed. She didn't like the tone. "Of course, neither has anyone else, because I didn't imagine this scene until about an hour ago."

"What if I call Kerrie over here and ask her?"

"Then she'll say I'm an old customer who has been coming here for years. She'll even show you my bar tab." "You said you don't have a bar tab."

"I don't. But to be self-consistent, I would have one in this world I've imagined."

"Circular reasoning, Morris. If you want to convince me, you'll have to do better than that."

"If you insist. Do you ever read science fiction?" She shook her head. "Frankly, I don't have time to read anything these days. My brother reads a little."

"Did you ever hear of a writer named Robert Heinlein?" "Everyone's heard of Heinlein," she replied. "Died a couple of years ago, didn't he?"

Morris nodded. "In my imagination, he did. At the moment, of course, he's at the height of his powers and soaking up entirely too much money the rest of us could use. His *Double Star* in *Astounding* last spring blew me away . . . as you people say in my future idiom. If his new *Door Into Summer* serial is as good, I'm going to be depressed for months."

"Sorry, I'm not familiar with those stories. What about Heinlein?"

"He has a technique he uses, one the rest of us wish we'd invented. He convinces readers that a story is set in the future by peppering it with outlandish newspaper headlines."

"So?"

"Tell me, Paula. Can you even think of a headline that is more bizarre than the ones you see daily in the newspapers of your world?"

"Not a fair test, since I'm not an aficionado of sci-fi."

"Ess eff."

"Huh?"

"We call it 'SF,' like the city of San Francisco. 'Sci-fi' is a term I imagine people who don't know anything about the field will be using in another forty years."

"Look, I like to play games as well as the next person, but games have to have rules. So far you've told me things that can't be checked. Surely there is some way to prove that this world I'm living in is fictitious."

"Just look around you," he replied. "Open your eyes and see! Can you honestly tell me that the modern world is logical?"

"Life's not logical."

"Of course it is. *Real* life is eminently logical. *This* life isn't, because I dreamed it all up."

She sighed in exasperation and mentally kicked herself for trying to find reason in the ravings of a drunk. Still, she had to admit that the man was entertaining.

"We're not getting anywhere."

"All right. What about astrology?" Morris asked. "What about it?"

"In the real world of 1956, only nuts believe in astrology. In your world of 1993, it has become respectable. Christ, you can call up on a telephone and talk to an astrologer for five dollars a minute."

"I read somewhere that the rise of astrology is a measure of people's alienation with their lives," Paula replied. "People don't understand the world around them, so they put their trust in something greater than themselves."

"Rubbish. Astrology is my own 'weird newspaper headline' technique. It's my way of convincing the reader that the story is really taking place in the future." He looked into his beer and then up at her. There was a silly grin on his face. "I do like my invention of the 900 telephone number, though. It lends verisimilitude to the plot. Which reminds me, what about the phone company?"

"What about it?"

"What more proof do you need that I imagined this world? In your world I've broken the phone company's monopoly and split it into a dozen little companies. In the real world, that will never happen."

"There are good reasons why Ma Bell broke up."

"You're damned right there are," Morris replied with a flash of anger. "Those snotty bastards overcharged me on my last telephone bill. I'll teach them to mess with Morris Cramer."

"Anything else?" she asked.

"Everything else," he said. "Do you own a computer?"

"Not personally. I'm on the road too much, although the boss has been talking about getting us all notebooks to keep our sales records in. Why?"

"What do you think of my naming convention? Microprocessor, coprocessor, ROM, RAM, 8088, 80286, 80386, WYSIWYG? Doesn't it just sound like there's an entire industry building cheap little computers that cost just a few thousand bucks each?"

"What's wrong with that?"

"It's silly! Everyone knows that IBM sells computers for millions of dollars a pop. You don't really think you could squeeze one of those monsters down into a little box you can carry around under your arm, do you?"

"I wouldn't know about IBMs. The boss is looking at Apple portables."

"Aha!" Morris yelled, slamming his flat palm down on the table. Despite the shotgunlike sound, only a few people glanced in their direction.

"What?"

"Apple Computer! Do you really think a big corporation would come up with such a silly name? Not in a thousand years. It's called that because I have a whimsical nature. And what about nuclear power?"

"What about it?" Paula asked with resignation. Obviously, the nebbish was the sort who warmed to his topic once he started rolling.

"You people all hate nuclear power, don't you?"

"They haven't solved the waste problem yet."

"Damn right they haven't! If they do, I don't have a story to tell."

"Nuclear's bad for the environment."

"What environment? That's another plot twist of mine. Here you have an ecosystem—cute name, huh?—that has been stable for four billion years and suddenly, the puny human race has upset the balance. And the icing on the cake is the ozone layer, which doesn't really exist, by the way. It has a hole in it due to pollution. Neat idea, isn't it?"

"The neatest. I suppose you have an answer for everything."

"Of course. I'd be a pretty poor creator of worlds if I didn't." He looked at her and frowned. "I can see that you still don't believe me."

She reached beneath the table to put her shoes back on, then straightened up in preparation for standing. "I must say, Morris, that you have an active imagination. Of course, I guess that's an asset in your profession."

"Wait, don't go!"

"Sorry, but I must. I've got some early sales calls."

His look was suddenly pitiful. All of the arrogance was gone. "Look, I don't know why it is so important that you believe me, but it is. Stay for another couple of minutes and I'll think of some way to convince you."

She glanced at her Lady Timex. It was still a few minutes short of ten o'clock. "Very well. I'll give you five more minutes. Make it good."

"Ronald Reagan," he said with an air of finality. "What about him?"

"He was president for eight years, damn it! Can you imagine anyone more unlikely to become president?"

Paula shrugged. "I didn't vote for him."

"Would you have expected the two biggest stars in Hollywood to be Danny DeVito and Arnold Schwarzenegger?"

She laughed. "You've got me there, Morris. I suppose that is your whimsical nature showing through again?"

He beamed, mistaking her jest for a breakthrough. "You see! Then there's the demise of the Soviet Union. Pure wish-fulfillment on my part. Look, I'm no fan of Joe McCarthy, but I also don't want the commises to win. So I swept them away in my dream world, even though they are on the verge of taking over the real one."

"It must be a good feeling being an author and able to rearrange the map to fit your own prejudices," Paula said.

"The greatest. That's why I have the Israelis acting like a bunch of brownshirts toward the Palestinians in the occupied territories. Only, I'm going to have to take that part out. My editor is Jewish, you know." "No, I didn't know."

He sighed. The manic need for her approval seemed to have passed. He slouched in his chair like a man who had taken all the responsibilities of the world onto his shoulders. Of course, she reminded herself, that was precisely what his delusion commanded him to do.

"Look, I can't say that it hasn't been entertaining. I do have to be leaving now, however. May I give you some advice? A little unreality is probably a good thing in a science-fiction writer, but I think you've taken it too far. One of these days you're going to launch off on one of these imaginary trips and not come back. Go see a doctor. He can help you."

"I'll think about it."

"Good. Now, if you will excuse me, Morris . . ." She stood, retrieved her coat off the back of the chair, and hung it around her shoulders. She threaded her way through the tables which had magically become uncrowded while they'd been talking. At the corridor, she halted and glanced toward the far corner of the back room. The little man was slumped down in his seat, gazing at the few flecks of foam that remained in his glass. He looked even more like a nebbish than when she'd first come in.

Ob, well, she thought, we've all got our problems.

She turned and made her way to the side door through which she had entered the bar. Just inside, she paused to fish for the Hertz keys in her purse. As she did so the door swung open and something gray with tentacles waddled in. She stood respectfully aside, then made it outside before the hydraulic mechanism closed the door.

The night was lit by the green neon shamrock over the door and two feeble street lamps. The skyscrapers at the city center showed above the low buildings around her. Halfway to her car, she halted in midstride.

Funny, I don't remember them announcing that they'd discovered intelligent life on Mars. After a moment, she shrugged. Oh, well, maybe I missed the news that day.

Five minutes later she was seat belted into her car, making her way back to her hotel. Tomorrow she would try to peddle that obsolete face cream to the Jovian Embassy over on the Thoroughfare of the Planets. The boss thought the beetles might use the stuff to polish their shells. She had her doubts. ◆

About the Authors

When **Bruce Bethke** sent in "The Single-Bullet Theory," he included a cautionary note. "This story is not what it seems at first glance, or even at second," he told us. Although we appreciated the warning, it really wasn't necessary, since we've come to expect the unexpected from Bruce. And it didn't take long to discover that this story was just the bit of foolishness we'd been looking for to lead off the April issue.

Bruce has been in this magazine six times before, dating back to November 1983 when his first professional sale, "Cyberpunk," appeared. Most recently, he was in the September 1991 issue with "Into the Altar Pit."

Mark J. McGarry wants it known that "The Ghost in the Machine" was inspired by a discussion of matter transmission that took place on the GEnie computer information service. He's grateful to the participants and especially the host, Damon Knight and we're grateful to Mark for taking the ideas from that discussion and turning them into an amazing story.

Stories about Dorothy and the Tin Man and the rest of that gang aren't all that unusual, but **Lawrence Watt-Evans** and **B. W. Clough** put a decidedly different spin on the subject with "Mastermind of Oz," their first collaborative effort. Lawrence has been a prolific writer for more than a decade, and has been in this magazine four times previously. Brenda, the author of four fantasy novels and a host of shorter material, is making her AMAZING[®] Stories debut.

Michael McCollum is back in this magazine after a span of more than ten years with "Dream World." His earlier story, "Life Probe" (January 1983), has the same title as one of his eight SF novels, the most recent of which is *The Sails of Tau Ceti*.

Don Webb wrote "A Visit to the Farside" as his way of examining the fall of the Soviet Union from a new angle, and we think he succeeded. He was also represented in our December 1992 issue with "The Coming of the Spear."

Maya Kaathryn Bohnhoff hasn't looked back since making her first sale in 1989—and happily reports that even having brain surgery to remove a benign tumor last summer didn't slow her down. "The Boy Who Loved Clouds" is her second story for us, following "The Devil His Due" (December 1991).

James Sallis is easily the most versatile wordsmith on this issue's roster, and we're pleased to have him back in these pages after a lapse of nearly fifteen years. Jim was the editor of *New Worlds* from 1966 to 1968 and has been published in dozens of different magazines. His first novel, a crime story called *The Long-Legged Fly*, came out last year; a sequel, *Moth*, is scheduled for release in August. "Powers of Flight" is his second story for this magazine; the first was "Exigency & Martin Heidegger," way back in November 1978.

Anchoring this issue is the first installment of a two-part presentation of "Thunder-Being," in which **Jack Dann** and **Jack C. Haldeman II** team up to tell a powerful story of first contact, corporate intrigue, and the strength of cultural integrity. This long novella is adapted from the text of *High Steel*, a novel that's due to be released in July . . . and about which we'll have a little more to say next month. ◆

A Visit to the Farside

Don Webb

Sasha hated checkpoints.

Any Soviet citizen could enter the American ghetto, but her father had access to the central computer. Information belonged to the state as surely as the means of production belonged to the workers—so what her father did was technically a crime.

A tiny probe removed an infinitesimally small piece of dermis from her left index finger. Enzymes would quickly coax the DNA away from the rest. They would further slice the DNA into small manageable strands—GGACTTA, for example. The negatively charged strands would swim



Illustration by James McCue

through a conducting agarose trying to reach the positive terminal. The strands would leave their patterns on filter paper, and the DNA print would be checked by the central computer. Such jobs were low priority. It would be twenty, maybe twenty-five, minutes before the central computer told Director Illych Borodin Maservich that his daughter was in the subbasement of the Patrice Lumumba Moon Base.

By that time she would have accomplished her mission. She would've told Todd she was never going to see him again.

The American sector stank with their ethnic cooking, marijuana, and tobacco. Everyone looked at Sasha as she made her way through the labyrinth of storefronts, brothels, and gambling dens. Correction: Everyone looked at Director Maservich's daughter. There had been rumors. . . .

There were eyes everywhere. Eyes. Sasha was shorter than the Americans. Like all Soviet citizens, she followed a careful exercise program and took calcium supplements. She didn't have long, brittle, American bones. *She* could walk on the Earth anytime. In fact, she had, twice. With her dark hair and cobalt eyes, she was every Russian farmboy's dream.

Todd Morlan worked at the Tail o' the Pup, a preposterous American establishment. The Tail was a ten-meter long "hot dog" painted in appropriate browns, reds, and yellows. The service counter—exactly 1.75 meters from the floor—roughly bisected the wienie. The Tail served hot dogs, hamburgers, malts, shakes, beer, coffee, kosher pickles, hot soft pretzels, and hashish candy. All synthetic, of course. Todd was laying a wienie into an open bun, and Sasha fell in love again.

Todd was red-haired, dark-skinned, and 2.1 meters tall. All in all, a typical American, except for his virginal skull. Todd's mother had kept it that way. She had ambitions for Todd.

The customer had left, and those enormous brown eyes were staring at her.

"Can I help you, love?"

"I. I. I want to talk to you."

"You *are* talking to me," he said. He began to pour synthetic potato mash into fry molds. He could be so difficult at times.

"I need to talk to you seriously."

"Hey, Pop. Can you watch the counter for a minute?" Todd's fat father came bounding out from behind the protein synthesizers. He was proud his son was nailing a Russian chick. He'd been some sort of official at the American Farside base decades ago. He grunted his assent, which was about as articulate as he got these days. A tiny cassette was attached to his bald head. Todd put his hands on the counter and vaulted over. He gave Sasha a little hug which completely exorcised her purpose in being there. Maybe she should just feed what she had to say to a servo and send it down here.

"Come along, love. We'll go someplace secure to talk."

A joke. No place was beyond her father's ears. They went deeper into Little America until they came to a tiny freight elevator. Hands plucked at her tunic. Buy this. Buy that. Smoke a genuine hookah pipe. Try genuine Southwest chili. Spot the lady. Snatches of music: rock-'n'-roll, country-'n'-western, electronic jazz. Each kiosk had its own sound—each loud and hideous and from a different period of America's frozen past. The elevator was a relief even though it was small and dimly lit. Sasha was surprised when Todd pushed the DOWN button. She had thought this was the lowest level. Perhaps it was true. Perhaps Americans did hold occult secrets. What was that old chemistry slogan? *Vista Interiora Terrae Recitficando Invenies Occultum Lapidem. Go to the interior of the Earth to find and refine the hidden stone*.

The door opened on the blackness of an air-filled basalt tunnel. Todd took a light from his blue jeans pocket and hung it around his neck.

The first thing Sasha saw were illegal sides of beef in bubbling clone tanks. The steaks must garner a fantastic price on the black market—not American boodle, real Soviet rubles. Then were tanks for cannabis, then tobacco, then hydroponically grown tomatoes. Todd smiled at her. He was putting her love to a test. Either she could report this contraband now or join him in the ranks of criminal.

This wasn't fair.

"Don't they need light?" Sasha asked, pointing at the plants.

"Of course," said Todd. "But they shut off for several seconds when the elevator comes down. We don't want to reveal all our secrets at once."

"But the elevator's there in plain sight. Anyone could find it."

"Could you?"

She thought of the sights and smells of Little America. Too much data, she decided.

"No."

"Besides, haven't you studied Revised Economics? The State requires the 'lubrication' that a black market provides. It hedges the bets for Five Year Planners."

They stepped out of the elevator. Lights flickered on in the plant tanks.

Todd asked, "So what did you need to talk about?" Nothing. Nothing now.

"I just wanted to see you. I need you."

"That's my girl."

Todd led her down the basalt tunnel.

"How many people know about this?"

"That's a dangerous question. Most of the Americans, I guess. Some of the higher-placed bureaucrats must have realized that the contraband they buy must come from somewhere. All of the American kids. This area functions as a Lovers' Lane."

"Lovers' Lane?"

Todd began to demonstrate.

One word could describe both Comrade Director Maservich and Mrs. Sally Morlan: ambitious.

Maservich was stuck in the smallest of the Moon bases. Patrice Lumumba lay four hundred kilometers west of the landing site of Luna 19. It barely made what the capitalists would've called a profit—mining, ceramics manufacturing, special atmosphere pharmaceuticals.

Eventually it would be closed down, but before then he would be directing another base. Maybe Tsiolkovsky Base, pride of the Soviet Moon.

When the air supply at Farside had gone critical and the Congress of the plugged-in land was unwilling to do anything, the Supreme Soviet ordered him to take in the refugees as a "humanitarian" gesture. Thirty Earth years ago. He knew he would've been promoted if it hadn't been for the Americans. They were a contaminant. They had ruined his career. They and Comrade Risolski's theory of "economic lubrication." He wanted to flood the lower levels with disinfectant.

He sat in his chair watching home movies. He didn't notice the warning flag on his terminal. His father had been placed—the ambassador to the People's Republic of Mongolia. There he is now, putting his son in a yakpulled troika, drinking bitter buttered tea, sledding the snows of Ulan Bator. That was the life, and it would be Director Maservich's life again.

Todd's mother, Sally Morlan, was determined that Todd would leave the American ghetto and join Soviet life. There was no hope for Todd's father. He didn't understand. He thought Little America would be around forever. She saw the printout on the wall. Someday Soviet pity would vanish and the Americans would be deported to the earth, where the gravity would kill most of them. She kept a black capsule hidden on her person for such an eventuality.

At first she welcomed the liaison between Todd and Alexandra Maservich. But she came to realize that Maservich would never allow a marriage. That Todd was just some sort of fling for Alexandra. Broaden her small world. Make her a woman of the cosmos.

Here's a sample conversation between Todd and his mother (as recorded by a chuka-bug two standard days before he and Sasha ran off):

Sally: I heard you were topside yesterday. Betty saw you-

Todd: Your friend the maid? The social climber?

Sally: Betty saw you speaking English. Up there. How many times have I told you to speak Russian? We didn't spend all that boodle to get you tutored in Russian for nothing.

Todd: I was talking—if you must know—to a fellow American.

Sally: Never speak to them. Who was it?

Todd: I don't see why you're interested, but it was Greg Peterson.

Sally: The servo mechanic?

(Silence. Presumably Todd makes an affirmative gesture.)

Sally: Well, what were you talking about?

Todd: There's a rumor that the base is going to be closed down. "Desirable" Americans will be divided among the four remaining Soviet bases. "Undesirables" will be deported by auto-rocket to Denver.

Sally: When?

Todd: You know these rumors. Soon. Always soon.

Sally: You need to stop seeing that girl.

Todd: I figure I'm an "undesirable" anyway, so why should I stop anything? My ticker will be bursting soon enough.

Sally: You're perfectly desirable. Smart. Not a tapehead. Todd: They would rather have tapeheads. Addicts are easier to control. Besides, the Great Russians have never been too keen on mulattoes.

Sally: There's an Official Policy—

Todd: Yeah, there's an Official Policy-

(This goes on in the course of a regular son-mother argument for quite some time.)

Sally slipped a new cassette in. Her ebony features relaxed. She has become a Cleopatra whom all powerful men love.

The basalt tunnel was lit by the plant tanks and the humans' afterglow. All concepts of time and responsibility have been dissolved by the feeling of joy. Sasha decides this is a real state, by its ability to replace all other states no matter how long they have been part of her routine.

"Todd, tell me a story."

The relationship between sex and storytelling is a very old one, going all the way back to Scheherazade and the Sultan. And what better place for a story than a tunnel beneath the surface of the Moon?

"This is something that really happened a long time ago. When they were salvaging Farside Station. This Russian girl"-he hugged Sasha-"and this American guy went with their folks to salvage. Well, the salvage teams were real busy so these two went off in a crawler. They were, you know, in love. So they went into a small crater beyond the sight line from Farside. They were just about to get to it, when they got a message from the circumlunar satellite that a cargo 'bot-you know, one of the big four-armed types-had gone berserk and that everyone should leave Farside. Well, the girl wanted to leave right then, but the guy argued that they were safe where they were. Well, they argued for a while, and the guy saw that he wasn't getting anywhere-so he kicked the crawler into Emergency Full and shot out of the crater toward the base. The girl said she thought she heard the crawler hit something, but the guy was so ticked off he didn't say anything. When they got to base and beyond the airlock and everything, they got out of the crawler. And there, hooked on the girl's door, was the torn-off arm of a cargo 'bot."

Sasha immediately disbelieved the story—not because of the improbable behavior of the robot—but because she wanted theirs to be the first love of an American and a Soviet.

"That can't be so."

"It is too so. I heard it from my dad."

"If it was so, everybody would know about it."

"The kids probably didn't tell anyone because they didn't want to get in trouble."

"Then how come your dad knew about it?"

"Because he was in charge of Farside salvage. He knew where all the vehicles went. At least the American vehicles." "Well," said Sasha triumphantly, "there aren't any more American vehicles, so we can't go check for severed robotic arms."

"There are too American vehicles."

Oops! He wasn't supposed to say that. That he was telling what he shouldn't was all over his face. Sasha saw that there were secrets beyond this—a whole maze of American secrets darker than space.

Todd decided to continue; he would tell all, he would tell her the biggest Secret. No, he would show it. It was time for his escape. So he continued talking, trying hard to sound as though he had never stopped to think. "There *are* American vehicles. We can go see the very crawler."

"You've seen it?"

"No. But I know where it's at."

"Take me."

She thought she was returning the testing challenge of love.

Todd touched the light around his neck, bringing it to full intensity. They walked down the tunnel slowly. Todd looked for something.

There was a fissure in the basalt—a lighter finger of breccia had intruded. Todd ran his beam along the length of the breccia. He passed the light from top to bottom three times. Almost silently a section of the tunnel wall slid away revealing a descending staircase.

All Sasha could think of was Dante: *Abandon all hope ye who enter here.*

All Todd could think of was Romeo and Juliet, except he would rewrite it. He would let the star-crossed lovers escape to a world free from their families.

Todd went first. Sasha followed. Then the doorway closed. The air was very stale here. Except for Todd's medallion, no light shone. They descended at least twelve meters when the darkness of an artificial grotto opened before them. Todd's light revealed three vehicles: two American crawlers and an out-of-date Soviet mining rig.

He said, "See?"

"So they're crawlers. That doesn't mean there are severed robotic arms. Let's go look."

"It's the further one, I think."

"Korosho."

Sasha led the way. There wasn't any arm. There were scratches, but anything might cause scratches. Sasha slowly shook her head; she decided that once again Todd was suffering from the American disease of irrationality.

Todd said, "Well, that was thirty years ago. They probably removed the arm. It was in the way or something."

"Todd, your dad was just having you on."

"Dad wouldn't lie to me."

"Oh it's just folklore. Everyone knows Americans—" She'd said it. He finished it.

"Everyone knows Americans are liars."

"It's not a big deal, Todd."

"Sure it's a big deal. You're thinking of marrying me and you think I'm a liar. You think that basically I can't be trusted, nor can my people be trusted. Look around you. Do you see how much I trust you? I brought you here. Here! I could be killed for bringing you here, and all you have to offer is tired Soviet platitudes."

"I'm sorry, Todd, I really am. It's just a saying, it's not what I feel here."

She put his hand over her heart.

Todd's voice became very intimate. "I could show you something. Something really big. Something that would change your mind about Americans."

"Show me."

"We'll have to take a crawler out."

"Where?"

"To Farside Base."

Todd opened the doors of the crawler. The lithium batteries still held their charge. He powered it up, disconnecting the navigational to the circumlunar satellite, which would have told the planetary computer their location. Orange indicator lights revealed that the crawler didn't have a good atmosphere seal. They would have to wear suits.

Sasha hated the old-style American suits. Damp and clinging yellow latex, they simply made you feel nasty. Todd toggled a switch, and a section of the grotto wall swung open. They rolled forward into an airlock. The air didn't leave the crawler right away, but continued to hiss for several seconds beyond the lock. Wasteful American extravagance. They drove through a long, dark, basalt tunnel, finally emerging into a small cave in a crater floor. The Russian base lay two klicks behind them in the lunar highlands.

Todd activated a scoop on the front of the crawler which picked regolite—crater dust—and deposited it behind them, obscuring tracks which otherwise would last as long as the Moon itself. The Earth was behind them, to the east. It would sink slowly behind the horizon as the crawler rolled forward at a somewhat less than thrilling thirty-five kilometers an hour. It would take two hours to reach Farside station, but Sasha didn't care. This was an adventure. She had to be realistic with herself—Todd would be on a rocket back to Earth, and she couldn't sustain her girlish dreams much longer. She wondered how long it would take her father to find her.

Through their suits they could hear the dull gravel roar of the scoop; their radios were on, albeit at minimum power, but neither spoke until the crawler had left the crater rim.

Sasha asked, "Why do Americans need secret vehicles?" "We like to keep an ace in the hole. Congress may

open up Farside again. The program could start up anytime."

"You wouldn't need secret vehicles for that. Besides what can you do with two crawlers and a miner?"

"So folks could get away if your dad ever went crazy." "There's nowhere to go."

"There's a place to go. Not all the Americans know about it. My mom doesn't even know about it. But Farside had a very special project going—the Sarfatti Project. Sarfatti began looking for what determines Planck's constant. He wanted to find the root of all reality. He found it in an old SETI transcription."
"The U.S. program that listened for extraterrestrial communication?"

"Yeah, for years they hid this long code from the Andromeda Galaxy. Eventually they released it to Sarfatti. It's called the *Yellow Text* of Thanos Kon. Really it was called by a long and boring code sequence, but someone cooked up a fanciful name for it."

Sasha knew then that Todd was a hopeless romantic, that he would waste his life on irrational quests. In short, that her tall, bronze love was typically American. But as the Earth dropped out of sight, it was a time for love and fancy, so she played along.

"What was revealed in the *Yellow Text* of Thanos Kon?" "Hey, I'm being serious."

"Korosho. What was Sarfatti working on?"

"Sarfatti found out that will and intent came before the forming of Planck's constant. That there was a way for an individual consciousness to play in an endlessly creative fashion without ever settling on a universe line to move through."

They were in a smooth, hilly area now. Occasionally a bump would send the cruiser flying for a few meters. When they reached the tracks the salvage vehicles had left thirty years ago, Tom shut off the scoop to conserve batteries. He went on with his fairy tale.

"Of course, that would be a meaningless existence. If you thought of something, you'd *be* it. There would cease to be a self and just an all. But Sarfatti went further. He found that you could create—through will alone—a different universe line to live in."

"In other words, you could click your ruby slippers three times and say, 'There's no place like home!' and you'd go there."

"Not necessarily. You couldn't control all the factors. It was more like, 'Be careful what you wish for; you might get it.'"

"You really think that all this you're telling me is real, don't you?"

In the harsh light of the lunar day, they could see one of the wings of Farside. Farside had been partially sublunar. Americans had always dug in. Originally it had been planned as a half-buried pentagon, but it had expanded in all directions as the radically pro-space Congress of the thirties had poured money into the Moon like there was no tomorrow. These strangely angled wings shot in all directions, suggesting an alien architecture fitted to this hostile world. Several holes appeared in the gleaming surface of the base—opened by micrometeors over the decades. Todd pulled the crawler up to a jagged hole, probably made by the salvage crews to pull out some valuable piece of equipment.

They turned on their suit lights as they stepped inside. Todd led the way down the long corridor toward the original pentagon. Sasha was impressed by the size and the waste. In its day, Farside had been the largest of the bases in operation on the Moon. With typical American expansiveness, it was just beyond view of the Earth. By claiming this view of the fabulous formless darkness, Americans had felt closer to the unknown which is space. It was a long walk to the central pentagon. Todd examined some controls, touched a switch, and the lights flickered on.

"The salvage crews left a small reactor going, so that if they ever needed to visit the base again they would have ample power."

Just as they reached the central pentagon, they felt a vibration. In the corridor to the left, something big was moving. Sasha didn't believe it. It was a cargo 'bot. A big, three-armed cargo 'bot. Todd began to laugh.

She grabbed him.

He hugged her and said, "It's all a joke. Look."

He touched three wall controls quickly and the 'bot stopped. He continued, "It scares off people from the real secret—that's what folklore was invented to do in the first place."

Todd led them through the pentagon. Every cubicle had either been cleaned out by the salvage teams, or had everything smashed by the 'bot. They crunched through piles of crushed boards, spaghetti wires, destroyed bits of wooden furniture brought from Earth as status symbols, lunar mineral displays, silicon data storage crystals, robotic parts. Everywhere were the heavy wheel tracks of the three-armed 'bot. Todd went into one room, seemingly no different from the rest. He stood in front of a closet door, and said, "Here is the Farside Secret."

He opened the door, which somewhat anticlimactically revealed only a closet. Then he pulled Sasha toward him and slammed the door behind him. It's not a big thing to descend in an elevator in the Moon's reduced gravity, but Sasha found the brief descent shocking enough.

The closet did not then open onto the magician's cave that she had been half suspecting. It was a small, densely packed lab, with some more or less familiar-looking high-energy physics equipment. She was waiting for Todd to uncover this hoax as he had the 'bot above. Already she was thinking of this experience as a story to tell her grandchildren, whom as she pictured them were clearly not Todd's descendants after all. She would play on a little while longer. She wanted to be able to tell the story of how she was young and foolish and brave.

"This is it," Todd said. "Sarfatti's dream machine buried in an abandoned base that looks away from Earth. This is the escape route for the desperate. It's our escape route." "What?"

"You know as well as I do that I'll be jailed for this, if I go back. So you've got to choose whether to follow me into another world and we live—perhaps—happily ever after, or stay here and be trapped into a lifetime of endless five-year plans."

"You can't make me decide this. You have no right."

"You decided it when you followed me into the tunnels under Little America. We've been gone—what is it? —four hours now. The Central Computer no doubt told your dad that you had entered the American ghetto at least three hours ago. Even now agents are swarming through Little America. If we stay I'll be a dead Romeo, with a literally broken heart in the gravity of Denver. You'll be a good career space agent living an emotional life as barren as the rocks you'll see every day through your viewports. Choose romance." At that moment the battle between romance and reason was decided. She would go with Todd, or at least let him try his technomagic. She had to swallow hard before she could speak.

"I'll go," she said.

Todd activated a terminal and typed in a password, which she noticed was "Rotwang." A few indicator lights came on. Nothing dramatic.

"We have to stand here." He indicated a roughly circular area, which perhaps looked a little scorched or discolored.

Sasha wondered if she was going to die. She held onto his arm very tightly. She had expected a long, mathematical description of the worlds they were going to bring into being. Todd said very simply, "I want a universe line similar to this where Soviet space doesn't beat out the American program."

As he spoke, the words appeared on the terminal. For a couple of minutes nothing happened, and Sasha was mad at the solemnity of this gag he was trying to pull. How could he offer something so important and it just be a joke? She was about to break free and slap him when the dizziness hit.

It seemed as though they were moving in every possible direction at once, including turning inside out. It was neither a long nor a short time, because they were in a place where time was not. Something there—something native to that timeless void—was both perplexed by their choice and amused by it. There was something like laughter—if Sasha believed in devils, she would have characterized it as a devil's laugh. Except that whatever it was, in whatever place they were, had neither sound nor substance.

It was hard to tell how long they had been staring at the lunar landscape in front of them. There was no clear moment of transition from eternity into time. It took several seconds for their minds to start again, and for them to realize what had happened.

They were the same—same dirty suits and stale air but Farside Base was gone. Farside was gone. The crawler was gone. The footprints and tracks were gone. They were in the base of a very deep crater, corresponding to the depths of the Farside lab. Todd turned his radio up to maximum gain, but there was only the meaningless hiss of cosmic rays.

No Americans. No Russians. No machine to try for another wish.

After a long silence, he would suggest that maybe they should walk back to Patrice Lumumba base. After a longer silence, she would agree.

They had come to another world, but not one they would have understood. They came to a world where Communism had fallen, and America had turned its back on space. No competition for the fabled ores of the asteroids, no pride in setting up bases to stare from the far side of the Moon. Even if they had had enough air to walk all the klicks back to see the Moon, no one knew how to build a rocket to get to the Moon. Their signals would have been wasted on a disbelieving drug manufacturing plant at an L-5 point.

They walked until they dropped, but they found their love as they dropped, and fell in an embrace. Thus they met the end of Romeo and Juliet, despite Todd's attempt to break free from myth.

Three hundred years later, when the true Space Age began, their well-preserved corpses would be a source of plays and novels, and they would live on always as one of the great mysteries of that age. \blacklozenge

-for Allen Varney



The Boy Who Loved Clouds

Maya Kaathryn Bohnhoff

He was surprised by how little it had changed. Home. It was the way his heart remembered it: the green of fields, the mottled hides of goats, the far purple mountains, the pall of fragrant smoke. Air pollution, they called it among the civilized denizens of New York, but Uttar Pradesh had never been civilized by Western standards and probably never would be. He had let that bother him for a while. Then he had simply accepted it. And when new acquaintances, learning his origins, made knowing remarks, he would smile urbanely and agree with the use of words like "backwater" and "anachronism." "But of course," they would say, falsely ingenuous, "that's what gives your stories their charm."

He hadn't recognized that as condescension the first hundred or so times he'd heard it. That realization, like his cynicism, was painfully won. Painful—the way this was painful. Coming home, the conquering hero, village-boy-made-goodand-powerful-and-wealthy. Coming home to his father's funeral.



Illustration by Joanne Lorah

"Adyahksa," his mother had told him, "he was so proud of you. So proud. His youngest boy, a great writer. A name."

Ah, yes, but not the name his father had given him. Not Adyahksa Samahita—Controller-of-His-Own-Destiny, Poised and Well-Founded—too difficult, his agent had said, for the Western ear and eye. So he was Kavi Samahita—a Writer, Poised and Well-Founded—and people often expected him to be Japanese.

"When you were born," his mother had said, and he knew what would follow, "your uncle, Narmada, saw your future."

"Yes, Amma," he said.

"'Yo yacchraddhah sa eva sah.' That's what he said: Whatever is his faith, that he becomes."

"Yes, Amma."

"So proud," she had repeated, her eyes misting. "He wanted to tell you himself, Adya."

And so, his Karma had come home to roost. The relatives gathered—scores of them, it seemed—and all with the same refrain: He was so proud. He wanted to tell you. Unspoken were the words: Why did you wait so long to come home? Why did you wait *too* long?

He could not explain that, even to himself. He had the means and the opportunity, had even swung through Agra on an international book tour. It was his brother, Josha, who explained it to him, unawares. During the family gathering he spoke of his younger brother's books.

"I've read several of them, of course," Josha said. "And I think they are very good, but . . . they change."

"Change?" he'd said. "How so, change?"

"The first stories were . . . lovely, loving, delightful. But the later ones . . . it's as if a different man speaks."

"A different man does speak," he'd said. "A grown man. Not the boy who left here."

"Yes," Josha had said and frowned. "That is exactly so." *And that,* Kavi thought, as he climbed the rolling hills behind the village, *is why I did not come home. I was not the one who left. Adyabksa left and Kavi returned.*

But even Kavi Samahita was seduced by the green hills and the bobbing forms of brindled goats and the great, spreading trees. There was one tree in particular, he remembered, at the crest of this very hill, where the boy Adyahksa had lain himself down in the grass and stared at the sky and daydreamed. He had named it Asvattha, of course, imagining it was the Tree of Life written of in the stories told by Avatars and Saints.

It was still there, he discovered, long before he reached the spot. It was huge, with a trunk as big around as the legs of four elephants (one measured everything large in elephants when one was a boy in Uttar Pradesh). It was the first tree at the verge of a grove that covered the top of the hill in a thick, verdant blanket that had made young Adyahksa see giants sleeping peacefully under the wool of titanic green sheep. Best not to wake them, he'd always thought, and so, he'd climb most secretly to the top of the hill and let his body gently into the grass beneath the giant vanguard. And there, he had given birth to his first stories, reached up and plucked them from the Tree just, he thought, as others must have done before him.

He was swept by hunger then, for the past, for the boy who abandoned the goats to lie in the warm grass. He stood beneath the Tree, at the outermost reach of its great branches and longed for the descent of those simple, ingenuous tales. Tales he had left behind him, somewhere between pain and disillusionment and discontent; before experience had matured him, jaded him and stripped him of something indefinable.

He searched the horizon for them and recalled how he had once found them in clouds. Great, billowing clouds—white and majestic, dark and rain-filled. There were some up there now, he realized, craning his neck and squinting a little against the sun. If he lay down upon the grass, if he reached up into the Tree and contemplated the clouds, would he find the simple stories there? Lovely, loving, delightful stories?

He dropped to the ground, careless of his expensive clothing—it could be cleaned when he returned to New York—and lay back, hands behind his head, watching the pageant of cloud-form. Sheep. They always came first, bright and bouncing, and followed, today, by their darker cousins. There was a wind high up; he could see it stirring in the heavy underbellies of clouds sponge-full of moisture. These became dragons and great, undulating sea creatures, escorted by dolphins of a lighter hue.

He began to see other things in the clouds: ships under full sail and wonderful and terrifying animals. He saw upside-down oceans upon which the Sun, burning whitely from behind, seemed like a wave-lapping moon.

A breeze wriggled into his shirt and caressed his skin with damp fingers; a lover wearing a perfume of jasmine and rain. He was slipping easily into contentment, rolling back the years, finding the impressionable Adyahksa beneath the urbane Kavi, when he saw a truly amazing formation just above the horizon.

It was a face. A giant face, of course, the only kind that clouds contain. It seemed to be a woman's face. A very beautiful woman, he decided. A Rani. No, a Deva an angel. He smiled, a dreamy smile that hadn't touched his lips since . . . when? Since the first time he had fallen out of love? He recalled a golden-haired woman with a glittering name. A woman with fair skin and a dark heart.

The smile slipped. He lunged to retrieve it, pulling the Cloud Face to him with a dreamer's eyes. She was beautiful. Her skin was pewter with a wash of blue. The color of Krishna's skin—or so the Scripture said—the color of a rain-filled cloud. The smile deepened. Surely, she must be of the Kessapa line. A daughter of Saints, a descendant of the Avatar. That made her better than a Princess or a Rani or even a Broadway songstress.

He studied her as she floated toward him. She would pass directly over soon, caught in quickening currents. Her hair was blue-black and sprinkled with pinpoints of light and, beneath her broad, gleaming brow, eyes of pearl scanned the ground, ever open. Did she see him there beneath his tree? Of course she did. She was a Deva. She saw all things beneath her. Would she deign to stop, to speak to a lowly boy of Uttar Pradesh, when the whole world was hers?

Perhaps she would slow, perhaps pause, perhaps study him as he studied her. She *was* slowing, he realized. Slowing and pressing lower. Through half-closed eyes, he watched her lips, full and dark; through a halfdreaming mind, he thought she would bend down, put those lips to the earth and kiss the spot where he lay.

He slept. He dreamed of himself. Of Adyahksa and his Cloud Girl. In his dream, she floated to earth on the backs of cloud horses—whites and greys and dapples the horses that had once drawn Krishna's chariot. And when she neared the earth, the horses dissolved away, depositing her upon the grassy knoll. Without hesitation, she stepped into Adyahksa's waiting arms. She was soft to the touch, but her diaphanous body had no substance and no warmth. He willed her to have substance and, for a moment, thought he felt her grow more solid, more real. But he had no sooner courted the thought than she pulled from his embrace, shaking her head and shedding tendrils of blue-black hair. Her lips formed a single word—"no"—but she smiled.

Heartened, he began to walk. She fell into step with him. They didn't speak, but only walked, though he dared to reach out and take her hand. It was cool and felt like dampened silk. It was enough, he thought, that she walked with him. At length, they reached a stream and the Cloud Girl stopped. Turning to face him, she pointed upward and laid one cool hand on his shoulder. Her lips moved, but he could hear no words. She smiled again, and shook him.

"Adyahksa!" No, that was not her voice. Who called him? He frowned and turned to see.

The face was his brother's. Pallid clouds arranged themselves behind his dark head, making his expression hard to read. "The procession!" he said urgently. "Come, Adya. It's time for the procession."

He leapt up, surprised for a moment at the fine cut of his clothing, at the quality of it. Yes, of course, he was Kavi again. And he was on his way to join his father's funeral procession. He glanced at the sky as he and Josha made their way down toward the village. He scanned the clouds for the face of his Kessapa maiden, but she was not there. Nor would she be ever again, he knew. Still, he left the hillside with reluctance, praying—if there was a prayer left in him—that the afternoon would pass swiftly.

He had been to a Hindu funeral before, of course. One of his uncles had died when he was nine or ten, and he had been among the mourners. He had mourned, too, for the young man, just married, who had lost his life to a disease that, anywhere else in the world might have been a "nuisance ailment." His uncle had been a friend, someone to trust with boyhood confidences, someone to encourage him in his daydreaming, much to his father's chagrin.

He recalled the pyre—his fear of it. The leaping flames had formed an impassable barrier, terrifying him, overwhelming him. They had forced him to understand the finality of his uncle's leave-taking. Today, it did not take a funeral pyre to make him understand that his father was forever beyond his reach.

His mother would deny that, of course. She believed in something beyond the physical—a reunion of sorts. He thought he had once, too. But no longer; so the funereal flames singed his soul, making it blink and tremble, and somewhere deep inside the man, a small boy cringed in terror and shed tears of loss.

It was a relief when night fell and the household curled itself for sleep. His mother retired early, her sister at her side, her face drained of everything but age. There were still some family friends in their parlor, chatting quietly, wondering how long the poor old woman would last without her husband, and speculating on whether she would move to the city to live with her oldest daughter.

The idea disturbed Kavi. What was this place without his mother? Not home. If she was not here, he would have no place to return to—or at least no place to *imagine* he would return to. He sought out his brother, intent on asking what arrangements were being made for the family lands and feeling vaguely guilty that he had not discussed it with his mother. But his brother brought him face to face with a young woman he said was the youngest of the family Mohandas. Did he not remember her? Josha asked. Her family lived not a quarter-mile away. They had played with her brothers as children.

He did remember. She was Sudha, and he had once daydreamed about her, up there on his hill. He had imagined a wedding and a melding of fortunes, for her family had been very wealthy in those days—still was, if her clothing was any indicator. She had seemed exotic and beautiful then. Now her hair was merely black, her eyes only brown, her skin too pale.

He forgot what he would have asked his brother, excused himself, and went to bed.

He dreamed. He dreamed of funeral pyres and dark smoke that billowed into the sky to become the cloudface of a beautiful woman of the lineage of Kessapa. A woman whose hair was blue-black, like a raven's wing; whose eyes were pearl; and whose skin was the color of a rain-filled cloud. She was fragrant and cool and translucent—elusive. Kavi did not want her to be elusive. He wanted her to be warm and near and solid as the Asvattha Tree—the Tree of Dreams. And since it was Kavi's dream, he willed her to solidity and she complied, metamorphosing into a woman of flesh and blood who came into his arms.

He took her in a savoring embrace, drinking in her beauty and her warmth and her fragrance. But even as his embrace tightened, those things faded. She faded with them. No, worse than that—in some horrible way she writhed apart, limb from limb, hair from flesh, dissolving into a dark vapor and leaving sorrow like a dew on his heart.

Kavi was a man well-practiced at manipulating his dreams, but though he worked hard at it all night, he could not bring the Cloud Woman back.

In the morning he talked to his brother about the family lands. "What will mother do now?" he asked.

The Boy Who Loved Clouds

"You haven't asked her?" countered Josha.

He shook his head. "There didn't seem to be . . . an appropriate time. Cousin Parva thinks she ought to live with Lila in Agra."

"Do you think she ought to do that?"

"I don't know what she ought to do, Josha. I only know what I hope she'll do."

"And that is?"

"Stay here. Keep the farm. It's not as if she'll be alone. You live so close, and there are her friends, the hands. She could even get someone to help with the house."

Josha looked amused. "Why should she need help with the house now? She never has before."

"Well, perhaps she doesn't. I was only thinking . . . she might get lonely."

"As you said, I'm right down the road with Bandhul and the children. Her friends are here; she's never lived anywhere else. If you're afraid she might get lonely, why don't you stay for a while? Better yet, why don't you come home for good?"

"Josha, my life is on the other side of the world. My agent is in New York, my friends, my business . . ."

"I'm not naive, Adyahksa. I know that many writers *successful* writers—live halfway around the world from their *business*. That science-fiction writer, Clarke, he lives in Sri Lanka, doesn't he? Why can't Kavi Samahita live in Uttar Pradesh? He was born here."

"Maybe I can stay for a while, but . . ."

"But living in a backward hole on the butt of the Himalayas is not your idea of living?"

"It's not a backward hole."

Josha laughed. "Ah, now he's defending it! No, you're right—you couldn't live here. What would your American friends say? They'd probably think you'd reverted to barbarism—become some sort of little shepherd boy."

"I don't care what my 'American friends' say. I just . . . I just can't see readapting to this lifestyle. Maybe I will stay for a little while. When I leave, I can hire someone to stay with her."

Color crept under Josha's dark skin. "She doesn't need that," he said. "A stranger living in her house. But you living here would amount to the same thing, wouldn't it? Perhaps you should leave." He turned on his heel and disappeared into the house, leaving his brother with a burning face and an uneasy conscience.

Kavi climbed the hill. He would sort out his thoughts; he would order his feelings. When he was done with that, he would talk to his mother, try to get a sense of what she wanted him to do. Perhaps, he thought, perhaps she would like to live with him in New York.

Under the Tree, he found it easier to think. He thought of what he would say to his mother, of the offer he would make to her. He told himself that was the most realistic alternative, that he really did need to go back to New York, really must live there, really *wanted* to live there.

At length, his thoughts were interrupted by clouds. It was inevitable, and it was one of the reasons he came here. He let the clouds have his thoughts, define their shape, even as he defined the shapes of the clouds. He realized almost immediately that he was looking for her, the Cloud Deva. It was impossible, of course. The shapes of the clouds were random, changeable; that combination of wind and pressure and water could never produce the same effect. Yet, he watched for her with a boyish expectancy, waited as the Saints had waited for their miracles. He grimaced. He might as well expect to see the Lord Krishna Himself, riding down out of the sky in a Prince's chariot. He might as well expect . . .

He sat up, his eyes locking on a formation near the horizon. It was the same face, he'd swear it. The same sweet, beautiful, inhuman face he'd seen the day before, and it was being borne toward him on currents of moist air. Smiling, he let himself back down into the grass and began to daydream.

In his dream the village boy, Adyahksa, wooed and won his Cloud Lover. He told her stories; she told him about her family. She was truly a Deva; the wealth of the world was hers—the wealth of all the worlds.

"I have wealth," he told her.

"You *think* you have wealth," she replied, and he was amazed that he could now hear her. Her voice was like the pale whisper of wind chimes touched by a mere breath of breeze—faint and sweet and inspiring such longing, Adyahksa nearly cried. "What is wealth?" she asked him.

"You are wealth," he said. "I am wealthy if I have nothing but you."

"Do you love me, He-Who-Controls-His-Own-Destiny?" "Yes," he said. "Stay with me, here, on the earth." There was no answer.

Adyahksa left the daydream and focused on the pewter face floating serenly above him, much closer now. "Stay with me," he whispered and watched as the mass of cloud pressed closer to him, closer to the Tree, closer to the earth.

She will kiss me, he thought when her face filled his vision. His eyes swam, unfocused—she was too bright, too huge to take in; he closed them. Readying himself for the kiss. He felt it take him, experiencing it in every cell, in every fiber. It was an orgasm that shook him from head to toe, from body to soul.

I love you, he thought.

"You *think* you love me," she said. "What do you love? What is her name?"

He quaked, shivered, sweating upon the ground. Someone watching would have thought him the victim of a seizure, or the recipient of a revelation.

"Who are you? I don't know your name!"

Kavi sat up and glanced around, anxious that someone might have heard him. He tugged at his sweat-soaked shirt and smoothed back his damp hair. A name. She had to have a name. And he knew who she was, he reasoned. After all, he had created her.

He got up, brushing away grass, chagrined at the damp stain at the crotch of his pants. He would sneak back into the house. He didn't want to be intercepted. The sexual charge had spent itself, but in its stead was a building desire to put Adyahksa's daydreams into words. He hurried down the hill, already rehearsing the opening of the story. * * *

Yujyate; that was her name, he decided. It meant "yoked" or "united" in the old tongue. The name was a product of Adyahksa's wishfulness. She was a Deva, of course, Princess of a spirit Kingdom, daughter of a spirit King— a daughter of Krishna, in fact, by his wife-lover, Radha.

Yujyate was of an age to wed, but was displeased with every suitor who came to her.

"You must marry, daughter," her Lord told her. "The Kessapa line must continue, or blessings shall cease to rain upon the earth."

But Yujyate saw no blessings in her selection of divine suitors. "They are uninspired, father," she told the Lord. "And they are uninspiring. How can Your blessings continue with such as these to oversee Your realm? Can I produce an Avatar with such as these? They have no creative power; their words are bland as unseasoned rice, their thoughts as pale as water. I will not have any of them."

"Then what will you do for a husband?"

"I will search the earth," said Yujyate. "I will scour the earth, arrayed as a cloud, until I find a man whose thoughts are bright and true and whose dreams are vivid and delightful."

That set the stage, of course, for the entrance of the village shepherd boy, Adyahksa, and his daydreaming. For it was Adyahksa's fanciful dreams that won the heart of the divine Yujyate, coaxing her to earth. They married, she gave him all bounties and delights and made his life heaven on earth.

Really, Kavi thought, sitting back from his pen and papers. *And they all lived in Samadhi happily ever after*. He rubbed his eyes. He looked at the words he had written and knew he didn't believe them. God, had he *ever*? He had to be honest in admitting that he had once. Hadn't that happy ending been what he had pursued, first to Agra, then to the United States? His stories had been redolent with it. He was a believer. A believer in his ability to create; a believer in what he created.

He still had confidence in himself, and in what he wrote, but belief? He wasn't sure he'd call it that. And, of course, the stories had changed too. Subtly, at first, as he had changed, then more distinctly. He had told himself his style was maturing, that he was finding his voice —the voice of Kavi Samahita. Now, he forced himself to honesty; in finding Kavi's voice, he had lost Adyahksa's. The critics had noticed it—so had the readers; even his elder brother had noticed it. And though his books still sold and still drew critical acclaim, he knew he was no longer unique, no longer fresh. He wrote, now, with mature cynicism. He wrote like any number of other writers. Adyahksa had been silenced.

He picked up his pen, then threw it down again with a grunt of disgust. He couldn't write these stories anymore. Kavi put aside "The Boy Who Loved Clouds" and sought out his mother.

"You don't need to stay for me," she said. "I won't be alone. I have friends. I have Josha and his family." "But Amma, this house—it's a big house...." She smiled with not a little pride. "Yes, it is a big house. And a fine house. And your grandfather built most of it himself."

"But by yourself . . ."

"I won't be by myself. I have grandchildren. I have friends." She paused to look at him oddly. "Do you have friends, Kavi?"

"Of course I have friends."

She reached over and patted his hand. "You used to say your stories were your best friends. Do you remember? When your father would worry about you being lonely, you would say, 'Father, my stories are my friends.'" She shook her head. "You worried him, you did. But you did so well in school, how could he complain?"

Kavi felt a smile tugging at his lips. "He was much more vocal about my performance in the fields."

"Well," she said, "you did lose several of his best goats. But, he easily forgave you that."

"Amma, did he read my stories?"

She nodded. "He didn't always understand them, but he read. And he was proud. I read them, too, you know. I like the old ones best. The ones you wrote when you were in school."

"Have you read anything more recent?"

She nodded. "Bandhul brought me a magazine with one of your stories in it. They said it had won an award." Her expression said she didn't understand how that could have happened, then shifted quickly to show concern. "Are you happy, Adya?"

"Am I—?" He laughed. "Of course, I'm happy. How could I not be happy? I have everything I ever dreamed. I write for a living, I am a modestly wealthy man, I am respected by my peers and loved by my readers."

Her mouth puckered and he could feel her preparing to quote him some hoary proverb about wanting and having. He put his arm around her. "Amma, I'm fine; it was *you* we were discussing."

"But do you have friends, Adya?"

He understood, suddenly, that she was not asking about friends of flesh and blood. She was asking about his stories—about his writing. He chose to misunderstand her. "I told you, Amma. I have lots of friends."

She let it go. "So do I," she said. "I don't need you to be here for me. I certainly don't need you to hire someone to be here for me. But Adya, if *you* need to be here, then I welcome you home with all my heart."

If I need to be here.

He stood upon the crest of the hill, beneath the branches of his Tree of Dreams and stared out at a cloud-less sky. *Do I need to be here?*

He had this image of himself, suddenly, as the globetrotting celebrity, living his hectic lifestyle nine-twelfths of the year, then running home to the quaint little farming village when things got to be "too much." A lot of his friends had places like that. Rustic little boltholes where they went to renew themselves and from which they could return to speak in glowing terms of the "simple life" and the "simple people" who lived it.

He had to smile a little at that. Simple. Rising at dawn

to feed stock; spending days in the fields, plowing, planting, harvesting, winnowing, herding; doing that through drought and monsoon and cold and earthquake. Yes, so simple.

But life in a western city—in any city—had its own complexities; a million tiny, mundane, daily disasters that, in the end, contributed to just so much insulation. Perhaps that was what those world-weary seekers after the simple life really sought—a place where they could strip off the insulation, where they could wear only their naked souls and no one would mind.

Insulation. That's what his stories had now. And he had to admit he could no longer think of them as friends. But the story he had tried to write this morning was a travesty. The words were all there, the simplicity, the ingenuousness—and all of it false, fabricated, squawked in the voice of a parrot. If he stayed here, wrote here, would that change?

He eyed the empty sky with frustration and longing. There were no stories up there today. He returned to the house.

His dreams were no kinder to him than the sky had been. He brought his Cloud Lover to earth again and again and strained to take her in his arms. Again and again, she eluded him. He struggled harder, conceiving of a way to trick her into descending. But he would no sooner embrace her than she would rend herself asunder, leaving him alone on his dark hilltop under the skeleton of the great Tree.

He woke exhausted, hearing thunder. A storm had come in overnight. Galvanized, he rose and dressed; the storm would bring clouds, and clouds could bring *her*. If he had not been so tired, he might have stopped to laugh at what he was thinking—doing. He was not so ignorant as to believe he could find yesterday's face in today's clouds. And what he had experienced yesterday could certainly be attributed more to stress and an active imagination than to any extraordinary play of wind and water vapor.

Yet, knowing that, he dressed and dove out into the moist morning. It wasn't raining, but the dark clouds that scudded overhead trailed tendrils and veils that made him think of funerals and Portuguese Men-of-War. He laughed aloud at the odd pairing of images and hurried uphill on a giddy rush of adrenaline.

The breeze was strong at the crest of the hill and the great Tree trembled at it, expectant. He paused beneath the outflung branches, trembling in harmony. Seeing the Tree with the eyes of Adyahksa, he perceived a portent: she would come. The Tree knew she would come.

Kavi lay in the grass, hands behind his head, watching the clouds flee dog-low across the sky. There was no gold in them today, only unremitting pewter, silver, grey. The grass smelled especially sweet, though, and he could even make out the fragrance of the trees that marched along the hill to his left. Sweet. All of it. The rush of wind, the silken scrape of expectant twigs and branches, the gossip of leaves.

How easy it was to be Adyahksa here-how difficult

to be Kavi. In his dreams, though—no, nightmares, those were—he was always Kavi. That was probably significant, but he allowed the significance to be lost on him as he lost himself in the clouds.

There were elephants in the clouds today, and sleek, black pirate ships, and Chinese dragons with silver eyes. Everything flew; nothing floated. Everything was in motion and foment; there was nothing of the placid or the meditative.

He began to fret. Would she come in weather like this? Could she appear on the leading edge of a storm? Would he recognize her?

He laughed at himself, then. Easy, indeed. Easy to shed the years of experience and live in the mind of a naive youth . . . as long as he stayed beneath the Tree, as long as he stayed upon the hill. He couldn't do that. And he couldn't seem to carry the memories (for that's all they were, after all) back down the hillside to spill them into the pages of a notebook. What tasted fresh and original and exciting at the beginning of the downhill journey seemed ludicrous at its end, as if . . . He sat up and gazed around. As if Adyahksa lived at the top of this hill in the shade of this Tree and nowhere else in the world.

He glanced back at the Tree's sturdy trunk—a trunk clear of graffitti or carving. In his travels he had seen trees in which people, passing, had carved their initials or names. They did this, he reasoned, because trees, barring the intervention of natural disasters such as flood and fire and man, are virtually immortal, which people don't believe themselves to be. He had never carved his name in the Tree of Dreams; perhaps it had carved its name in him.

He lay down again, pondering the idea of cutting from the Tree a small chunk of wood. Something he could put on his desk and fondle when he needed the memories to flood his mind. Perhaps, in that way, he could recapture his stories. Perhaps, in that way, he could reacquaint himself with old friends.

It was as he pondered this that he saw her. He knew it was her—Yujyate—even though she appeared as she never had before. She was just a whisp at first, torn from the underside of a great, black whale of a cloud and he watched her with only passing interest. But then the warp and woof of eddying wind caressed the whisp into something else. She took shape—a maiden's shape, curvaceous and graceful—dressed first in a flowing sari, then in the garb of a warrior, then in the sari again. On her head she wore a crown, then a battle helm.

Now, he thought. Now I shall be able to finish the story. He smiled, sliding back toward Adyahksa. See how she runs to me, leaps to me, flies to me. And how constant she is. No human lover could be so faithful. How she must love me.

And fly she did, as if wings decorated her heels and helm. Dropping below the belly of her whale-cloud, she spread her arms and they became as wings, bringing her ever closer to her waiting lover.

Adyahksa's heart filled. Theirs would be a wedding such as the world had never seen. All the gods would at-

tend, all of creation would witness it. The bride would wear a wedding dress of clouds and a veil of sun-sequined dew. Oh, the words! The words he would write. They would fill pages. They would fill hearts with longing.

And there she was, before him, floating just above the ground. Her eyes were silver in her pewter face, her lips like black pearl, and, from beneath her helm or crown, locks of the truest black swam in currents of moist air. If he could only draw her down; if only she would stand beside him.

"Yujyate," he murmured, sitting up. He put out a hand. "Yujyate."

"You call me that," she said, her voice like the whisper of rain, "because you seek to place the yoke of union upon me. That is not my name. I am Yukta—union with the divine."

"Whatever your name, I love you," said Adyahksa.

"I am not a Deva, as you understand it," she said, "although you are not wrong in saying I possess the qualities of a Deva."

"Whatever you are, I love you," answered Adyahksa.

"I am not the daughter of Krishna and Radha," she said, "although you are not wrong in saying I am a child of the Avatar."

"Whatever your family, I love you," answered Adyahksa. "Tell me, Yukta, do you love me?"

Her great, silver eyes did not blink and her beautiful, black-pearl lips curved into a smile. "I have always loved you."

"Then come to me. Live with me and be my wife. Set your feet upon the earth and take on a real form. Let me hold you."

"I cannot."

"Why can you not?"

"I have already told you. I have shown you."

"You have shown me? How have you shown me?" The words had no sooner left his mouth than he understood she referred to the nightmares that had visited him. He was horrified. "You would dissolve?"

"I am a creature of daylight and spirit, Adyahksa," she said, and he shivered at the sound of his name on her lips. "I cannot survive on earth in your form. If my feet touch the earth, I cease to be."

He felt, for a moment, as if his heart had dissolved in his breast. He hadn't anticipated this. In his imagination the faery tale would end with her descent to earth, with their union, with the birth of their children. "There must be a way," he insisted, a frantic tightness seizing his chest. "There must be a way we can be together."

Her head tilted slowly to one side. "There is a way." "Tell me," he demanded, coming to his knees in the

grass. "Tell me how I may have you."

"I am not a possession, One-Who-Controls-His-Destiny." "No, no, of course not." He reached for her. "Tell me how we may be together."

"You must come with me."

"I _____ II's addain a model

"I . . . ?" His eddying world slowed to a stop. His blood stilled in his veins. "How?"

"You must come with me," she repeated, and began to withdraw, upward, toward the steel-bellied clouds. Kavi leapt to his feet. "But what would happen to me? What form would I take?"

"You would take a form befitting your station." She continued to withdraw from him while his panic and desire grew in a bizarre tandem.

"I would die?"

He thought she laughed. "Are you now alive?"

"I don't understand. . . ."

"You understand. I cannot exist in your world, but you can exist in mine."

"How, exist? Will I have a body?"

"Not as you know a body."

"Will I be able to write stories?"

"Not as you know writing."

He rejected the idea. With every fiber, he rejected it. And in that rejection, he tried to shake himself free of the daydream, willing it to end. It did not end. The Cloud Deva still floated above him against the rain-filled sky. He still shivered in the grip of some strange, fearful passion.

He shook his head, believing he must be asleep. A chill of real fear hovered at the back of his mind. What if he was not asleep? What did that mean?

"Stop," he said. "Wake up. You're dreaming."

Above him, Yukta laughed softly—a sound like the trickle of water over rock. "You do not dream," she told him. "At night, you dream. Your dreams are full of your-self. Full of Kavi."

"Who are you?" he demanded. "What are you?"

"You know who I am," she said, and evaporated. He stared at the spot where she had been and did not wake up. Rain fell, tossing sequins among the leaves of the great Tree, pattering at his face, soaking his hair. Still, he did not wake. Finally, he left the hilltop and walked home through the rain.

He had intended to return to New York at the end of the week. He cancelled his airline reservations and stayed. He told his mother and brother he needed the break. That much was true. When pressed, he also admitted that he was in search of that loveliness his brother had found lacking in his most recent stories. That was also true.

He didn't speak of clouds or daydreams or hallucinations. He didn't try to explain why a man who knew better was hungering for the repetition of an impossible phenomenon, entertaining unimaginable thoughts. It was the stories, he told them. The stories he could bring down from the hill.

He went there every day, but he brought nothing back. The clouds stayed high in an azure sky, ignoring him. His daydreams were flat, lifeless; his nightmares were turbid pools of fear and loss.

When he had been there a week, his agent cabled to remind him he was scheduled for a book tour that would begin in ten days. He barely glanced at the message.

He tried to write. He finished "The Boy Who Loved Clouds," but the new ending, in sharp contrast to the old, was dark and cynical. In it, Adyahksa, realizing his union with the Cloud Maiden was impossible, hung himself from the Tree of Dreams. He was disgusted with himself. What utter tripe! What self-indulgent whining! Of course, the critics would find it morbidly satisfying, and his literary friends would nod and say, "Yes, isn't that just the way it is?" But to Adyahksa, it stank of fatalism. *I would never*, he thought. *I could not*, he protested. And it occurred to him, then, how very personally he was taking this story, as if it really was *be* seeking the Maiden—seeking Yukta.

He paused over his pages, awash in a sea of untamable words. "You know who I am," she had said and, suddenly, he did know. She was the Story and she was Adyahksa, having found the Story. She was the power of creation, the lovely, the loving, the delightful.

And if I surrender to her, he told himself, the Story will surrender to me.

He understood, now, as he climbed the hill, that this entire experience was but a play he had staged for himself—a metaphor, an allegory. The Writer had lost his unique perception, his imagination, his creative edge, his stories. The Cloud Deva was an analogue. It made perfect sense. And now, by making a symbolic gesture of surrender, he would regain those things.

Wonderful! he thought, almost gleeful. Such an experience! And I will write about it eloquently.

He reached the crest of the hill and stood beneath the spreading branches of the great Tree. He threw his arms wide open and looked up at the tall, fleecy clouds and shouted, "Yukta! I am ready!"

The only answer was the whisper of wind across the grass.

"Adyahksa surrenders!" he proclaimed. He turned slowly now, arms still outstretched, searching the sky in every direction. Nothing, nothing and nothing.

He stopped his turning, lowered his arms. If this were a story, what would he be expected to do to draw the Deva to earth; should he fall to his knees in abject surrender? He tried that, but the clouds remained as sheeplike as before, letting the wind herd them northeast into the mountains. Finally, he lay down as he always did, hands behind his head, waiting.

The movement began almost at once in a mass of iridescent pearl that hung nearly overhead. He gazed up into the soft whorl, expectant. Like a funnel cloud, it seemed—he had seen them in *National Geographic* and on television—but this cloud was bright as a white Sun, and out of its belly slipped an un-funnellike shape. It was the thing he called Yukta, the daydream, the wet dream, the metaphor.

The cloud is giving birth, he thought, watching. She was dazzling in a thousand shades of white and silver, gradations of subtle color he had never even imagined. She descended toward him like one of those angels that appeared in Christian depictions of something called the Rapture.

I have never been a Christian, he thought, irrelevantly. *I wonder if a one-time Hindu can experience this Rapture.* And he wondered if it was like Samadhi. But that was irrelevant, too, since he had never experienced that, either.

She is like a bride, he thought as she drew close to the earth. Arrayed in radiant purity. And I will be her husband.

Floating just above the ground, she met him face to face, all but blinding him, and his excitement leapt at her.

"You know who I am?" she asked; her voice was the sound of water rushing from a spring.

He smiled. "You are my stories."

"I am more than that."

"Of course."

"What do you think will happen if you take my hand and follow me into the clouds?" she asked, tilting her radiant face skyward.

He followed her pearl gaze up into a well of glory and he gasped at the sheer beauty of it. *I amaze myself*, he thought, then said, aloud (perhaps), "I will surrender to the Story and the Story will surrender to me. I will find my voice—my own voice, not the voice of those who surround me—and I will write stories that will amaze even the gods." He thought that sounded good, to mention the gods. He would remember it when he wrote this all down, later.

"You are right in believing that," said Yukta, "and you are wrong in believing it."

Ah! A mystic riddle! "How can that be?"

The gleaming head tilted slightly, a gesture he found endearing. "It is even as you say, except you will have no voice to find and you will have no hands with which to write."

"You puzzle me."

"I speak the truth."

"Still, you puzzle me."

She held out her hand.

"I dream of making love to you," he said, feeling that urge suddenly, insistently.

She sighed, he thought; a sweet breath of wind passed gently over him. "You made love to me often, once," she said. "Then, you only pretended. The words still came, the gestures were still made, but there was no love."

Yes, of course. If she was the Story, that was undeniably true. "Now there is love," he said, and stepped toward her.

She embraced him. He felt the misty coolness of her on his skin. He raised his own arms to return the embrace and his senses exploded. More intense by far than the orgasmic frenzy excited by her imagined kiss, this swept him upward, outward, inward all at once. He was lifted, reeling, from the solid earth, flung upward into a roil of cloud, tumbled in eddies of vapor.

He had body-surfed once in Hawaii. This was like that; this was totally unlike that. He was sundered and united; shattered and gathered up again. Pieces of him rained like shards of bright glass from up and down. He heard the rush of a great wind; he heard nothing.

NO! he thought or shouted, or did neither. *This isn't right! This isn't what I imagined! I'm hallucinating! Dam-mit, I'm hallucinating!* Anger rose within him, making him feel hot and swollen. He wanted to scream himself awake, he could feel the scream building, but in a thunderous moment, all sound, sight and sensation crescendoed and evaporated and he was left, numb, blank, motionless, emotionless and silenced.

He was swimming, then. No, he was not. He was ... motionless. There was movement, but he could not describe it by saying, "I am walking, running, swimming, flying." He was simply in motion. There were veils before his eyes. No, there were not. He was ... eyeless. There was sight, but he could not describe it by saying, "I see."

I can't see.

Perceive, then.

He roiled. There was someone with him. *Yukta*. *Yukta*, she agreed.

Where am I? What am I? He wanted to feel fear, but fear was a memory fleeing swiftly. He felt disoriented. Yes, that was the right word.

You are in my world. You are a son of the Avatar. I don't understand.

Perceive.

He felt that he had been directed to turn his attention downward (was it downward?). He wanted to perceive veil-lessly, and the veils dissipated. Color. There was color. Green. Vast areas of green. Shapes. Shadows. A tree. A tree on a hillside of verdant, breathtaking green. A King of Trees that rose above its nearby neighbors like a giant.

He felt a stirring, a frisson of excitement like static lightning in a cloud. The Tree of Dreams.

He could see them, then, hanging like heavy dew from every leafy limb—dreams, stories, visions, imaginings. And around him, in shifting veils of mist (was he that?), lived more of the same, each unique, each sparkling or fragrant or melodious. They fell like rain from the sky. They lay like dew upon the grass. They rode to earth on beams of sunlight. They travelled on temple chimes and on the clanking of cowbells. There was nothing that did not contain them or was not festooned with them.

If only he had known! If only he had seen them. *Why is this place so blessed?*

Laughter rippled around him. It is no more blessed than any other place. Nor is it any less blessed.

He digested that motionlessly. He had lived for stories. He had left here to seek them. Then he had returned here to seek them. All the while, he had been surrounded by them. He would have laughed at the absurdity of that, if he had had a voice. Having none, he became laughter.

In the world below, beneath the great Tree, a man lay. It was Kavi, lying beneath the dream-laden boughs, his mouth open, waiting for the dew to drop. Waiting for the rain to bring stories to earth. Waiting for his Cloud Lover.

What is he waiting for? he asked.

For a breeze to shake loose the dew. For a cloud to carry it to him. He is waiting for you.

As I waited, he realized. As I waited for you.

Clumsily, he willed himself (what was self?) to descend toward the dreaming figure on the hill. He saw the face he had once called his, saw the lazy eyes open and the lazy smile spread and he felt the hungry, curious mind reaching up to grasp . . . him. He was fully conscious of it then, of what he contained, of what he was. He was a cloud full of rain. He had only to shake the rain free.

When rain fell, children caught the droplets on their tongues; so Kavi-On-the-Earth caught imaginings as they shook loose from Adyahksa-In-the-Heavens.

The earthbound creature sat up, then, producing a cloud-white pad of paper and a pen. And he began to write.

Adyahksa-In-the-Heavens was amazement. Words filled the bright pages. Stories filled the bright mind. He marvelled.

I did that?

You helped him do that.

Then, I am . . . Am I stories?

This dew of dreams is the stuff of stories and songs and things made. You are the mist that scatters the dew and the wind that spills it. You are the word 'Be.' I am also those things, for we are now one.

And is it like this everywhere?

There is no place that is not full of dreams. No place?

None.

Then may I go . . . ?

He moved over glittering buildings—great, angular mounds of diamond, wrapped in ribbons of light and dappled by pools of darkness. He came closer and the lights resolved into streams of cars and street lamps. The darkness resolved, too, into empty lots littered with refuse and dominated by crumbling piles of stone.

And everywhere were dreamers, storytellers, songmakers. Some knew they were that, others didn't. Some tapped the dew of dreams on occasion. They lapped it from the air, let it fall on their tongues and spit it out again onto paper or into the airwaves or onto canvas.

But many more saw only the hemming buildings and people and bright lights. They heard only sirens and loud music, the shriek of brakes, the angry bleat of horns, the chatter of tongues. The lights made them blink; the darkness made them cower. And as they walked teeming streets and silent corridors or sat alone in cabs or limos or shattered tenements, the dreams, unseen, surrounded them. They trod upon them in stinking alleys, they ignored them in the subway, they strolled beneath them in Central Park.

Even now, Kavi could feel curious, hungry souls turning outward and inward all at once, wondering where the dreams were and how they might be found. All they needed, he thought, was someone to show them. A little breeze to shake down the dew.

Kavi became contentment, then; he became a smile that, if you stood in Central Park at that moment and looked skyward with a hungry soul, you might have seen, lingering like a Cheshire cat's above the tallest buildings. Perhaps you saw it and knew it for what it was. Or perhaps you thought it was only a cloud. \blacklozenge

Powers of Flight



James Sallis

As he steps away from the shop door, he begins to rise into air, his feet at first scuffing at pavement, then he is above it, clear, floating now over the heads of fireplugs, children, streetlamps, feeling the ground, with something like a long sigh, give up its claim. There is a light breeze and he drifts gently towards the shipyard, the strip of crab houses, checkerboards of docked pleasure boats. Faces turn up to him. I am falling, he thinks, upwards; I am falling into freedom.

"Maybe it's just," Sheila says, "not meant to be." She peers up from a column of figures atop which she has been picturing a diminutive man reposing nude, looking out at her. "Maybe I'll just never be loved, never find the right man out there."

"You could have mine," Jeffrey says. "If I *had* one, that is." "You and Brian aren't to-

gether anymore?"

"Barbells to Beethoven, all gone. Empty room in the flat, black hole for a heart."

"I'm so sorry, Jeff."

"That's what *be* said—right before he hooked our CD player with a little finger and hauled it out to Larry's VW."

"Perhaps you're right, dear," Sheila's father says, turning from the window where he's

Illustration by Jack Pennington

just watched her latest young man (Blair, he thinks; they all have these odd names nowadays) float away in a wash of pigeons and seagulls. "Or perhaps," because he knows how much this means to her, "it's just that you've been trying too hard. You should concentrate on your career. Watched pots and all that, you know."

"But I haven't been trying at all, Papa. If there's anything I *don't* want, it's all this pain, this having to be around someone all the time, always wondering how *he* feels, what will become of the two of us. Having my life torn up all the time like a road under repair. I hid in my apartment for five months once, remember? Came to work, went home, locked the door. Then one day it was so gorgeous that I thought, I'll just hurry this trash out to the dumpster, no harm in that. So standing there with cans and paper towels falling out of tears in the plastic bags, and a week or more of old newspapers skewing out from under my arms, I met Stephen."

Whom Mr. Taylor had last seen, he was fairly sure, outside the fifteenth floor of Campbell Center, tiny multiple images of him reflected in the building's mirrored surfaces as he rose into a blinding dazzle of sunlight.

"Where'd you have lunch?" he had asked Sheila when she returned to the shop.

"Le Chardonnay."

"The one in Campbell Center?"

"I don't think there is another one."

"Eat alone?"

"Well . . ."

Stephen was followed close on the heels by Claude, then by David, Seth, Ramon. Mr. Taylor began to look up at the sky with dread. He took new interest in reports from traffic helicopters.

His own wife, Sheila's mother, vanished early one March. Snow crept towards them through weeks of sundrenched weather and finally sprang, and when it was gone (though podlike shells of it clung on for days in dark places), so was Elizabeth. After that, life for Mr. Taylor became largely people and things taken from him. He sometimes feels that Sheila is all he really has left: what his life comes down to.

"Papa, I'll always be here to take care of you, just as Momma asked," Sheila would say as a child. She doesn't say that anymore. And when he goes for dinner to her tiny apartment, she listens again to the stories she's heard so often before and tells him hers (many of them, though he doesn't know this, invented), but her eyes reach out towards the city and its lights, the dwelling darkness, sequestered horizons. This is something they never speak of.

She and Jeffrey, however, often speak of such things. The heart opens like a flower, one will say, and the other continue: and closes again like a damaged fist.

So it is that Jeffrey knows something Mr. Taylor does not. For several weeks now, Sheila has been deeply involved, not with one man, but two. The first, Blaine, whom she met standing in line at her bank, this afternoon has floated off into the sky like a child's balloon. The second's name—he runs a specialty bike shop in one of the northside malls and lives in a garage apartment choked with art deco—is Ian. "I love him so much, Jeffrey," Sheila says now. "Ian, I mean. There's almost a . . . a physical *pain* to it, I love him so much."

At which point Jeffrey begins to look rather more interested in what she is saying.

"But poor Blaine. He knows there's someone else, despite all I said. You could tell it from his eyes, from the way he almost touched me, then at the last moment drew back. Do you think I'll ever see him again, Jeffrey?"

"Hard to say," Jeffrey, who has watched from another window the spurned lover's ascent, says. "Sometimes it is possible, *enfin*, to become friends again."

"Oh, Jeff, I hope so."

There's a fall of customers then, and for almost an hour the three of them are diverted from the narrow streets of their own lives onto the boulevards of commerce.

"Well," Mr. Taylor says when the customers are gone. *"That seems quite* enough for one day's work. I vote we shut it down and have a few drinks together by way of celebration. Seconds?"

Jeffrey raises one arm, looking at his watch on the other. Two-fifty. He wonders what Brian's doing. And what *he*'ll do for the rest of the day, leaving this early.

"Oh, Papa, how wonderful!"

They decide on Schopenhauer's and gather their various coats and jackets, hats, parcels, bags. With two fingers Jeffrey forklifts a thatch of hair half an inch to the right to cover an isthmus of bald scalp.

They walk out into an afternoon of empty streets and wind. Coming towards them along the opposite sidewalk, muffler blowing out like twin exhausts, is a man whom Jeffrey knows, instantly, must be Ian. He is dressed in a grey corduroy suit and brown wool porkpie hat and, seeing them emerge from the shop, starts walking faster.

"So this is where you hide." He reaches for the hand she tucks quickly away in a pocket.

"Papa," Sheila says. "Papa, this is Ian Whatley." "Whatley," her father says.

"Mr. Taylor. I am pleased." He offers the forsaken

hand, which is this time, somewhat hesitantly, accepted. "And Jeffrey."

They also shake hands.

"We've been, sort of, seeing one another, Papa."

"Seeing one another," Mr. Taylor says.

"Quite a lot, actually, Papa."

"I love your daughter, sir. I did want to come and tell you that."

Sheila turns from her father to look at Ian and sees that he has grown taller: she must now, as never before, look up at him. She turns back, then back again to Ian, beginning to understand in some instinctive way that needs no words.

Wind comes up strongly just then, like waves heaving up against a ship, and very quietly Sheila says, "I'm sorry, Papa," as he begins to rise, slowly at first, then ever faster, into the sky. Leaning out ahead of the wind with feet trailing behind, almost reclining, he moves out of sight through the downtown skyline.

"I love you too," she tells Ian as her father joins the horizon. \blacklozenge

Negentropy Rules OK The Refloating of New Worlds

lan Watson

Metaphorically speaking, I was a child of New Worlds. To be more precise, I was a twenty-seven-yearold when my first story appeared in one of the twilight issues of Britain's controversial speculative fiction magazine. That was in December 1969. Only four more issues remained of its regular monthly large-format incarnation. Nevertheless I managed to squeeze in two further stories together with a feature article about life in Tokyo. (William Gibson remarked to me many years later that he had been rather struck by the imagery of the piece. . . . Had I only possessed a futuroscope and been of a different cast of mind maybe I could have founded cyberpunkyears before the world was ready for it!)

At the beginning of 1971 a postmortem "special subscription only issue" appeared, with an 1890s look to it. This contained an index of the previous twenty-seven large-format issues, a tale by Thomas Disch, and a genuine fin-de-siècle essay about the future entitled "Is the End of the World Near?" (reprinted from the previous siècle). Also, there was an announcement about the forthcoming first number of *New Worlds Quarterly*.

This duly appeared in paperback format under the title of *New Worlds*, and ran (though not exactly quarterly) until 1976. According to editor David Garnett's afterword to the recently revived *New Worlds 1* (London: Gollancz, 1991), the title then



For readers in the United Kingdom, New Worlds 1 is currently available directly from the publisher for £2 (postage & packing charge) by writing to: Sales Department, Victor Gollancz Ltd, New Worlds Offer, 14 Henrietta Street, London WC2E 8QJ England. Both publications are available from various bookstores and book dealers in the United States.

returned to magazine format and five more issues appeared irregularly until September 1979, when *NW* finally succumbed.

Mention of these five final issues fills me with some concern. Presumably I'm suffering from amnesia. I wasn't aware that these rare birds existed, even though I was busily writing sf for publication in Britain during this period. A child of *New Worlds*, did I say?

Yet I was never actually part of

the effervescent Swinging Sixties British New Worlds scene. Shinjuku was my stomping ground rather than London's Portobello Road, and when I returned to Britain from Japan in 1970 that particular scene appeared to have evaporated. So I can claim some element of objectivity in taking a look at the present resurrection of *New Worlds* in trade paperback from Gollancz, notwithstanding the fact that I do have a story in the second issue.







Yes indeed, 1991 saw a refloating of the trouble-tossed argosy upon which many brave speculative souls formerly sailed . . . the new wave. A relaunch, with Michael Moorcock as vocal figurehead (and crewman), and with experienced anthologist David Garnett as Captain (formerly the skipper of Zenith 1 & 2, and the Orbit Science Fiction Yearbook 1. 2. & 3). Gollancz is the underwriter for a guaranteed four voyages. Originally these were scheduled to be undertaken at eight-month intervals. Now they will be a little more widely spaced. On the retirement of the last remaining family member, Gollancz was sold to Houghton Mifflin; and now, after losing a million pounds in spite of the massive earnings of Terry Pratchett, this pioneer flagship of British sf has been resold to Cassell. Gollancz has been transferred lock, stock, and barrel from its Dickensian offices in Covent Garden to the open-plan brave new world of a certain Villiers House in The Strand. Come to think of it, Alan Villiers was one of Britain's premier sea-dog authors. . . . Yet there are limits to the predictive power of a metaphor. Belay it, my hearties.

And belay this mention of *new* wave, too. "New Wave" was merely a catchphrase, a label which once pasted together a very heterogeneous collection of individualistic authors who were all intent on charting their own personal courses. These were the privateers, the buccaneers of the imagination, crusading against the oppressive banality of commercial fiction. They were filled with visionary fire and guided by an essentially moral eye (Errol Flynn + Jimi Hendrix = Jerry Cornelius; perhaps). By a quintessentially moral eye, in spite of protests in the Parliament at Westminster about New Worlds (on account of the serializing of Norman Spinrad's Bug Jack Barron) and its banning by the principal British magazine distributor, W. H. Smith. The Moon landing-as a "late Capitalist" military-industrial phenomenon as well as a science-fictional apotheosis—was largely irrelevant to these passionate, stylish pirates by comparison with the tumours and turmoils of Planet Earth, the truly "alien"

planet which we must learn to see anew.

Once upon a time under editor Ted Carnell, New Worlds had been a more "conventional" sf magazine akin to, say, Galaxy, with increasing leanings towards the psychological rather than the nuts-and-bolts end of the spectrum. In 1964 Michael Moorcock (at the age of 24) took over the reins. For the next three years New Worlds appeared in pocketbook format. In 1967, with the assistance of a financial grant from the Arts Council (**POW!**, as the pop artist Lichtenstein might express the transition), New Worlds bloomed into a thoroughly experimental large-format speculative fiction/arts magazine. Under Moorcock's captaincy (and latterly with extra funding from his own private resources, Sword and Sorcery novels underwriting the enterprise) *New Worlds* published "the world's most imaginative and innovative sf," as David Garnett puts it, quite justifiably in fact. Nor let us forget the three Nebulas and a Hugo won by Moorcock as well as by Samuel Delany and Harlan Ellison for work which appeared in New Worlds. The British sf renaissance provided a liberation to quite a number of American authors. So much for the transatlantic cliché that UK sf. and New Worlds sf. was downbeat and entropic.

During the Jaundiced Seventies and the Materialist Eighties, sf and fantasy became mega to an extent unforseeable when New Worlds collapsed. Many gaudy three-master and five-master galleons have crowded the seas of fantasy/sf-trilogies, and even five-volume trilogies. Cloned bestsellers have squeezed the maverick privateers for sea-room, and themselves have pirated most of the booty. Today economies are collapsing (or at least staggering), Communism has collapsed, countries are schisming, and the ozone layer likewise-amidst business as usual (not to be too downbeat or entropic). It's high time for more energy, anger, frustration, and enthusiasm-which the newest British voices are articulating, so Moorcock declares in his introduction to New Worlds 1, 1991 vintage. And there are many new British voices indeed: Iain Banks,

Mary Gentle, Gwyneth Jones, Paul McAuley, Eric Brown, Geoff Ryman, Kim Newman, Stephen Baxter, Greg Egan who is Australian but one of the *Interzone* mob; and others, and others. David Pringle's magazine *Interzone* provided an agar dish for new talent during the 1980s; and many were the *Interzone* contributors who have been beckoned to the casting couch of this London publisher, or that.

Now here is *New Worlds* come round again to provide a podium.

Both volumes to date are splendidly and provocatively designed (just as the late-60s NW was) to let us know that this isn't merely another anthology. Varying typefaces, eccentric rejigged photos of the authors, surreal internal illos: designwise the books are great fun. In the first volume John Clute delivers a hermeneutic, nav pedagogic (no lesser words will suffice), and ever-witty wrap-up of recent sf novels, focusing first of all upon the marginals (where the action is) before moving on to the looming dinosaurs: "In Nightfall . . . Robert Silverberg, using every ounce of his enormous skill, managed to sound just as Asimov might have sounded if Asimov had been dumb as well as lacking in metaphor . . ."

"Entropy" was one of the catchwords associated with the original *New Worlds* milieu: the tendency of systems to run down, increasing disorganization, the Heat Death of the Universe. This latter catchphrase was the title of Pamela Zoline's 1967 New Worlds short story in numbered paragraphs, often lauded as archetypical, about domestic depression counterpointed with global/cosmic crunch. The doctoral thesis, turned book, about by the New Worlds spree, by Colin Greenland, is entitled The Entropy Exhibition. So I was mischievously curious to see how many times entropy might be invoked-consciously, or perhaps unconsciously-in these New Worlds yarns gathered by David Garnett.

Several times, in fact.

Irish *wunderkind* Ian McDonald presents two poignant and eloquent stories. "Innocents" (*NW2*) features necrovilles of the rekindled dead, reconstructed by nanotech. Our suffering heroine, Mrs Sifuentes, obtains an abortion from a dead doctor, and presently a divorce from her superrich globe-trotting spouse, whose main role is to be frighteningly nonsimpatico. Diving into her swimming pool, she scratches a sign on the tiles emblematic of her "entropybound life" and of rebirth. A while later, a rich friend lends her a dishy dead manservant with whom she falls in love. Tragedy and bizarre transfiguration ensue when she realizes that the dead play enigmatic games. Her lover Gideon is in reality her aborted embryo conjugated to manhood by nanotech from the DNA. Notwithstanding the self-repairing nature of the dead, nevertheless they accumulate data errors. Gideon needs to dissolve himself and reconjugate in her swimming pool-into which finally Mrs Sifuentes dives, to be cannibalized by his temporarily dissociated nanotech bitties. ("Mummy's coming.") Resonances with Silverberg's "Born with the Dead" and his keynote buzz of angst-ridden cosmopolitan luxury remind us eventually that McDonald is an impresario of science-fictional and fantasy tropes and themes, an eloquent recycler. Symptomatically, his second story collection is entitled Speaking in Tongues. Yet McDonald transforms, transmutes, and alchemizes miraculously well, with golden oratory.

McDonald's other tale, "Floating Dogs" (NW1), tells of altered animals (racoon, and tapir, and cat, and porcupine) conditioned to carry out a military raid across a devastated world on behalf of unknowable human "angels" up in orbit. In a sense this is Harlan Ellison's golden oldie Nebula-winning New Worlds story "A Boy and His Dog" thoroughly retrocyberfitted, with an inverted touch of "Flowers for Algernon." Triumphof the bleakest kind-occurs when the fatally injured and disenchanted coon narrator strips the neural enhancers from Bir-dee, the scout, to let it fly free as pure animal once more; and then from its own head too. It's a story of cruel brilliance.

New Worlds 1 and *New Worlds 2* feature in their line-ups a couple of high-spirited American mavericks,

Paul Di Filippo and Marc Laidlaw (as well as Philip K. Dick, deceased). Di Filippo's "Brain Wars" (NW2) is also about future orbital war of a gonzo stripe, and the disintegration of consciousness. The enemy infect our epistolary informant and team with a series of cortical scramblers resulting, for instance, in a total inability to use nouns. Among the many delicious neojargon coinages, one of the gems is the announcement of the enemy's Artificial Intelligence having committed silicide. The Acid Head Wars recounted by Brian Aldiss in the psychedelic late-60s New Worlds have led on to phenomenological nanotech neurodisrupters.

Further disruptive nanotech features in Di Filippo's "Any Major Dude" (NW1). North Africa is transformed into a domain of seductive prosperity. Refugees are flocking there despite a UN embargo (which is as doomed as the dodo). The dodo-engineer of a second Channel tunnel-using mega-tech which those little nanos will soon render obsolete-heads for Tangier to shoot his old rival, the hallowed originator of all this nanotech, to whose bed the engineer's wife has decamped. But, ah, the gun does not fire. Nor do any internal combustion engines work in North Africa. This is due to an "accumulation of anti-entropy." A by-product of energy-from-nothing produced by nanotechnological power sources, this will spread until it engulfs the whole world, benignly (or seemingly so). Graffiti upon walls-the symbol of the new dispensation-take the form of an "inward-pointing circle of arrows representing anti-entropy."

Maybe in these *New Worlds* of the 90s there is a hidden dialogue between the entropy of the old, and the anti-entropy of the new?

Brian Aldiss's two contributions are ingeniously entropic. In "FOAM" (which stands for "free of all memory") a war rages offstage in the former Soviet Union, and a roving expert on church architecture loses the past ten years of his life's memories to a confidence trickster exploiting the new tech of "nostovision." The victim's sex life and architectural expertise are bootlegged to purchasers

of "memory bullets." All the rest of his memories from the previous decade are thrown away. Failure of reality afflicts the victim; failure of history. During the theft of his memories. which takes the form of a fascinating journey through a Kafkaesque brain cathedral, the narrator momentarily imagines-or *almost* imagines-that he is sitting typing during "a dreadful, senseless war . . . in the Gulf." So we are to a certain degree in selfreferential metafictional territory, with the story as conscious text amidst the inventive trappings of near-future tech and events. Yet barring a few in-jokes-such as the presence of Sir Kingsley Amis—"FOAM" mostly avoids affectation. Hence its presence in Gardner Dozois's best-ofthe-year anthology for 1991, along with Kim Newman's NW1 contribution. (Now that indefatigable New Worlds editor Garnett's own Orbit Science Fiction Yearbook has been crassly shot down in flames by its publisher, the Dozois compilation is the sole such surviving authoritative annual tome.)

The other offering by New Worlds warhorse of old, Aldiss, disintegrates the whole of human evolution. Weird, beautiful, and typically a bit vucky, with a fine cadenza of notquite-pidgin English, "Ratbird" (NW2) reveals in the Malayan hinterland an alternative evolutionary stream of egg-laving shamanistic humanoids who will extinguish alienated Homo sapiens by means of poetical wizardry. Intellectual verbalisation has betrayed Homo sapiens; shamanic utterance will thrust us aside, inaugurating a new mythic age. And lo, story becomes (has already become) reality. Our world has already crumbled.

"Suppose," says the shaman to the explorer, "we have lived in utter darkness and only believed that darkness was light? Then on the day that light dawns, it will be to you as if a sudden incomprehensible darkness descends." And so it happens.

Recurrent imagery is always diagnostically interesting. Marc Laidlaw's "Great Breakthroughs in Darkness" in this same second issue of *New Worlds* treats of a disastrous erosion of European civilization when antilight *things* escape into the environment. Laidlaw's crafty narrative takes the form of successive alphabetical entries in an esoteric encyclopedia of photography. These detail how a monomaniacal genius scientifically focuses the forces of darkness (as it were). This thoroughly gonzo yet meticulously detailed enterprise is conducted in a laboratory resembling the engine room of a ship, with captain and navigator and frantic crew. All of this is deliciously reminiscent in tone and theme of a certain New Worlds stalwart of old who is absent from these first two volumes, namely Barrington Bayley, the master of cuckoo cosmologies and crazy scientific undertakings, the originator of alchemical interstellar sailing ships.

Far be it from me to labour the navigational metaphor, but New Worlds 2 also features three sets of mini-chapters by "Warwick Colvin Jnr." These are extracts from "Corsairs of the Second Ether," a supposed saga thousands of chapters long. "Corsairs" is a swashbuckling romp in which rival ontological buccaneers plumb a multiverse which is also the Mandelbrot set of Chaos Theory (as displayed in those lovely computer graphics which make such swishy posters, forever intricate on any scale). Full of zippy invented cosmo-seadog slang, "Corsairs" is three surreal slices, spiced and fruity, from a giant (and imaginary) cake which would be utterly indigestible en masse. Fortunately the mass is missing; and really, this is the whole point. In an afterword to New Worlds 2 Michael Moorcock says that he's sorry to see so little non-linear work in the lineup. The old New Worlds frequently waved the flag of non-linearity as opposed to conventional narrative. "Where are the authors who will go on doing for fiction what Mandelbrot did for mathematics?" A tongue-incheek comment, indeed, since Colvin was a New Worlds house name used by Moorcock himself; and the probability that he authored "Corsairs" is about 90% on the Speculometer. (Bayley: 5%; Di Filippo: 1.666% recurring . . .)

Moorcock's own signed story is the exotic, baroque "Colour" set in a mutated Louisiana in which memories fracture and reality melts down. Seeking an infinite power source, engineers have foolishly drilled into the fabric of the multiverse itself, damaging the regulator of-yes-entropy. The surge of entropy causes bizarre catastrophe, the nature of which this story anatomizes (anatomizing the Nature of a Catastrophe being a golden old New Worlds strategy). The rich solidity of Moorcock's descriptions avoids any self-indulgent whimsicality; and the moral of the piece is that love can resist Chaos. A fascinating and vibrant story, indeed. The very telling of the story by its narrator-the piecing together of fugitive reality-is in itself explicitly a cordon against Chaos.

Conventional narrative—and what in these surroundings is a conventional theme and tone of voice—come off rather poorly by comparison in Jack Deighton's premier story, "The Face of the Waters" (*NW2*). Mars is being terraformed. An obsessive is determined to build a proper Martian canal system as per our romantic vision. He duly succeeds, eventually. This earnest story ends with a nod to "swimming against the tide of" yes, our old friend—"entropy." It would, wouldn't it? Full marks, though, for publishing new authors.

Another of these tyros, Jay Summers, presents as his apprentice work a quintessential piece of nonlinear meta-text in fractured anti-narrative, about the nature of art, virtual reality gigs and such. A grey blob of an interlocutor poses the philistine bourgeois "What-does-it-mean? Is-itart?" objections which the disgruntled *lecteur moven sensuel* (the average slob reader) should feel ashamed to entertain, if he/she has persevered thus far in the story; which seems unlikely. So here is a thong to whip our radical backsides with, and it would be curmudgeonly to demur at it. "Indeterminacy" (NW1) is ambitious, youthfully pretentious, long, very clever, wantonly difficult to access. Personally I would rather spend the time reading genuine experimental stuff from Re/Search Publications of San Francisco than this phantom simulation ("like stepping out of an air-lock into a place that affected obscurity," unquote). Yet thus of course one has failed the

test—and if there's this much to quarrel with in a text, well, it must be . . . provocative.

Of other newish writers, Peter Hamilton (soon to have a novel, no. very likely three novels out) performs stunningly in "Candy Buds." This sensuous, disconcerting, and genuinely clever piece is set in flooded East Anglia in the aftermath of global warming and political fragmentation. It concerns a local warlord of an entrepreneur, newgene biology and botany, affinity-bonded animals, artificial-memory buds (botanical rather than nostovisionbased), a hungry waif and her blind crippled brother, the corruption of the innocent, and retribution. "En*tropy* 's frosty encroachment" tootles its horn at one point. Fresh and sharp, "Candy Buds" is probably the finest story in New Worlds 2, by just a short head.

Simon Ings, another newcomer, nods to the old New Worlds icons of Jerry Cornelius, Portobello Road, and Eduardo Paolozzi, in "Bruised Time" (NW2), a naughty squib full of phenomenological malaise. Ings's recent first novel, Hot Head, was a bit chaotic (though energetic). Teamed up with Britain's cybermind Charles Stross, soon to have a novel (no, two novels) out, in "Something Sweet" (NW1) Ings and Stross deliver a hip, effervescent non-stop firecracker of a cyberstory set in a nearfuture London. Along those mean streets, ruthless combines duel over bootstrapped street kid Jimmy. His brain tumour is going to become an artificial intelligence. Here is Grand Guignol cyberpunk; and who cares if the C-word has already become a bit old-fashioned! You can almost hear the authors giggling with glee as they concoct it; and wasn't this always part of the New Worlds crusade -to have fun with your new head? (Actually, in this story we do have a brain amputated into a nutrient fishtank in a cellar, courtesy of Hammer Films special effects department, retrofitted cyberwise.) In the end our feisty female cop wins the jackpot, at the cost of being somewhat seriously minced. The amount of mincing of flesh in "Something Sweet" may induce squeamishness.

Stephen Baxter is another upcoming figure of the Brit neo-Renaissance of the 90s. His first, hard-sf novel Raft puts the "s" back into "sf," quoth the critics (though to me the sound of this happening is *clunk*). In "Inherit the Earth" (NW2) he sequelizes Blish's classic "Surface Tension," though with due retro-irony, incorporating Blish's atheistic fascination with Catholic doctrine alongside his microbiology. Reciting Mass in Latin, sundry far-future ponddwellers set out on a quest for an Artificial Intelligence Pope. Whereas Ian McDonald inserts into his passionate, eloquent fiction strands of DNA from Bradbury, Geoff Ryman, Silverberg, et. al., Baxter might seem to be engaged in a huge Blishean joke rather than a *homage*, were it not for the emotional engagement we feel with his conceptually blindfolded pond-life characters.

Passionate engagement indeed: this is the touchstone for absurdist cosmologies and environments. Despite its title. Matthew Dickens's "The Descent of Man" (NW1) has no connection with Aldiss's deconstruction of Darwin. Obeying its title to the letter, it details a world-or rather, lack of it-where the human race is permanently falling through the air. Along with much usable and useless bric-à-brac. Inspired inventors and squabbling theologians fall. Everyone falls, at varying rates. This lends a whole new meaning to people "drifting away from one another." To my mind the story falls somewhat flat towards the end. The final Clarkean Starchild echo (". . . there would be so much to do!") is another way of saying, tongue in cheek, "I haven't the foggiest."

Editor Garnett regrets the low representation of women authors two in the first volume (out of ten) and none in the second. Unfortunately, only six percent of submissions for the second volume came from women, and alas none of these fitted the bill. Somewhat to compensate, Storm Constantine leads the initial line-up. After a clutch of ambitious, unsettling, exotic novels Storm Constantine has already outstripped her publishers' limp-wristed capacity to promote her properly. "Immaculate" is an intense psalm to the unreal, to artificial electronic reality. A recorder of sex fantasies, half of whose body was burned away when his data-suit malfunctioned, has his lostsoul surrogate restored to him by a thoroughly marketed yet childlike Madonna figure, in a fulfilling though eerie fashion. A new cyberpsychic dispensation is in the wings, and in the wired walls of the world.

Just as Matthew Dickens takes his title quite literally and thus arrives at a whole new vision of existence, so does J. D. Gresham in "Heat" (*NW1*). This poses the question: what if women were to go into heat for only a few days only twice a year? To go into heat overwhelmingly both for themselves, and for the pheromoneprovoked males in their vicinity. Here is one of those classic stories which overturns our routine gender assumptions, while revealing the actual psychological substructure of our society.

The other story which Dozois harvested from New Worlds 1 (his harvest from the second volume being yet awaited) is Kim Newman's "Übermensch!" This answers in spirited style the awkward question: what if a certain infant's cocoon had come to Earth not near Metropolis, USA, but in Bavaria in the years preceding the growth of Nazism? A master of film lore, both in his nonfiction on the subject and in his noir horror fiction, Newman pitches the swastika-caped crusader against Nosferatu and Dr Caligari, and oh dear yes against the Jewish Golem,

thus qualifying Superman for postwar residence in Spandau Prison confined by green kryptonite, although Übermensch was really no Nazi at heart.

Finally, Garnett prints for the first time (in *NW1*) two well-fleshed outlines of proposed novels by Philip K. Dick. Presented by the invaluable Paul Williams and illustrated by Jim Burns, these considerably assist the sense that we are experiencing a living magazine, albeit in book form.

The previous incarnation of New Worlds was stimulating, irritating, relevant, taboo-breaking, trend-setting. It was a conspiracy of droll love and enthusiasm and visionary rebellion. Since those days, sf and fantasy have metastasized, their tissue reproducing prodigiously. The "underground" vein has continued to throb, producing pulses such as Journal Wired, Science Fiction Eye, and Semiotext(e) SF, as well as the assorted magazines of the New Science Fiction Alliance. Meanwhile cutting edges such as punk of the cyber variety, or horror of the splatter variety, are swiftly transformed into commodity. These new New Worlds are, of course, commodities too. Or else they wouldn't exist. (Are we to pretend that the most excellent, communicative, startling work should limit itself to private publishing or to electronic ghosts on a network of secret devotees?)

At the back of *NW2* is an advertisement to the effect that *NW1* is already available FREE (plus postage and packing). A revolutionary liberality on the part of the publishers! What else could this possibly signal? Not, one would hope, that there might only be a quartet of resurrected *New Worlds*, and then no more until the year 2010 or so. If short fiction provides vital blood transfusions for sf, *NW* is a major artery.

Belay the tourniquet. \blacklozenge

Tomorrow's Books

May 1993 Releases



Piers Anthony: *Hard Sell* Ace SF, first time in pb, 272 pp, \$4.99. Fisk Centers would buy real estate on Mars, drive a supersonic car in a suicide race, or go to a robot mortician for a free sample embalming. He's a hero, or a sucker... and stupid enough to survive being both.

Piers Anthony and Robert E. Margroff: *Mouvar's Magic* Tor Fantasy, first time in pb, 320 pp, \$4.99. In this fifth and last volume of the saga of Kelvin of Rud. Mouvar the great magician's Prophecies have been fulfilled, but one challenge remains . . . and for this one Mouvar himself may be needed.

Isaac Asimov, writing as Paul French: Lucky Starr Book 2 Spectra SF, pb reiss, 288 pp, \$4.99. Omnibus edition containing Lucky Starr and the Oceans of Venus and Lucky Starr and the Big Sun of Mercury.

Stephen Baxter: *Timelike Infinity* Roc SF, pb orig, 304 pp, \$4.99. Mankind is oppressed by the Qax—until the loose end of a time tunnel allows a band of rebels to escape. In a makeshift craft, pursued by the great sentient ships of the Qax, they seek allies living 1,500 years in the past.

Francesca Lia Block: *Ecstasia* Roc Fantasy, tr pb orig, 160 pp, \$8.00. A contemporary fantasy set in a world of carnivals and circuses, magical drugs and

Key to Abbreviations

hc: hardcover, almost always an original publication.

pb orig: paperback original, not published previously in any other format. rock 'n' roll, where the gravest crime of all is to grow old.

John Boston: *Naked Came the Sasquatcb* TSR Fantasy, pb orig, 320 pp, \$4.50. A comedic story, with a dash of adventure and mystery, about saying goodbye to one's monsters. Michael Fenberg, editor of a small newspaper in the Sierra Nevadas, is out to solve a series of grisly murders. He knows that a monster is committing them. The problem: which monster?

Ben Bova: *Challenges* Tor SF, hc, 352 pp, \$21.95. A collection of short stories, with the six-time Hugo Award winning author's observations and commentaries about writing SF in an increasingly futuristic world.

C. Dale Brittain: *Mage Quest* Baen Fantasy, pb orig, 368 pp, \$4.99. Sequel to *A Bad Spell in Yurt* and *The Wood Nymph and the Cranky Saint*. Faced with treachery, black magic and a big blue djinn, only Daimbert's ingenuity could save the lives—and souls—of five guys from Yurt.

C. Dale Brittain: *A Bad Spell in Yurt* Baen Fantasy, pb reiss, 320 pp, \$4.99. The recently graduated, slightly incompetent, newly appointed Royal Wizard to the backwater Kingdom of Yurt must break the spell on his employer, or start looking for a new job.

Jack L. Chalker: *Downtiming the Night Side* Baen SF, pb reiss, 288 pp, \$4.99. Former Air Force officer and NSA agent Ron Moosic thought he'd been assigned to be Security Director for a nu-

pb reiss: paperback reissue, designating a title that was previously published in paperback but has been out of print.

pb rep: paperback reprint, designating a title that was previously published clear power plant, but the plant was a cover for a top secret time-travel project.

Jack L. Chalker: *The Identity Matrix* Baen SF, pb reiss,320 pp, \$4.99. While backpacking in Alaska, Victor Gonser is caught up in a skirmish between two highly advanced alien races who can switch bodies at will.

C. J. Cherryh: *The Dreamstone* DAW Fantasy, pb reiss, \$3.50. The story of the last defense of Faery against the encroaching iron sword of the Era of Man.

C. J. Cherryh: *The Tree of Swords and Jewels* DAW Fantasy, pb reiss, \$2.95. Sequel to *The Dreamstone*. With newly awakened evil swarming across both worlds, Ciaran Cuilean must reclaim his haunted weapons from the Tree of Swords.

Alfred Coppel: *Glory* Tor SF, hc, 352 pp, \$21.95. Book 1 of the Goldenwing Cycle. Hard SF adventure. One of the last Goldenwings (giant spaceships built a thousand years ago, during the age of colonization), now used for colonial trade, gets swept up in a revolution on Voerster, a colony world determined to restore apartheid.

Dan Crawford: *Rouse a Sleeping Cat* Ace Fantasy, pb orig, 256 pp, \$4.99. The nine-year-old King of Rossacotta is a lure that attracts courtiers, nobles, ambassadors—and assassins.

David Darke: *Blind Hunger* Pinnacle Horror, pb orig, 256 pp, \$4.50. Recently widowed and blind, Patty welcomes her husband's twin brother into

in hardcover or trade paperback (sometimes expressed as **first time in pb**).

tr pb: trade paperback, a format using pages larger than a paperback but generally smaller than a hardcover, with a flexible cover.













her life. only to discover that he's really her husband returned . . . as a vampire.

Gordon R. Dickson: *The Spirit of Dorsai* Tor SF, pb reiss, 256 pp, \$3.95. The warrior spirit of the Dorsai does not reside solely in their men, for it is their women who remain behind to defend the world and its future.

Ann Downer: *The Books of the Keepers* Atheneum Books, YA Fantasy, hc, 256 pp, \$15.95. The conclusion to the trilogy begun in *Spellkey* and continued in *The Glass Salamander*. Folk from Above, Below, and elsewhere become part of the larger plan for finding the Books of the Keepers.

Thomas A. Easton: *Tower of the Gods* Ace SF, pb orig, 256 pp, \$4.99. After designing living machines, and crossbreeding plants and animals with humans, the bio-engineers of the future have fled to a distant planet to escape persecution and continue their experiment . . . and it's about to backfire.

Ru Emerson: *The Craft of Light* Ace Fantasy, pb orig, 288 pp, \$4.99. *Night-Threads* Book 4. Four years after being unseated from her position as duchess of Zelharri, Lialla must use her fearsome Hell-Light to determine her fate.

M. J. Engh: *Rainbow Man* Tor SF, hc, 256 pp, \$17.95. A woman from a nomadic generation ship settles down on a peaceful planet, only to come to realize that everyone there believes in heaven and hell, and her infertile female status makes them determined to send her to one or the other.

Raymond E. Feist and Janny Wurts: *Mistress of the Empire* Bantam Fantasy, first time in pb, 672 pp, \$5.99. Conclusion of the Empire trilogy. Besieged by spies, rivals, and assassins, the brilliant Lady Mara of the Acoma prepares to fight her greatest battle—for her life, her home, and the Empire itself. Nigel Findley: *The Broken Sphere* TSR Fantasy, pb orig, 320 pp, \$4.95. Volume Five of the SPELLJAMMER[™] Cloakmaster Cycle. Teldin Moore's magic amulet allows him to "see" through the eyes of the great ship *Spelljammer*, giving him clues to its location. He leaves the elves, scro, and Unhuman War behind and employs his magical cloak's powers to hunt for the ship within its "broken sphere." But will he live long enough to claim his quarry?

Robert Frezza: *McLendon's Syndrome* Del Rey SF Discovery, pb orig, \$3.99. On a trading ship hurtling straight into murder, mayhem and an interspecies war, Ken MacCay learns that not all vampires are black-haired and sinister . . . and some shipboard murders aren't quite what they seem.

Gregory Frost: *The Pure Cold Light* AvoNova SF, pb orig, 256 pp, \$4.99. In near-future Philadelphia, a horrifying hallucinogen threatens human civilization . . . and one activist journalist means to experience the corporately sponsored substance in all its destructive power . . . and reveal everything.

W. Michael Gear and Kathleen O'Neal Gear: *People of the River* Tor Books, first time in pb, 544 pp, \$5.99. Book 4 in this series of novels set in prehistoric North America. Among the Mound Builders of the Mississippi Valley, the corn crop is failing and the only hope lies with a girl who is learning to Dream of Power.

W. Michael Gear and Kathleen O'Neal Gear: *People of the Wolf* Tor Books, pb reiss, 448 pp, \$5.99. Tie-in reissue of the first in a series of novels set in prehistoric North America.

W. Michael Gear and Kathleen O'Neal Gear: *People of the Fire* Tor Books, pb reiss, 480 pp, \$5.99. Tie-in reissue of the second in this series. **W. Michael Gear and Kathleen O'Neal Gear:** *People of the Earth* Tor Books, pb reiss, 608 pp, \$5.99. Tie-in reissue of the third in this series.

Stephen R. George: *Deadly Vengeance* Zebra Horror, pb orig, 384 pp, \$4.50. A tale of canine terror about a boy and his faithful—and dangerous dog. A dog who shares his master's secrets, and his rage . . . and wants revenge.

Charles L. Grant: *Something Stirs* Tor Books, first time in pb, 288 pp, \$4.99. A handful of misfit teens discover that something terrible is stalking their town . . . and they know all its victims.

Roland Green: *Conan and the Gods of the Mountain* Tor Fantasy, pb orig, 288 pp, \$3.99. Spies and assassins pursue Conan and Valeria as they enter long lost cities in caverns beneath the earth, and confront creatures that threaten their minds, their souls, and their lives.

Simon R. Green: *Blood and Honor* Roc Fantasy, pb orig, 336 pp, \$4.99. In Castle Midnight, where the real and the unreal exist side by side, an actor must pretend to be a prince fighting for the throne of his dead father . . . and if he's discovered it's curtains for sure.

Gayle Greeno: *The Ghatti's Tale, Book One: Finders-Seekers* DAW Fantasy, pb orig, 496 pp, \$5.50. Earth colonists were stranded a century ago on the world of Methuen. Now, without technological resources, their survival depends on Bondmates, one human and one ghatti (the native telepathic catlike beings).

Simon Hawke: Star Trek: The Next Generation #26: The Romulan Prize Pocket Books SF, pb orig, \$5.50. An advanced Romulan Warbird prototype leads the Starship Enterprise into a deadly web of treachery.









Robert A. Heinlein: *Glory Road* Baen SF, tr pb reiss, 304 pp, \$10.00. First trade paperback edition of Heinlein's classic story.

Robert A. Heinlein: *Assignment in Eternity* Baen SF, pb reiss, 288 pp, \$4.99. Prequel to *Friday.* A secret group of telepaths race to save the Earth from destruction by the ultimate nuclear weapon.

Robert A. Heinlein: *The Menace From Earth* Baen SF, pb reiss, 288 pp, \$4.95. From the colonies in the underground caverns of the Moon to Pluto, where a doomed colony can be saved only by a hopeless mission.

Robert A. Heinlein: *Methuselah's Children* Baen SF, pb reiss, 288 pp, \$3.50. Lazarus Long hijacks an experimental starship to escape the lynch mobs of Earth.

Robert A. Heinlein: *Revolt in 2100* Baen SF, pb reiss, 352 pp, \$4.99. The second American revolution challenges a century of absolute rule by a religious dictatorship.

Robert A. Heinlein: *Sixth Column in Eternity* Baen SF, pb reiss, 256 pp, \$4.99. Six desperate men set out to free America after it is conquered and occupied.

Robert A. Heinlein: *Take Back Your Government* Baen Nonfiction, pb reiss, 304 pp, \$5.99. A how-to book explaining the way our American heritage of freedom and representative government used to work—and how to make them work again. With an introduction and notes by Jerry Pournelle.

Nina Kiriki Hoffman: *The Thread that Binds the Bones* AvoNova Fantasy, pb orig, 320 pp, \$4.99. Evil lurks beneath the sleepy surface of a small town, where a drifter with unfathomable powers weds the beautiful, rebellious daughter of an ancient family . . . and sets in motion dangerous supernatural challenges and dread obligations.

J. Alison James: *Runa* Atheneum Books, YA Fantasy, hc, 160 pp, \$19.95. A Vermont girl's visit to her grandfather in Sweden brings her face-to-face with the rites of her Viking ancestors and the implacable wills of ancient Norse Gods.

William W. Johnstone: *Battle in the Ashes* Zebra Men's Adventure, pb orig, 320 pp, \$3.99. *Ashes* #17. A soldier/ survivalist and his rebel army, struggling to reclaim America, confront an army of highly trained fascist soldiers led by descendants of Hitler's Third Reich.

Robin D. Jones: *The Beginning of Unbelief* Atheneum Books, YA Fantasy, hc, 160 pp, \$13.95. Hal's imaginary companion, Zach, teases, goads, and won't leave Hal alone. So Hal creates a SF story, making Zach the captain of a spaceship heading into danger, to drive Zach away.

Richard A. Knaak: *The Crystal Dragon* Questar Fantasy, pb orig, 288 pp, \$4.99. A *Dragonrealm* book. To stop two hordes wielding hellish powers, Wizard Cabe Bedlam must become a willing pawn of the mysterious Crystal Dragon.

Joe R. Lansdale: *Bestsellers Guaranteed* Ace Fantasy, pb orig, 224 pp, \$4.50. A collection of bizarre tales of inflatable dinosaurs, monstrous pets, Elvis impersonators, and more.

Keith Laumer: *Retief and the Rascals* Baen SF, pb orig, 256 pp, \$4.99. In the first new Retief novel since 1989, Retief is assigned to the planet Bloor, where vicious factions are united only by their hostility toward the Terrans, and a fleet of Groaci warships are on their way to invade and annex the planet.

Stephen R. Lawhead: *The Paradise War* AvoNova Fantasy, 1st time in pb, 432 pp, \$4.99. *Song of Albion*, Book 1. On Scotland's misty moors, two students discover a place where legends live. One, seduced by the Otherworld, opens a breach between the worlds. And the second, a skeptic, must venture into a realm of terrible magic to save his friend . . . and future.

Jim Long: *Battletech: Main Event* Roc SF, pb orig, 288 pp, \$4.99. In this tenth novel based on the popular futuristic role-playing game *Battletech*, a former Com Guard soldier must fight on the game world Solaris VII to win a new BattleMech.

Shawn MacDonald: *The Darkness Within* Zebra Horror, pb orig, 320 pp, \$4.50. They said she was a bad girl, and had to be punished. But now, with two little girls of her own, the evil that shadowed Anne's childhood has returned, and only Anne can banish it

Larry Niven: *The Magic Goes Away* Ace Fantasy, pb reiss, \$4.99. Hordes of short-sighted magicians used up the mana that moved the world, and the magic went away. If Orolandes cannot find the lost power, all the creatures of spirit and powerful spells will vanish . . .

Diana L. Paxson and Adrienne Martine-Barnes: *Master of Earth and Water* AvoNova Fantasy, hc, \$22.00. A novel about of one of the most famous characters of Irish legend, Fionn mac Cumhall.

Steve Perry: *Aliens Book 2: Nightmare Asylum* Bantam SF, pb orig, 320 pp, \$4.99. Based on the Dark Horse graphic novels, *Nightmare Asylum* tells of survivors of Earth's alien invasion, who escape to a remote military outpost . . . only to discover a commander determined reclaim Earth with an alien army of his own.

Mike Resnick, editor: *More Whatdunits* DAW Science Fiction, pb orig, 336 pp, \$4.99. A new collection of SF









mysteries, solved by noted SF authors. Stories by Jane Yolen, Stanley Schmidt, Kristine Kathryn Rusch, Jody Lynn Nye, David Gerrold, and others.

Mike Resnick, editor: *Whatdunits* DAW Science Fiction, pb reiss, 320 pp, \$4.99. Tie-in reissue. A collection of stories combining science fiction and mystery. Stories by Pat Cadigan, Judith Tarr, Katharine Kerr, Jack Haldeman, Esther Friesner, and others.

Christopher Rowley: *To A Higbland Nation* Del Rey SF, pb orig, \$3.99. On the planet Fenrille, human colonists and native Fein have reached an uneasy truce. But with gaining control of virtual immortality in the balance, maybe peace on Fenrille is just not meant to be.

Robert J. Sawyer: *Fossil Hunter* Ace SF, pb orig, 304 pp, \$4.99. Sequel to *Far-Seer.* A geologist, searching for the rare metals needed to take his species to the stars, discovers an ancient artifact that may reveal the true origin of a world of dinosaurs.

Elizabeth Ann Scarborough: Last Refuge Spectra Fantasy, first mass market pb, 368 pages, \$5.99. Sequel to Nothing Sacred. A woman leaves Shambala, the Tibetan haven that protected its inhabitants from the ravages of a nuclear catastrophe, and journeys into the blasted land to find and rescue other survivors of the holocaust.

Melissa Scott: *Burning Bright* Tor SF, hc, 352 pp, \$21.95. A tale of love and death, high-tech games and interstellar politics, set on the freeport that is civilization's center of virtual reality gaming . . . the planet Burning Bright.

Pamela F. Service: *Stinker's Return* Charles Scribner's Sons, YA Fantasy, hc, 96 pp, \$12.95. Sequel to *Stinker from Space.* An alien, inhabiting the body of a skunk, enlists the help of his young earthling friends in his mission to find a uniquely Earthly souvenir to appease the territorial alien Twak.

Carol Severance: *Storm Caller* Del Rey Fantasy, pb orig, \$4.99. Book 2 of *Island Warrior*. On a dreaded island, far across the Empty Sea, the Storm Caller must fully master the powers of wind and water to help Iuti restore the sea magic to its rightful place.

Robert Silverberg, John Brunner, Chelsea Quinn Yarbro: *Beyond the Gate of Worlds* Tor SF, pb orig, 288 pp, \$3.95. Short novels by three masters of SF, set in the deadly alternate Earth created in Robert Silverberg's *Gate of Worlds*.

Neal Stephenson: *Snow Crash* Spectra SF, first mass market pb, 480 pp, \$5.99. In near-future LA, Hiro Protagonist delivers pizza, but in the Metaverse he's a warrior prince, battling a new computer virus that's striking down hackers everywhere and threatening to bring about infocalypse.

Jack Vance: *Throy* Tor SF, hc, 256 pp, \$18.95. Book 3 of the *Cadwal Chronicles.* The convoluted plots and politics of the House of Clattuc and the Conservancy of Cadwal begin to unravel, threatening to bring down a dozen powerful families on as many worlds.

Jack Vance: *To Live Forever* Tor SF, pb reiss, 256 pp, \$3.99. Garven Waylock was an Immortal, until a scandal threatened to end his "true" life. Now, his hopes to regain his privilege are threatened by meeting the Jacynth . . . but how many times can you kill the one you love?

Deborah Wheeler: *Jaydium* DAW SF, pb orig, 352 pp, \$4.99. A Jaydium miner and three other humans from disparate cultures are trapped together in a space-time warp that catapults them to alternate ages on the world known as Stayman.

Tad Williams: Tailchaser's Song

DAW Books, pb reiss, \$5.99. Fritti Tailchaser is a courageous ginger tom cat on a magical quest, amidst powerful feline gods and whiskery legends about strange, furless, erect creatures called M'an

Jack Williamson: *Beachbead* Tor SF, first time in pb, 368 pp, \$4.99. Hardscience adventure about the trials and ultimate triumph of the first Mars colony. Introduction by Arthur C. Clarke.

Janny Wurts: *Sorcerer's Legacy* Spectra Fantasy, pb reiss, \$4.99. Captive in a world of warring magic, Lacy Elienne and her unborn child are safe—until the sorcerer protecting her dies and she is left defenseless amidst the warring wizards' deadly games.

Timothy Zahn: *Star Wars #3: The Last Command* Spectra SF, hc, 384 pp, \$21.50. Five years after the events of *Return of the Jedi*, hopes in the fragile new Republic dim in the face of attacks by Grand Admiral Thrawn.

Publishers of science fiction, fantasy, and horror books are invited to contribute material to this monthly listing. For more information, contact Bill Fawcett & Associates, 388 Hickory Road, Lake Zurich IL 60047.

Looking Forward: **The Craft of Light by Ru Emerson**

Coming in May 1993 from Ace Books



Cover art by Angus McBride

Introduction by Bill Fawcett

It's been four years since Jennifer, her son Chris, and her sister Robyn were brought by a sorceress into a parallel universe. The results of their stay in this land, chronicled in the first three books of the *Night-Threads* series, were dramatic and world-shaking. But that was hardly the end of the story.

Even though they're honored as heroes, the three Americans are still trapped in a world where magic works and science has hardly progressed by their old standards. So, it seemed like a good idea to introduce a bit of new technology here and there; what harm could it do for this world to have (for instance) a telegraph system?

In this excerpt from early in the book, Jennifer discovers that one of the possible answers to that question is not a particularly pleasant one.

Just inside the gates, men—mostly foreigners, Americans wearing trousers and shirts unsuitable to a desert climate—stood around an open hole. A telegraph pole lay at the edge of the hole; one of the men leaned on a pick, others on shovels, two held a thick coil of wire between them. Just outside the gate, a lone pole stood, sunlight glinting on glass reflectors and a snarl of dangling wire. This morning, when she'd walked past the men, the near hole had been a shallow scrape, while the men had been in the process of standing the outer pole upright. As she watched, a man began to work his way up it, while two others watched from the base. A small crowd of Sikkreni stood a short distance away. It was going faster than she'd thought; another day or so at most and there'd be a line between the Thukar's palace and the nearest village on the Bez highway—first test of the system. Their end of it, at least; other Americans and a handful of Rhadazi trainees and plain hard laborers had several miles of line installed from Bez toward Podhru, along the old road.

Chalk one up for Chris, whose CEE-Tech Trading Company put most of its effort into finding things like the telegraph—and then convincing the foreigners to import them, and the Rhadazi to accept them. He'd had his hands full with this: The Emperor was growing mentally erratic in his old age and while he'd put a good deal of power into the hands of his brother and heir, Afronsan still needed Shesseran's approval for any outside trade. Particularly for something like the telegraph, which needed foreign engineers to set up and—at least for the present—to run and repair. Fortunately, Afronsan had seen the point at once of such swift and accurate communication; Shesseran didn't understand it, and he openly loathed the brash and arrogant Mer Khani.

Jennifer wondered again how Afronsan had convinced his brother to accept the new technology, and the foreign engineers. Probably bribed the emperor's astrologers. She grinned and leaned forward to watch as the men began to straighten the pole so half a dozen Sikkreni could shovel dirt around it.

Sharp movement caught her eve; another thing held it. "Wait." She held out a hand to the guard on her left, who gave her a quick glance, then turned to look where she was staring. "Behind the pole-what's he doing in Sikkre?" She scrambled onto one knee and caught at the guard's shoulder. "Tell the boy to stop, now!" The loud, flat crack of a gun cut across her words and something whistled past her cheek, splintering into the wooden upright behind the cushions. Jennifer yelped, as much from surprise as fear, and threw herself flat. Half a breath later, something large and heavy landed across her, and the rickshaw took off as though it had grown wings. Her guard didn't know what a gun was; Rhadaz didn't have them. That something had hit the litter had been enough, and her reaction sealed it: Vey lay sideways across her, clinging desperately to the far side of the jolting and swaving litter, covering her body with his own. He was heavy; she couldn't breathe.

"Lie still, Thukara." His words came out in choppy little bursts of sound as the litter bounced the wind out of him.

"No! We have to go back—!" But she couldn't shove him aside, and she wasn't certain she'd get enough sound out for him to hear her. Behind them people were screaming, and someone was bellowing, swearing in broadly accented American. She shifted her head what little she could. The point guard was no longer at the head of the procession. Off chasing an assassin—an assassin with a gun. He wouldn't stand a chance.

Somebody shot at me! Suddenly she was trembling. Rhadazi weaponry was like nearly everything else in the country: a product of five hundred years of isolation behind tightly closed borders. Blade steel was impressive stuff, high in tensile strength. But blades had to be thrust; if thrown, they were like arrows in that it took a lot of skill and practice to hit someone with one. Most often a would-be killer made actual contact with his target; Jennifer was fairly safe in counting on Thread-sense to warn her if someone with murder in mind was near.

But a gun! She fought for calm. This time at least, the shot had missed, and she didn't want to face Dahven in her present state. According to Chris, guns in this world weren't very advanced and none too accurate and most were single-shot. Whether because of that, the moving target or lack of skill, that man had missed her. But there was a very strong law against smuggling guns into Rhadaz; all foreigners understood they and their ships could be searched and if guns were found, they'd be heavily fined, ordered out and permanently banned. Any Rhadazi caught with a gun would be executed, but so far as Jennifer knew, no one had been impressed enough by the notion of foreign weapons to risk death for them; the foreigners weren't about to risk good trade and high profits to defy the law.

The rickshaw plunged into deep shade; they had reached the tunnel leading from the city to the outer palace courtyard. The litter slowed and Vey slid off as they came into lighter shadow. Jennifer fought air into her lungs and sat slowly, let Vey lift her out and hold her upright until she caught her breath.

Voices echoed in the tunnel and off the high stone walls. Jennifer nodded to Vey, who let her go, and she ducked back under the canopy to peer at the cushions. Guardsmen and servants were staring; Jennifer straightened up and yelled, "One of you get these men water before they collapse! Vey, hand me your knife, will you?" She took it, pulled the cushion aside and dug into the frame behind it. A lead pellet about the size of a marble, partly flattened, popped out of the hole. She returned the dagger to its owner, beckoned for him to follow her inside.

It was quieter here, though she still had to raise her voice to top the noise outside. "Did you see the man who did this?" Vey shook his head. "Did anyone?"

He shook it again. "Don't know, Thukara. The point man and the rear guard were running toward that post, last I saw of them."

"You didn't see him, though?"

"No. Why?"

"Because," Jennifer said flatly, "I did. And I think I know him."

Looking Forward: Glory by Alfred Coppel

Coming in May 1993 from Tor Books



Cover art by Darrell Sweet

Introduction by Bill Fawcett

This novel represents a return to science fiction by an author who began in the field and has gone on to write several best-selling mainstream novels. "Glory" is the Goldenwing ship *Gloria Coelis*, one of the last surviving sub-light, solar-wing spaceships at the beginning of a new age. Today the remaining Goldenwings carry vital supplies and information between worlds. But when the *Glory* calls on the planet Voerster, the ship and her crew become entangled with racism, revolution, and smuggled technology.

This excerpt, which sets the scene on board the ship en route and introduces some of the major characters, is taken from close to the beginning of the book.

Glory's cold-sleep combs were empty. They had been empty since the last colonists awoke on Aldrin, long ago. The only human thing in the combs was the dead astroprogrammer in hold 1009.

A strange man, Han Soo, with a horror of drifting in interstellar space for eternity. Duncan had promised him a burial in soil. If not the soil of China on Earth, then what soil the colonists of Voerster would allow a man of Old Earth.

The Goldenwings suffered from an ancient malady. They were no longer "economically viable enterprises." Without colonists to transport, what could a ship carry that might be ordered by one generation and delivered to another? This vulnerability to market forces was slowly forcing Goldenwings into dismantlement and oblivion. Circling Columbia, the colony world of the 61 Cygni system, the Goldenwing *Starbolt* slumbered away eternity as a space museum, visited by the precocious children of a technologically advanced society. On Wheat, the prairie world of Beta Indi, the bones of Goldenwing *Potemkin* lay like fossils surrounded by fifty million hectares of grain. But *Glory* sailed on.

She carried timeless things. In her holds were ingots of rare elements, old books and works of art, bolts of silk and tapestries, gemstones from Barnard's Star, and polished slates from Lalande. There were a few technological supplies now far out of date at home, but still useful to colonists on less favored worlds.

Glory was certain of a welcome on Voerster. She carried frozen animal embryos for the kraals and farms of Voerster's savannahs. There were horses, beef cattle, goats, sheep, and dogs. On Voerster's single continent there were only the few animals descended from the stock brought by the First Landers. Offworld stock had not prospered on Planet Voerster. And there was a sea of wild grass. But there were no trees, no insects, no flowers, and no native mammals. The indigenous lifeforms were necrogenes struggling, against their nature, to survive.

A Voertrekker of Voerster could do without native flowers and insects. He could live without trees. But he could not survive without a replenishment of his stock of Terrestrial farm and domestic animals.

A great many of Voerster's five-hundred-day years before, an ancestor of the present Voertrekker-Praesident had ordered a vast shipment of genetically engineered animals from the captain of a Goldenwing named *Nostromo*.

The old Voertrekker's descendant now awaited the arrival of the shipment. The *Volk* of Voerster could always be counted on to be stolidly patient and to take the long view of things.

On Voerster, the long view was the only view. Thirteen hundred planetary years before this time, colonists from South Africa had been landed on the single great continent by the Goldenwing *Milago*. The Voertrekking whites had fled from the plague-ridden horror of Africa. Miraculously, they had persuaded several thousand blacks to join them in cold-sleep and colonization. "Look about you," they said to the kaffirs. "See what Africa has become. There is talk of democracy, but what is real is the repression, plague, tyranny, and death you see all about you. On Luyten we promise you opportunity."

For the first three hundred years the promises were kept and Voerster prospered. There were some who saw a threat in the assumption of that name, called it code for oppression to come. But the whites wished only to honor their tribal leader, they said, who had led them skyward.

The Great Kaffir Rebellion exploded 301 years after Landers' Day. It began as a riot and ended in a ten-year war between the races. Civilization was staggered, knowledge was lost. A population laboriously built up to number ten million whites, sixty million blacks and fifteen million persons of mixed blood was savagely reduced to one-twentieth of that number. Science, except for the technology of war, languished. The medical arts stagnated. What had been a burgeoning technological society reverted to rustication. And there it remained, slowly dying, a sad replica of the world of apartheid the first white colonists of Voerster had secretly longed for.

The crew of *Gloria Coelis* knew little of Voerster's history. The planet had not been visited since the brief call by Goldenwing *Nepenthe* more than fifty years before. But what *Nepenthe* might have discovered about Voerster, only *Nepehthe*'s syndicate knew. Goldenwing syndicates dealt with one another through agents. Space is simply too vast for chance encounters.

Anya Amaya, her eyes open but unseeing, caused the mizzen foretops to be fulled preparatory to tacking the ship out of the Oort Cloud. Her move, so neatly done that it took only a score of monkeys racing up the rigging and out onto the spars, was watched and admired by the Captain.

Duncan Kr was a man with a natural appreciation of elegance, and the Sailing Master's skill was worthy of her talent. Within a solar system Anya sailed *Glory* like a zero-gravity dancer.

Duncan's pod lay next to the Sailing Master's. There were others, one for each member of the crew, but at the moment they were empty. Like Anya, Duncan lay nude in the pod's glyceroid medium, hard-wired to the computer.

His globe of awareness was far larger than Anya Amaya's. Her responsibility was to sail *Glory*, who was *yare*. Sweet to sail, quick to the helm, swift and manageable. Duncan's talent and responsibility was larger. His computer-enhanced awareness englobed the entire vessel and the millions of cubic kilometers of space around her. Duncan sensed the Luyten 726 solar system almost in its entirety. He felt the turbulence of the Oort Cloud, cluttered with hurtling rocks and clumps of ice. Duncan was aware of collisions, close passes, the surge of gravity tides and centripetal forces.

There were twelve planets circling Luyten out to a distance of 560^{12} kilometers. The outer six were gas giants. Of the inner seven, only one was habitable. Voerster, fourth from the sun, was not an easy world. Space had not provided Man with any worlds as good as his own. Soon Duncan would begin to sense the life on Voerster, still a billion kilometers sunward.

Closer at hand, Duncan was aware of the subtle bioelectric spillages from the living things aboard *Glory*. He felt the faint, spectral plasmas formed by the frozen animal embryos in the hold—the feral, joyous, psychic auras of the ship's family of cats—the strongest from Mira, the young queen who has been given her own small remote interface with *Glory*'s computer. A sardonic joke by Dietr Krieg, the German neurocybersurgeon.

Wired, Duncan shared the protothoughts of the simianbrained cyborgs who inhabited the rig. Duncan even detected the melancholy grace notes released by Han Soo's slowly dissolving synapses in the comb.

Sentience, Duncan thought, was fragile. But final death in the cold of space can be a slow business.

As Master and Commander—the syndicates were always drawn to ancient ranks and titles—Duncan was aware of all *Glory* contained, including her crew.

He shared Mathematician Jean Marq's troubled sleep as he sweated through his nocturnal bout with remorse. Each night of every voyage the Frenchman returned to a sunny field long ago in Provence where, over and over, he committed rape and murder.

Dietr Krieg, a saber-blade of a man recruited at the advanced age of thirty-four downtime years, was not sleeping. Duncan felt him nearby.

Dietr, too, was presently hard-wired to the ship's computer. But he was not concerned with *Glory* or the Oort Cloud or anything whatever pertaining to Luyten or the voyage. Krieg's passion was medical knowledge for its own sake. Unlike the others of the syndicate, he never felt a twinge of regret or loneliness. He could as easily have worn a black SS uniform in the Dark Century of Earth, performing grotesque experiments on living men and women. He would have done this without heat or rancor, but with a vast curiosity—much the same sardonic curiosity he expressed when he fitted Mira, a four-yearold Abyssinian cat, with a computer interface. Krieg's only truly human trait was his sense of the prodigious.

As *Glory* transited the dangerous Oort Cloud, Krieg reclined in his quarters, wired to the computer and absorbing a new medical program he had acquired at the last planetfall, on Gagarin. His brain was receiving information at billions of baud. Duncan, aware of the neurocybersurgeon, knew he would not be able to retain data absorbed at such speed. Duncan knew that Krieg knew it, too. But the surgeon was addicted. Hunger for knowledge of his art was what had enticed him into space. "Downside," he had once said to Duncan, "how long could I live? Eighty years? Ninety? How much could medicine progress in that time? But if my years are *up-time*, I can suck medicine dry."

Perhaps, Duncan thought. There are many wonders. But Dietr lacks a heart. There are things he will never know.

An impression of fear brushed Duncan's consciousness. It came from young Damon, the last recruit of the *Glory* syndicate. Damon Ng, fifteen and newly Wired. It was his task to back up the monkeys, to handle whatever problems they could not. It was the most menial task aboard *Glory* and the most physically challenging. The Rigger must go EVA many times each voyage and must often climb to the tops, fifty kilometers from the hull of the ship.

Damon Ng was chosen on Grissom, the second planet of Ross 154, a forested world of thousand-meter-tall trees. The natives of Grissom spend all their lives under a green canopy. They see the stars freely. Damon, like many of his generation on Grissom, was raised on fantastic tales of space and Starmen. When the *Glory* syndicate dispatched Krieg and Han Soo downworld on Search, the young man begged his family to give him to *Glory*.

He quickly discovered that without the comforting ceiling of green leaves above his head he was neurotically acrophobic. A climb into *Glory*'s rigging never failed to call up a choking panic. Yet he went extravehicular at every opportunity, determined to conquer his fear.

It was Dietr Krieg who had introduced Damon to the process of "desensitization." No psychiatrist, Krieg was curious about the efficacy of such therapy. When Duncan questioned the wisdom of sending a terrified Rigger EVA, Dietr said, "It is an Old Earth method, Duncan. If a horse throws you, you must get back into the saddle."

Duncan asked drily, "Does it work?"

"It may," Dietr Krieg replied. "But how would I know? I am a neurosurgeon, not a feelgood."

At the moment there was a minor tangle at the blocks of the starboard mizzen top. A monkey could clear it easily, but Damon Ng was determined to master his phobia. Duncan allowed it because to shield young Damon would be to destroy him. A frightened man between the stars was a menace to himself and to his syndicate.

At this moment Damon was at the mizzen top, untethered, clearing the block and weeping with silent terror. ◆

The Resources of the Moon

Stephen L. Gillett

The Moon's just a big dull rock, right? Or so goes the conventional wisdom in many quarters. In contrast to our planet, which has air, lots of water, and a very active set of ongoing geologic processes, the Moon just sits there. (Well, okay, every now and then it gets hit by a meteorite. But *still*...) Of course, we've only landed at six sites on a surface bigger than Africa, but we know the Moon's a dull rock even so. (Don't we? I'll get into that later.)

But it's all we've got, so we've gotta use it. We can scoop up ordinary lunar dirt ("regolith") and get most of what we need out of it. After all, it contains iron, aluminum, silicon, magnesium-plus lots of oxygen, since most of these metals are present in silicates or oxides. And, there's even a little bit of hydrogen, from protons implanted by the solar wind (the tenuous stream of charged particles continually blowing away from the Sun). In fact, one naive study noted that the composition of average lunar regolith is about 80% "demandite," where "demandite" is a fictional substance containing all the elements in the proportions currently used by industry.

Wrong. And wrong again. We don't know nearly as much about the Moon as you might think from some popular articles—or even from some of the technical articles in the aerospace literature. It's a lot more complicated, a lot more interesting—and potentially, a lot more useful—than some people would have you believe. And conversely, the scenarios you read about for processing ordinary regolith for everything we need are completely unrealistic. We won't mine the Moon that way. Let's take those scenarios first. The "demandite" model, where we just scoop up ordinary regolith and extract all the aluminum, iron, and so on from it . . . well, that's just grotesque. The composition of Moon dirt is almost the same as Earth dirt (Earth dirt just has more water and organic matter in it). Now, we don't mine ordinary dirt on Earth for its iron, aluminum, etc. It's "demandite" too, but the economics of separating *everything* we want out of ordinary dirt (or rock) would be horrendous.

Why? Because chemical elements are *hard* to separate. Let's see why. There are two fundamental ways to separate things: physical separation, and chemical separation.

We'll take physical separation first. In it, we use the difference in physical properties between different minerals to separate the ones containing the things we want from the ones we don't.

Take panning for gold, for example. As you all know from numberless Westerns, gold nuggets are a lot denser than other pebbles—and you can use that high density to separate them out very effectively. They sink to the bottom of the gold pan (or rocker, or dredge), while the lighter rocks wash off the top.

Physical separation is comparatively cheap. It has a problem, though: it's usually not very complete. Minerals don't come with nice clean edges, so there's usually stuff you want stuck to stuff you don't want. Even in placer mining for gold, for example, you get other heavy minerals along with the gold.

On the Moon, a good example of "unclean" separation by simple processes is in extracting iron metal from the regolith. You may know that there's a little metallic (or "native," as geologists say) iron in the lunar regolith-about half a percent or so-and you've probably heard that it's easy to separate out: all you need's a magnet! Well, not quite. Most of that iron occurs as small crystals and drops stuck in other things; as tiny droplets embedded in glass, for example. So, what your magnet picks up are grains with a little iron in them-and it's not trivial to separate the native iron from the metal and silicate. (Melting would work, but it's not cheap.)

You can often make physical separations cleaner by grinding the material to be separated—the "feedstock" —first, to make the grains smaller. Since particles tend to break between individual mineral crystals, this means smaller grain sizes have fewer mixed-composition grains.

Two problems here, though. First, grinding is expensive. Not only does it take extra equipment, but the equipment has high wear and tear. Rocks are hard, and things handling them break. A lot. (*Mucb* more on this point anon.)

Second, if you grind the grains too small, your separation process won't work any more, because the surface properties of the small grains start to dominate over their bulk properties. For example, you can't pan very fine-grained gold. When gold particles are mere microns across, they just wash away. The "Carlin-type" gold deposits of Nevada, for example, contain "micron gold," and before such deposits could be mined new technology had to be developed to deal with them.

Now let's look at chemical sepa-

ration. In this, we set up a "phase change": part of the raw feedstock melts or vaporizes, or even both, and most of the element we want ends up in the melt, or sometimes in the vapor. Or, as chemists say, the element "partitions" between different phases. And oftentimes a lot more of the element partitions into one phase than the other. (Or at least it does if the process is to be useful.) Usually, though, we have to add some additional chemicals-"reagents"-to make all this happen. That is, we add something, or things, that chemically react with the ore to make new chemical compounds into which our desired element partitions.

Here's an example. Iron ore is iron oxide—as pure as possible. To make iron out of it, you add carbon (coke or charcoal) and heat the whole mess. The oxygen in the iron oxide goes away with the carbon to leave molten, metallic iron behind. And, the inevitable impurities in the iron oxide form a glassy slag that floats on top the iron.

So, because of iron's chemical affinities for the molten liquid, you don't lose much iron in the vapor. Second, because the molten iron and molten slag "unmix," like oil and water, you separate most of the iron from the impurities.

Chemical separation has several problems that make it very expensive, though. First, it takes lots of energy. As is obvious, when you're talking about temperatures high enough to melt rock and metal!

Second, the reagents aren't cheap. Especially on the Moon. Third, it's never complete, since the partitioning is never complete. You always lose *some* of your desired element into the waste phases. Take iron smelting again, for example. After you drain off the molten iron, you're left with the slag, which you throw away. However: there's lots of iron in that slag, too—it's just not worth getting out.

You also get side reactions. Natural materials are never pure, and they also vary a lot from place to place. This means that your expensive reagents react with impurities to make things you don't want anyway. Take extracting "micron gold," for example. Most processes use dilute cyanide solutions. Since the cyanide ion (CN^-) has a tremendous affinity for gold, it dissolves the tiny gold grains out of a vast volume of rock very effectively. However, other things in the rock also react with cyanide, and so you have to use more cyanide than woud be necessary just for the gold. In fact, sometimes you have to use so much more that gold extraction isn't economical.

A lunar example: a popular "paper scenario" for getting propellant oxygen from lunar dirt is to react the mineral ilmenite with hydrogen. Ilmenite is an iron-titanium oxide (FeTiO₃) that's pretty abundant here and there on the Moon. The hydrogen reacts with one oxygen atom to make water, and leaves behind a mixture of metallic iron and titanium oxide. The water will then be electrolyzed to hydrogen and oxygen, and the hydrogen reused.

On the Moon, though, your ilmenite feedstock will contain a little iron sulfide (FeS, the mineral troilite) as an impurity. The troilite will react with the water that's formed to make a little sulfuric acid . . . and *that* will be awkward if your equipment wasn't designed to handle it.

And last, when the dust settles, you still need to do a physical separation too, since you have to separate the phase you want—the one containing most of the desired element—from the unwanted phase. You have to drain the slag off the molten iron, for example.

The upshot is that, for resource extraction, it's *highly* cost-effective to find a place where nature has done as much separation as possible first. You *don't* use something that contains all the iron, aluminum, magnesium, and so on all stirred together in a chemical mishmash, even if the mishmash is the right ratio for what you want. You get iron from something that's just as rich as possible in iron to start with. You get aluminum from something that's just as rich as possible in aluminum. And so on.

That's what an "ore" is—a rock in which by geologic happenstance an element is concentrated to the point that it can be extracted ("won") at a profit. Obviously, the higher the concentration (or "grade," as the miners say) of the ore, the less rock you need to move to extract the same amount of metal, the less chemicals you need to buy to react with the ore for your extraction process—and the cheaper the whole business becomes.

But you'll hear that all this has nothing to do with the Moon. Everybody *knows* there are no ores—no anomalous concentrations—on the Moon! So we have to make do with what we've got: getting only very common elements from ordinary regolith. Besides, we also know that anything that's already in space is much more valuable than gold, because of the high cost of getting into space.

So even if we're stuck with using ordinary lunar dirt, that's okay.

If that analysis were true, we could give up on lunar resources right now. You see, that high cost of space access is a double-edged sword. It also makes capital and maintenance costs extremely high. Mines are very expensive propositions even in the best of circumstances—and on the Moon, a quarter-million miles away, is not the best of circumstances.

Mine maintenance costs are also horrendous. Again, rocks are hard, and in competition with machinery they often win. And the more dirt you have to move, the more it costs you to move—and the worse your maintenance and processing-chemical costs become.

This is why high grade is so important for a resource—for an "ore"! (Obvious, right? But some scenario designers out there still haven't gotten the picture.)

But all is not lost. The Moon is a *lot* more complicated than people have thought. Sure, it's waterless and airless. But that doesn't mean we have to give up on local concentrations of useful elements. In fact, just in terms of those common elements, we already see significant difference in concentration from place to place.

Take oxygen, for example. It's abundant in all lunar rocks, because most minerals are chemical compounds with oxygen, and it's going to be one of the first lunar products, for rocket oxidizer. But even though oxygen occurs everywhere, you won't get it just anywhere. For example, if you extract oxygen from ilmenite, in the process I mentioned above, you want a place rich in ilmenite. For example: if you can find a place where the regolith contains 20% ilmenite instead of 10%, you only have to move half as much dirt!

We won't have to settle just for common elements, either. Geologic processes have probably formed ores of rare elements locally on the Moon. In fact, there are probably types of deposits that don't occur on the Earth.

What are a few possible examples of lunar ores? In some lunar rocks we find chromite and native iron mixed together. Chromite is a mixed oxide of chromium and iron (FeCr₂O₄), and on Earth it's the main ore of chromium—but here you *never* find it mixed with native iron.

The Moon, though, is much less chemically oxidized than the Earth. At high temperatures, when minerals start to crystallize from magma, the chromium is present as chromous ion, Cr^{++} . As the magma cools, though, chromous ion is not stable, and it loses another electron to become chromic ion, Cr^{+++} , the form of chromium in chromite. Two of these lost electrons then glom onto a ferrous ion, Fe^{++} , to give iron metal, which is just Fe.

Now, the iron-chromite examples we've seen in lunar rocks are tiny a few millimeters across at most. We're not going to mine them! But there's nothing to say that much larger deposits don't occur. Mixtures of iron metal and chromite . . . that's a far cry from the "dull rock" image the Moon has!

You see, magmatic processes the processes in which rocks melt to form magmas, and then solidify again into igneous rocks—can separate elements very effectively, all without a drop of H_2O . And for the first few hundred million years of its existence, the Moon had a lot of ongoing magmatism.

Dry magma processes have made important ores on Earth, too, as far as that goes. One example is magmatic "cumulate" deposits, which are the source of much of South Africa's mineral wealth. As a large body of molten rock cools in the crust, various minerals become stable at various times. They crystallize and then settle out (or sometimes float), so that you end up with an igneous rock consisting of layers of various minerals—a "layered igneous intrusion." And such intrusions are common on the Moon.

Another possibility is magmas rich in phosphate minerals, which would also be enriched in quite a few other rare elements. How would this happen? Consider a body of cooling molten rock. As it cools, minerals form and precipitate; and elements that don't fit into those minerals get left behind in the magma. Thus they gradually become more concentrated in the magma, and eventually they will precipitate out minerals of their own.

On Earth, water is always dissolved in magma. As the magma cools, this water will eventually come out of solution (or "exsolve," as geochemists say) as very hot steam with all kinds of elements dissolved in it. (It can't stay in solution as the rock solidifies. for the same reason all the gas comes out of a frozen can of Coke.) Then, as it cools, this superheated steam forms veins, which are commonly rich in valuable minerals. The quartz veins seamed with gold you read about in Westerns are one example. (In fact, volcanic gases on Earth are by and large just very hot steam.)

Obviously, this won't happen on Moon because the magmas are dry. What happens instead, if crystallization goes on long enough, is that the magma eventually "unmixes," just like slag and molten iron. One group of lunar geologists has predicted that molten granite and a phosphate-rich melt are a likely result of such unmixing. Since the phosphate fraction is very fluid, too, it could easily get injected higher in the lunar crust where it's accessible.

Such liquid-liquid immiscibility, in fact, can form in quite a number of cases. On Earth we find deposits in which fist-sized chunks of ilmenite occur scattered through a large mass of sodium-calcium feldspar—a rock called anorthosite. Some such deposits have even been prospected as ilmenite placers, since ilmenite's a titanium ore on Earth. Geologists think these ilmenite chunks formed by liquid immiscibility, as drops scattered through the feldspar magma.

And there's lots of anorthosite on the Moon. Sulfur compounds—sulfides—also commonly form immiscibile liquids in a magma, even here on Earth, and they're responsible for a lot of important ores. Most of the western world's nickel comes from a sulfide deposit in Canada, for example, that seems to have been injected as an actual sulfide magma. It was probably formed by liquid immiscibility.

Sulfide deposits are especially interesting because a lot of valuable metals (zinc, lead, silver, mercury, and others—the "chalcophile" elements I mentioned last month) combine more easily with sulfur than oxygen. So they go into sulfides instead.

And again, there are lots of sulfides on the Moon. The known occurrences are very small, to be sure —single crystals in rocks—but *somewhere* on the Moon . . . who knows?

Most speculative is a suggestion your author made at the 1990 Lunar and Planetary Science Conference in Houston: salt magmas. Without water, chlorides, including ordinary table salt, won't mix in a magma either. Thus, if there's enough chlorine to start with, and the magma become fractionated enough, you might be able to unmix a chloride magma-a magma of molten salt. Like the phosphate-rich melt, molten salt has a relatively low melting point and is very fluid, so it could easily penetrate upward through the lunar crust. Maybe the molten salt could even breach the surface to make a salt lava.

That would be an extremely useful deposit on the Moon, since salt's such a useful industrial chemical. I mentioned above that extracting elements from their ores often requires adding large amounts of reagents. Salt, and the chlorine you can get from it, are great reagents for many processes.

The Moon is different from the Earth. And it's dry and airless. But by no means does that mean it's dull or useless. ◆

Thunder-Being

Part One

Jack Dann and Jack C. Haldeman II



5322 LEVEL ONE CONFIDENTIAL

5323 ACCESS RESTRICTED TO RED LEVEL PERSONNEL

5324 ***COPYPROOF***

5325 ATTEMPT TO COPY WILL RESULT IN DESTRUCTIVE LOCKUP

5326 ATTEMPT TO COPY WILL RESULT IN IMMEDIATE ARREST

5327 ***FLASHPRINT ONLY***

5328 PASSWORD: STAR/REACH

5329 SUBJECT: ANALYSIS OF ROSETTA TRIPTYCH, UPDATE 5330

5331 THE HILLERMAN REGRESSIVE ANALYSIS PROGRAM WAS

5332 SUCCESSFULLY INSTALLED IN THE EXPERIMENTAL AI

5333 CONSTRUCT CODENAME EINSTEIN, NESTED IN THE



5334 FORWARD-CHAINING LOGIC LOOP. AS EXPECTED. 5335 THE SOURCE OF THE RADIO SIGNAL WAS 5336 CONFIRMED TO BE THE TRIPLE STAR SYSTEM 5337 OF 36 OPHIUCHI. AT THIS TIME THIRTY-TWO 5338 PERCENT OF THE ALIEN TRANSMISSION 5339 REMAINS UNDECIPHERED. THE BALANCE 5340 CONSISTS ENTIRELY OF TECHNICAL DATA 5341 RELATING TO THE MECHANICS OF THE FASTER 5342 THAN LIGHT TRANSPORTATION SYSTEM. 5343 5344 NEW INFORMATION DECODED BY EINSTEIN 5345 APPLIES TO THE PHASED ARRAY SUBSYSTEM 5346 AND TWO UNIQUE ALLOYS THAT APPARENTLY 5347 SOLVE THE HEAT-TRANSFER PROBLEM THAT 5348 HAS BEEN BLOCKING THE GREEN TEAM. THIS 5349 INFORMATION IS AVAILABLE ON A LEVEL ONE 5350 NEED TO KNOW BASIS. 5351 5352 EINSTEIN IS STILL WORKING ON REVISING THE 5353 DEVELOPMENTAL SCENARIOS. ESTIMATES LOOK 5354 GOOD, BUT THE PROBABILITY IS INCREASING 5355 THAT EITHER MACRO OR INTERTECH HAS ALSO 5356 BROKEN THE CODE. NO FIRM INFORMATION, 5357 BUT OUR FRIENDS ARE LISTENING FOR US. 5358 5359 NEXT UPDATE IN TWENTY-FOUR HOURS. 5360 5361 ENDIT 5362 WIPE ALL

CONFIDENTIAL TO DIRECTOR LEIGHTON EYES ONLY

SUBJECT: JOHN STRANGER

SORRY TO BOTHER YOU, BUT STRANGER IS A HARDER NUT TO CRACK THAN I THOUGHT. THE MORE I PUSH HIM, THE MORE HE DIGS IN. CAN YOU SPLIT UP HIS CREW? TWO FLOATERS ESPECIALLY:

ANNA GRASS-LIKE-LIGHT SOC 15782-NN-863 SAM WOQUINI SOC 13837-NN-676

THEY'VE BEEN A CONSTANT PAIN IN OUR COLLECTIVE ASSES, AND EINSTEIN SAYS THEY'VE BEEN PROVIDING HIM WITH EMOTIONAL SUPPORT. SEEMS STRANGER HAS BEEN SUBVOCALIZING THEIR NAMES WHEN HE'S DREAMING, ALTHOUGH WE DON'T GIVE THE POOR BASTARD MUCH CHANCE TO SLEEP. IF YOU CAN MOVE THEM OUT OF THE WAY, I WOULD SURE APPRECIATE IT.

ON THE BRIGHT SIDE, I'VE GOT A SURPRISE FOR YOU. ONE CLUE: JELLYROLL MORTON.

-DAMON

John Stranger twisted in his armor, an exoskeletal harness of sensors as sensitive as flesh. He had set himself into a wild, careening spin, and the stars flashed in trails around him like neon in the Cimmerian darkness.

Dan Hobart's laughter rang in his ears as John cursed in Arabic and Hebrew, which Stranger much preferred to the whitebread Amer-European tongues. His own language, natural Sioux, did not contain equivalent words. He tapped the finger-switches to bring the spin under control.

"Dumb move, Stranger," Hobart said through the intercom. Hobart was a Trans-United work leader. A senior noncom. "If this had been real life, you would have lost your big red ass right there."

John took a deep breath to give his anger room to dissipate; and then he smiled at the spirits, as his old friend and teacher Broken-Finger had taught him to do. Even though the *wasicun*—the white men—had drafted John into their squared-off, divided-up, vertical corporate world, he still communicated with Broken-Finger. Distance had no bearing on dreams, and both John and Broken-Finger had the gift of the thunder-beings: the gift of dreams.

Just so did John drift in a state akin to dreaming. Now he dwelled in a psychological space where his ancestors might speak with him as easily as thoughts drifted in daydreams. In this hogan of thought, he could reach out to friends and relatives, to the living and the dead, to gain strength and peace. This was also the eternal state of the warrior, a place cleansed of hate and anger, a state of complete and perfect focus.

A ruddy sandstorm cloud raged across the heel of Africa below him. The moon was a hard, cold disk off to his left, as dirty and shadow-cracked as old cheap china. The spindles and gauzy mesh of a relay net hung above him like woven silver on a loom. And all around him the stars in their distance watched: the eyes of a thousand dwellers of the eternal night.

It *had* been a dumb move, John told himself. He had let his mind wander and dreamed about Sam Woquini and Anna Grass-Like-Light. It was a recurrent dream that always left him in cold sweat, for in that dream Anna became Corn Woman and Sam became the Sandman, tormented spirits caught in arid deadlands and corridors of ice.

Again he had dreamed of earth.

Forty hours without sleep. It was catching up with him. "Shall we try that maneuver again?" asked Dan. "How about let's try some sleep?"

"There gonna be times in the field when you won't

be able to sleep, Stranger," Dan said smoothly. "And we need to know what'll happen. Now, you ready, or do you want a jolt first?"

He yawned. "Do we have to go around this again? You know I can't use that shit."

"Not can't. Won't. But eventually you're gonna have to get off your high horse and take a stimulant, Stranger. Now get yourself into position. Toni, you ready?"

"Toni's off-shift, Mr. Hobart. This is Lester. I'm set to record up here. We're tracking him now." John looked like a fly caught in some impossibly huge metallic spiderweb. Thin wires and struts branched hundreds of meters in every direction from the harness that suspended him in the middle. Tiny servos controlled by his fingertip switches induced the spiderweb to flex and bend into any number of shapes.

It was a new device, an instant one-man work station. From within the web a person could conceivably reform and realign one of the gossamer relay nets alone. The philosophy behind it was typical Trans-United thinking: if it worked, one man could do the work of ten. *If* it worked. So far, nobody had been able to master it. It was far too complex. It was also, as John had been told countless times, necessary for the navigation system of the Mars ship they were working on. It was part of a navigation experiment. But John knew bullshit when he heard it, and this whole project smacked of it.

He switched from visual to internal, and the faceplate of his suit silvered over; his view of the Earth and the moon was replaced with a series of dancing lights. He fine-tuned the display and gently tapped a few selected thrusters. The spiderweb flexed and bent as it moved slowly toward the relay net. John's fingers padded softly over the various controls as one by one a series of indicator lights turned green, indicating contact between the web and the net.

"In position," said John as the last light turned green.

"Let's try zero point one three seven," said Dan. "This is a timed test. Mark time . . . mark . . . start."

Seconds started ticking off on a small display in the upper lefthand corner of John's faceplate. He managed a wry grin. Nobody had ever aligned a net within seventy percent using this clumsy device, no matter how much time they took.

John switched screens on his faceplate and tapped in the ideal configuration of 0.137. Immediately the screen became a sea of red dots. By tapping the small servo motors, he moved parts of the web against the net. As sections of the net moved into position, some of the dots on his screen turned green. He was directing the interaction of a complicated balance of forces, sometimes winning, sometimes losing. The activation of a key servo would send a wave of green lights washing across the screen, gradually becoming a ripple and dying out. Sometimes the green dots turned red as a correction on one part of the net caused another part to move out of alignment.

John no longer thought in terms of individual movements, but visualized the entire screen as a sea of color. He worked intuitively, without conscious thought, eliminating the red and replacing it with green. In a few moments the screen was as green as he could make it. Any other corrections caused eddies of red to appear. He was at the limits of the spider web machine. He could do no better.

No one could do any better.

"That's it," said John. "That's all she'll do." Suddenly, he was exhausted. He slumped back into the harness.

The softly modulated voice of Einstein whispered to Dan, as if it were actually beside him. The senior noncom had not yet gotten used to his permanent implant. "ANALYSIS OF PERFORMANCE FOLLOWS. SUBJECT: JOHN STRANGER. TRIAL NUMBER 37. PERCENTAGE OF ALIGN-MENT EFFICIENCY: 96.3. TIME: 3 MINUTES, 46.39 SECONDS. THIS BETTERS HIS PREVIOUS TIME BY 72.63 SECONDS AND IS THE HIGHEST ALIGNMENT EFFICIENCY RECORDED BY A HUMAN SUBJECT."

"Stranger, back off from the net," Dan Hobart said. "What?"

"Back off. Half a kilometer. We're going to try it again."

TRIAL NUMBER 38

As the bands of colors swirled like confetti in the screens before him, John Stranger heard the soughing, bellowslike sound of the thunder-beings. He felt the cold touch of wings. The formless ones. Death. He felt the presence of spirits and danger, and he fell into the deep shifting tunnel of their dreams.

But these dreams were unlike any he had ever had.

He was scourged by light more intense than the sun that had once blinded him during a sundance with Broken-Finger.

He was looking into the fully realized world of the spirits.

Yet they were not spirits. They were not from any world known to man.

He screamed as they consumed him in the fullness of their thoughts.

Director Gerard Lincoln Smith Leighton sat in the vast darkness of his office in the Bernal sphere space colony that was his fiefdom.

Here, upon what was ostensibly Trans-United property, he had built a grandiose villa to symbolize his power and status; if he could be compared to a modern-day Lorenzo de Medici, then this villa was his *Poggio a Caiano*, that architectural dream of the Renaissance humanists. Leighton's own Ivy House was built to impress heads of states, directors, CEO's, and other princes, to facilitate the constant and delicate diplomacy between governments and states and duchys and corporations and other powerful and dangerous legal entities. Leighton's villa was in fact modeled on *Poggio a Caiano*, but on a much larger scale.

It was also built to be a temporary escape from the crushing responsibilities of the directorship of the world's most powerful corporation.

Leighton had inherited a nation-state which had no borders. He was a corporate prince, a slave to the unceasing demands of client states and individuals demanding or begging for any one of a myriad benefices and offices and sponsorships with which the corporation rewarded its faithful. That was how the system worked . . . on patronage and short-term alliances.

But for this moment, Leighton had escaped. It was as if he were floating in his cushioned chair, for he had keyed walls, floor, and ceiling to transparency, an effect provided by a hundred state-of-the-art cameras on the Bernal sphere's skin, and he was staring into the hard ice-clear beauties of near-Earth space.

He had turned the room into an eyepiece of the Trans-United orbiting telescope.

The constellations blazed around him, as if the universe was indeed the inside of a great sphere-or, as the ancients had proposed, a dark firmament punctured with millions of tiny holes through which passed those few rays of the celestial light. Around him were his factories that grew crystals and purified metals; refined here were foam steel and iron-lead alloys, which had the most interesting electrical properties. It was in these laboratories and factories that liquid-state physics had become a reality. Leighton nodded, as if affirming that all this was real, for it had been his dream.

But what gave him the most pleasure was the university that rotated in the sector beyond the labs and factories. He had devoted himself to it, and was repaid, for Leighton-Loyola University had eclipsed Oxford-Harvard as the most prestigious center of learning and scholarship. It was a world all to itself, a mirrored Stanford torus rotating in the primordial darkness, where thousands of scientists and engineers lived and did the research that would begin a new renaissance. Or so Leighton dreamed.

Beside it was the Cup-and-Saucer, the radio telescope that had received from the triple-sun system 36 Ophiuchi the enigmatic radio signal which had come to be known as the Rosetta Triptych. Part of that transmission was apparently a blueprint for a faster-than-light drive, but there were still too many missing pieces of information.

And then there were the recent incidents of mass hallucinations and hysteria on earth.

Leighton wondered, as did many others, if one was related to the other.

The confirmation of intelligent life elsewhere in the universe had several immediate effects, not the least of which was the birth of a thousand different cults, each claiming a lock on the truth. Some preached salvation, others preached doom. Many of the leaders were charismatic, hypnotic in their ranting. There was far more hysteria than logic.

For logic, Leighton turned to the scientists. He employed thousands of them, and a good number had been working on the ramifactions of the alien transmission, most in the area of the faster-than-light drive. Prototypes of the drive had been built and tested. They had all failed. The logic was, well, alien. Some of it resisted all attempts at translation.

Most of the scientists rejected the notion that the alien race still existed. There was no time/date stamp on the transmission, and for all that anyone knew it could be thousands of years old, hundreds of thousands. The aliens and their artifacts could be dust by now.

Leighton keyed down the magnification and looked into another quadrant. A silvery spiderweb reached out in all directions, bending and flexing and undulating against the static backdrop of the heavens. It was part of the ship but, more than that, it was a cybernetic nervous system, a biocrystalline network linking human to machine.

He focused in on John Stranger. He was a useful tool for the corporation, but a difficult one to manipulate. He was hard to break, but he would be broken.

68

Leighton zoomed in still closer, and John Stranger's features were sharp and clear through his faceplate, magnified a thousand times, floating in front of Leighton like some huge icon. Sweat stood in beads on his forehead; his eves were closed.

Then he opened his eyes.

Leighton flinched in terror. John Stranger-overtired and overtaxed-was hallucinating, but Leighton was suddenly trapped in Stranger's crazed thoughts and bizarre visions.

He looked into alien worlds and screamed as his senses were overloaded by what could only be imagined as radiance.

Radiance that burned his eves in their sockets.

Radiance that slurred his voice and fused his thoughts along the perfect yet blinding patterns of a programmed dream.

Laura Bowen's first thought was that an electrical glitch had screwed up her equipment. She checked the backup and no, what was happening was real, whatever it was.

She was sitting on a raised dais in a laboratory in one of the research hubs of Leighton-Loyola. Below her were twenty subjects in open-topped cubicles. Each of the men and women were connected to fifty-channel physiological recorders that measured everything from blood pressure to brain waves.

The images on the bank of monitors in front of Laura danced wildly, but oddly in synch. Brain activity showed some fast theta waves coming in at six hertz per second, and spindle activity was increasing, up to eighteen hertz. It was inconceivable that all twenty subjects would slip into the same dreamlike state at the same time, but the evidence was right in front of her.

Laura tried to visualize a scenario that would cause such a condition. Shaking her head, she sat back in her chair. She closed her eyes.

She fell into the dream.

And as she fell, the formless spirits whispered to her. She fought the dream, but she was helpless. The image of a faceless man carrying a broken lance and a shield floated in front of her for an instant and was gone, replaced by an impossibly bright light that burned everything else away. Purifying, blistering pain . . . as white and deep as God's eyes.

People were screaming, and it took Laura a moment to realize that she was one of them.

TWO

Anna Grass-Like-Light felt awkward and clumsy and just a bit nauseated as she and Sam Woquini shouldered their way out of the crowded, filthy, graffito-burned cablecar-part of the Rand Electromagnetic High Speed Transit System-into a chrome and glass way-station at Flagstaff, Arizona.
Although Sam seemed totally unaffected by the shift from zero-g, Anna found every step exhausting. She had been in space too long, but then so had Sam. But nothing bothered Sam.

"This way, Anna," he said, throwing his flight bag over his shoulder.

"Just a minute," Anna said, nodding in the direction of the rest room doors. She left her bag at Sam's feet; she had packed it light, but now she could barely carry it.

Inside the rest room, Anna pressed the clean-up pad before entering the cubicle. Gagging on the sweet smell of the remaining sterilizing gas, she leaned against the sink and pulled a narcodrine inhaler from her pocket. She inhaled a burst and felt her head clear and her strength return. Fuck it, she thought. If she had to, she'd stay high until she could get her muscles back in shape.

She closed her eyes and wished she was back in space. She needed R&R, but not down here, for Chrissakes. Everything was wrong: the air, the water, the people. It was too noisy, too dirty, and there was too much room.

But it was only for a few weeks, she told herself. Then she'd be back in orbit. Once she got out of Flagstaff, there'd be nothing but scrubby desert and a burned-out reservation. At least she wouldn't have to worry about being caught in a riot. But just being here, in this overblown Arizona village, made her anxious, for it would only take one lunatic to set off a riot. Christ, if Bangor, Maine, could be burned to the ground by crazies, any one-whore town could be dangerous to one's health.

Sam was talking to a man wearing a Trans-United security badge when she returned.

"What's happening?" she asked, picking her bag up. It was definitely lighter now.

"This is Dave Spotted Eagle," said Sam. "Our local guide."

Spotted Eagle nodded behind mirrored sunglasses. He was tall and gangly and sullen-looking, his cheeks hollow; yet there was an energy there, radiating like heat. He wore a faded black tee shirt with the short sleeves rolled over his shoulders. His arms were well muscled.

He was probably Navajo, Anna guessed, maybe twenty years old. Probably ran sheep before T-U grabbed him.

"This way, please," he said and reached for Anna's bag. She pulled it away and slipped it over her shoulder. She could fucking well manage it herself.

They threaded through the crowd, taking the glideway to the street level where a battered, dusty, blue Ford pickup truck was double-parked, warning lights blinking and a tattered official business permit hanging from the rear-view mirror.

"They get this out of some museum?" Anna asked as she and Sam tossed their bags in back.

"It works," said Spotted Eagle with a shrug. Anna and Sam climbed in, tossing a pair of work gloves, a tire iron, and a clipboard behind the seat to make room.

The truck started noisily, with a clatter of worn valves. Spotted Eagle pulled out into traffic.

"Not many roads out in the reservation," said Spotted Eagle, shifting gears and changing lanes. "These old trucks, they keep on going. Not as temperamental as the new stuff. We've got two floaters and a Lear steam bus at headquarters, but they're in the shop all the time. Sand gets into everything."

Sam was asleep before they were out of the limits of Flagstaff, his feet propped against the dash, his body jammed in against the door. Sam could sleep anywhere. She cursed him silently and fumbled in her shirt pocket for another narcodrine, which she inhaled deeply.

For Anna, the rest of the drive out to the Trans-United office on the reservation passed in a dim fog; the only thing of even passing interest to her was the hogans.

Anna didn't know much about the Navajos, but she did know that they tended to live in family units, although often a family unit might consist of several hogans miles apart from each other. Distance didn't seem to matter much here; everything was spread out. The land was not much more than hardpan, poor and worn out from years of overgrazing; it took several acres of worthless scrub to support a single sheep.

The hogans were simple affairs, squat six-sided buildings with a single door facing east, the most sacred of the four directions, the place of illumination and the morning star. The special place of the eagles—and thunder-beings. The hogans seemed to be made of anything handy; some were stone, some timber, some mud and clay. Occasionally Anna would see a cluster of two or three hogans a good distance from the road and then nothing else for miles.

Anna was not impressed with Tuba City when they finally reached it. It was a small town: a few stores and restaurants, a semimodern hotel. The Tribal Police Headquarters was an old mobile home on cinderblocks. There was a residential area, but it was all single-story square houses, nondescript and ordinary, probably all thrown up in a month for a Trans-United project. Clouds of red dust hung over the town like a storm, roiled up by the cars and occasional horses.

The Trans-United installation was on the north side of town. The buildings were constructed of modern materials, carefully designed to look old and weathered. They were kitschy, cheaply made imitations of hogans.

Sam grunted and shook his head.

Spotted Eagle pulled into a parking slot next to one of the larger buildings. Sam and Anna followed him inside and were hit by the rush of cool, efficient air conditioning. A receptionist looked up from her screen and nodded cursorily to Spotted Eagle.

"He's expecting you," she said as she fed flimsies through a scanner.

A door opened and a pleasant, heavyset man waved them into an office. He was casually dressed in slacks and a lightweight flannel shirt open at the neck; his sleeves were rolled up. His blond hair was thinning, and he had a slight overbite, which gave a belligerent cast to his face. The interior walls were covered with stunning Navajo blankets and reproductions of native sand paintings. The outside wall was all glass, and beyond were scrubby plain, buttes, and a massive plateau that looked gray-blue because of its distance.

"Welcome to our corner of the world," the man said,

Thunder-Being (Part One)

breaking into an easy smile. "I'm Maxwell Bradshaw, T-U's chief cook and bottle-washer in these parts. Call me Max." He extended his hand first to Anna, then to Sam.

"You must be worn out," he said. "I imagine you've been on the go since you left orbit. How long ago was that, Anna? It's all right if I call you Anna, isn't it? We don't stand on formality out here."

Anna shrugged. "About twenty hours," she said. "Let's get you settled in first. Get you and Sam something to eat, some rest. We can start in the morning."

"A question, Mr. Bradshaw," said Anna. "Why us?" "It's Max," he said. "What do you mean, Anna?"

"Look, Mr. Bradshaw," said Anna, "I don't know Navajo tribal ways from Eskimo ways. Neither one of us is Navajo. Why drag us down here when you must have a hundred more qualified people right here in Tuba City?"

"You know bureaucracies," said Bradshaw with a shrug and a smile. "What we need here is someone who's been in space to go out and talk to these young boys and girls, get them interested in Trans-United as a career option."

"You'll draft them if they don't," said Anna.

"I won't," said Bradshaw. "Trans-United might; it's the company's option by legal treaty. That's their business. My business and *your* business is to pick out the best and most motivated people for the job. You see, I know a lot of these kids, maybe too well. Sometimes it's better to have an outside opinion. I've been here fifteen years and I know their families, their histories, and the way they live on the reservation. What I don't know is how they'll do in space. I've never been there, and I never will." He tapped his chest. "Weak heart," he said. "Valve trouble, rebuilt three times."

"You're missing a lot," said Sam. "Bad food, long hours, and low pay."

"I can get that right here," said Bradshaw with a laugh, "although I can't complain about the food. Dave," he said to Spotted Eagle, "why don't you show Anna and Sam to their rooms? Point out Emilio's to them. I can recommend the tostados, but start out with the mild sauce. And whatever you do, don't bite down on any of those little green peppers."

Spotted Eagle led Anna and Sam out and as the door closed, Bradshaw walked over to his desk and pressed a button. A small screen popped out of one drawer, revealing the sharp image of a small room, one bed, and a dresser. He twisted a dial under the screen and the image shifted as the hidden camera moved, sweeping the room. Anna's room. He turned up the volume until he could hear the air conditioner hum. Satisfied the sound was working okay, he toggled over to Sam's room and settled back into his chair.

Ever since the radio signal that came to be known as the Rosetta Triptych had been received from the triple sun system 36 Ophiuchi, Trans-United and Macro Technologies had been involved in developing deep sleep. Each corporation wanted to make the first contact with a technologically superior alien race. Even if they could not break the alien code for an FTL drive, they could use deep sleep and the new Cristal-Williston Fusion Drive, which had been successfully tested, to make contact with the aliens in less than a hundred years. Not so much time in corporate terms, for corporations, unlike nation-states, were used to long-range planning.

But deep sleep was still more an idea than a reality....

Until a minor ranking scientist working for Trans-United discovered a way to get around the neural synapse problem. One of Macro's spies got hold of the information and an undeclared corporate war began. But after a failed Trans-United deep sleep experiment was leaked into the newsnet, the public outcry was immediate and strong. As luck would have it, one of Macro's mass graves of Sleepers was also discovered by a reporter for one of the most popular sleazy yellow shows. And that immediately became hot news. Within weeks the World Court had outlawed all deep sleep experimentation. After that, the corporations purged the rank and file of their security sections and simply moved their operations to other underground sites.

Eventually, of course, the outcry died down.

Leighton was roused from his dream by the thrumming of the computer implant in his tooth. It intruded upon his vision of John Stranger, slowly pulled him through the layers of dream and into consciousness.

He sat straight back in his chair—appearing taller than he was, imposing—as if he were receiving a guest, and tried to remember the dream. He ran his hands through his shock of wiry gray hair; a nervous gesture.

And just as before, Leighton couldn't remember the content and substance of the dream. He only knew that he had been having recurring dreams and hallucinatory flashbacks like this for weeks. He ground his teeth in frustration. Leighton had an eidetic memory, but he could not penetrate these dreams. He had tried dream therapy, but not even drugs had been able to break through those barriers.

He tongued the implant off and said, "Yes?" although he could have subvocalized and would have been heard. He didn't bother haranguing his aide for calling him when he was in private mode.

"It looks like Macro is paying us back for burning their deep-sleep operation in Oregon," a voice said. It seemed to be coming from within Leighton's head, but that was the implant. Leighton was used to it; it was little different than thought itself.

"Get to the point," Leighton said.

"We're received new intelligence regarding the hit on our Winnipeg installation. Seems that Macro set it up. Looks like those fuckers are gearing up a for a nice quiet war."

"They just got caught with their pants down," Leighton said as he opaqued walls, floor, and ceiling. "Our security was probably better than they had anticipated. But it still grinds me that we lost all those people." He pressed his knee against the inside of his desk, which deactivated the security lock, and the door whispered open. A man in his early thirties with thinning blond hair, freckles, and a slight build quickly entered the office. He

was one of Leighton's aides, and a particularly close friend, for Leighton could only trust the small group of secretaries and aides who worked closely with him and had become his counselors. They practically lived with him, at his beck and call.

This man's name was Damon Borland, and he wasas were most of the other aides-a wunderkind. He had advanced degrees in space law, liquid-state physics, and musicology. He also knew more about mid-twentiethcentury American blues and jazz than any man alive; he composed in that tradition, and often played for Leighton. His Sensorium Kolbold Videotecta composition was considered the major symphonic work of the decade. Leighton loved music, which was one of the many reasons he had retained Borland in his inner circle. Compliment though it was, it was also a frustration for Borland, for he should have been an independent ambassador to Macro or Brazil by this time. Leighton knew that, but he considered his own sanity more important than Borland's career, which he would take care of at the proper time.

"Suggestions?" Leighton asked.

"You might consider reprisal," Borland said. "If we leak it to their sources that we know they took out the Winnipeg shop, we'd be safe. They're not interested in escalating this into all-out war."

"I want to know if Macro has decoded any more of that alien transmission than we have. This may be the time to go in and snatch some of their people. Work up a plan and get back to me. What else do you have?"

Borland began to speak, but Leighton received a message that his mistress Antea Hetaera wished admittance. Leighton once again touched the side of his desk with his knee and the office door opened. He glanced at Borland, which was enough to tell him that they would continue in a few moments. Then Antea swept into the room, as if she were raw energy itself. And, in fact, she was burning with her own life energies. Although Leighton had elevated her long ago, she still considered herself a courtesan and never wore clothes, not even to the most important functions. She embodied the modern sensibility of physical beauty and displayed no obvious surgical implants or bio-ornamentation. Her face was heart-shaped and fair, dusted with freckles; her long, curly hair was light brown. She was thin, as if built to be a quick, sylvan creature. In an ancient age, she would have been mistaken for a preternatural creature, a naiad, siren, sylph, dryad, or any one of a dozen elemental spirits once thought to have inhabited seas and forests and the very being of things.

She did not look to be seventy years old. She did not look to be dying.

Antea had an introduced an irreversible bio-organism into her system for reasons beyond Leighton's understanding. It would kill her. But for these last few months she would be as radiant as Leighton's dreams.

She kissed Leighton and held her cheek next to his for an instant. Leighton imagined that she was burning with fever, although her face did not look at all flushed. She smelled of musk and sweat, for she used no perfume; her odor always excited Leighton. "So have I interrupted something vast and important and fascinating?" she asked.

"Of course," Leighton said, smiling at her as he leaned back into the softness of his chair.

"Good. Am I not to be consulted, then, upon matters of importance?" She was being coy, but she was also being truthful, for Leighton held few secrets from her. She had never failed to provide excellent counsel, and had to be doubly guarded from Leighton's enemies because of that.

"Damon will brief you on everything that's going on everywhere," Leighton said with good-humored sarcasm, seemingly vitalized by her. His tone of voice changed and he said, "Damon will fill you in, and if you have any suggestions . . ."

She nodded and then asked, "Have you been in communication with Fiammetta?" She did not seem worried about his reaction, for he had never once raised his voice to her, although his friends and counselors often felt his high temper.

Leighton did not immediately respond. He had not thought of his wife for several days. It had been mutually agreed that she remain earthside. He did not feel he was asking too much to have Antea to himself. She had only a few weeks left to live. He would return to his wife after he interred Antea's ashes in the sarcophagus he had prepared for her in the chapel of the house. His friend Della was even now creating a statue of her, a hologram that would guarantee her image be kept alive. She would be a ghost in his house, a consolation for the light she had decided to extinguish. Yet only he would see her; she would never trouble Fiammetta again.

Antea's decision to end her life was one decision Leighton could not control. She simply claimed that it was her time, and it was certainly her right.

Although he had tried, Leighton could not argue it. This form of ceremonial suicide had been a tradition in his own family; and one day Leighton, too, would probably choose the method of his extinction. But first he had to ensure that his son David would inherit a secure empire.

"I have been extremely busy," Leighton said guiltily, "but of course I've been in contact with her."

"Not for three weeks," Antea said. "She has been so frustrated trying to contact you personally that she called me."

Leighton looked at Damon, who lowered his eyes. "I told you of these things, Stephen, but you said you would respond in due time."

"And I kept meaning to do so, but—"

"Your domestic problems require as much attention as any other diplomacy," Antea said. "I'll call her today." Leighton said.

"Then I'll leave you two to matters of state." Antea kissed Leighton hungrily on the mouth and left. As the door whispered closed behind her, it struck Leighton how much he loved her. He felt a coursing, adrenal rush of sadness and emptiness.

He had a passing thought of Antea submerged in the icy depths of an ocean or starless space, and he trembled.

"Director . . . ?" Damon asked tentatively. "I can return later. I'll have worked out several scenarios for-"

Thunder-Being (Part One)

"Continue," Leighton said.

"There's little else. I've split up John Stranger's crew, as per your orders. Most of them are scattered to widely separated units, but Anna Grass-Like-Light and Sam Woquini are about as far out of the way as they can be." He chuckled. "Those two floaters are a real pain in the ass. They were due for earthside leave, so we gave it to them in spades. They're sucking dust in Arizona now. Our agent in Flagstaff, man called Bradshaw, is monitoring."

Leighton nodded.

"And one last thing," Damon said. "Jellyroll Morton."

"Yes?" asked Leighton, smiling, and for an instant his face looked almost boyish.

Suddenly it was as if they were in an ancient auditorium, for the strains of "Black Bottom Stomp," one of Jellyroll Morton's finest rocking rags, pulsed and echoed and flashed from one theme to another. This was one of Morton's tightest arrangements; and his use of the string bass instead of a marching band tuba was unprecedented at the time.

"I augmented the original," Damon said. "You can blame me for any inconsistencies, notably the kazoo and comb players. Kid Ory is on trombone; Barney Bigard, Darnell Howard, and myself are on clarinet. And I had someone color up the vocals by Lew LeMar."

"No images?" Leighton asked.

"You want music or bullshit?" Damon bowed dramatically and left . . . and, for a time, Leighton escaped to find relief in the syncopated, mathematical universes of "High Society," "Shreveport Stomp," "Grandpa's Spells," "Frog-i-More Rag," "Big Foot Ham," and "Weary Blues."

Sam and Anna ate at Emilio's, a small Mexican restaurant on the main street in town. They used loads of hot sauce and put away countless little green peppers, glad for some spice after so much bland food in space. Afterwards, Sam went back to his room, but Anna went down to the trading post and sat on the porch sneaking sips from her bottle until Spotted Eagle came around. She knew he would. Anna found she liked him. He was surprisingly gentle, yet there was a fierceness about him, an implacability. He was the kind who made strong friends and terrible enemies.

But he had not tensed, nor stopped, when she had moaned "John" during her orgasm.

Spotted Eagle was gone from her room long before dawn, long before she woke from her dreamless sleep.

Bradshaw's tapes, of course, captured it all. . . .

THREE

The gondola bobbed across the flooded, oil-slicked, garbage-strewn Piazzetta San Marco, its two passengers dressed in bright feathers as sumptuous and thick as furs. Their whorls of iridescent violet and emerald were the colors of peacocks; their masks were satiny black and rostrate. The passengers looked like great, chimerical birds of prey perched in their golden gondola, which appeared to be headed toward the Isola di San Giorgio. From her window in the balcony overlooking the plaza. Laura Bowen couldn't tell if they were genetically engineered mooncalfs or simply dignitaries costumed for the ball this evening. No question about the young waterpeople standing about on the slippery quays, parading their sleek if not yet completely developed bodies. Revealing gill-slits that looked like chest wounds, they waved webbed hands for the coins tossed by gawking tourists. A young man shouted "Sogliola" to them from an elevated walkway as he threw his coins, obviously not realizing that he was calling them flounders, a term of local derision. A young merman with shoulder-length. straight black hair picked up the coins and then, scowling, made an obscene motion at the tourist with his middle finger.

The feathered pair, who were huddled together and lost in their floating nest, ignored all of them.

Laura hated herself for loving this decaying, waterlogged, filthy city. She certainly deserved this earthside trip . . . in spades; but this little perk couldn't begin to make up for the way Trans-United had boxed in her career, locking her into a well-paid but definitely low-end position. No matter what kind of an inflated title they gave her, running psychological profiles on at-risk employees and their family members was a job that could easily be handled by technical personnel; although it was true that since the riots her job had become more significant. But still, her two Ph.D.s—mathematics and psychology—might as well be wallpaper.

But Venice had captured her in unexpected ways, unlike Rome, which she hated; she had been there three years ago for the last Multicorp Summit. Rome was too artificial. Too consciously modern. It was as if all the ghosts of the past had elected to leave its narrow streets, which were destined to be widened into the precise grids of boulevards. But it was more than that, for Rome had become a city under siege by its own people, all of whom lived in constant fear. Fear of themselves.

Unlike other major cities, Venice had not yet had a significant riot. It had other problems, to be sure. The first of the floods had been devastating; countless treasures lost forever. But now a series of locks maintained a more or less constant water level. But the technology that prevented floods did nothing for the quality of the poisoned waters of the canals. Even as Laura gazed out into the transparent darkness, she watched sludge glowing and burning on the surface of the water.

"You there, Laura?" A discreet knock at the door: two soft raps. That was Marie. Laura had almost forgotten that her assistant had promised to drop by for coffee, scheduling, and gossip. Marie was right on time, as always.

"Door's open," Laura said, closing the window. The air conditioner cycled on, sighing as if relieved. Then she turned up the lights.

"Jesus H. Christ," Marie said, eyeing the room, which was completely paneled with blocks of Capodimonte porcelain; upon all the pearly walls, in relief, were turquoise and orange and green and yellow figures: birds, flowers, heraldic emblems, and a characteristic pattern of knotted branches. And like interior windows, every other panel contained a looking glass that reflected walls and ceiling and mirrors into seeming infinity. The ceiling was also porcelain; and in the center of the room, hanging like a green stalactite, was a hand-blown Venetian glass chandelier, a fragile and delicate reproduction of an early English style.

"We peons have to stay over in Punta Sabbioni," Marie said. "That ferry ride is going to be the death of me. I thought hovers were supposed to be smooth. I requested Lido, but they were booked solid. Too much brass here."

"We'll all make a good impression," Laura said sarcastically. "Get a good ten-second video bite on the nightnet and prove that you're not really interested in profits, but are only concerned with the betterment of all mankind. You know, some of the fucking bites are so good, I believe them hook, line, and sinker. Even my own. Makes me feel like a regular Joan of Arc. I recommend it for at least five minutes every day."

"Right," laughed Marie. "But is Joan of Arc ready now to discuss such mundane matters as the panels they've booked you on and the paper you're supposed to deliver at eight-thirty tomorrow morning?"

Laura groaned. "Eight-thirty? Why do they always insist on booking me on these stupid panels at the crack of dawn?" She touched the servant bell and ordered coffee. A small robot whispered into the room, placed a silver tea service on the table and poured coffee for Laura and Marie. The robot returned a moment later with a plate of cakes and cookies: fig cakes, certosino, pine nut macaroons, and several meringues.

"Oh, this is just great for my weight problem," Marie said. "Thanks a heap."

"Give yourself a break, lest you turn anorexic."

Laura took one of the fig cakes, looked at it wistfully and made a face, then tried one of the other confections. "Here's your packet," Marie said. "We're all registered."

Laura wasn't worried, for Marie was a genius at organizing and filtering through the mounds of bullshit paperwork that Trans-United kept throwing at them.

"So what's my schedule?" she asked as she opened her registration packet and slid out a bewildering mass of brochures, programs, pocket programs, invitations, free tickets, and advertisements. Two of the brochures started talking to her; she sailed them across the room to the fireplace.

"Here, these are the basics," said Marie, handing her a single printed sheet. "It's not too bad, pretty much like we expected. Same old shit. Oh, David Bass of Maxwell, Inc. has replaced Harry Davis on your mass hysteria panel. That's certainly an improvement, I would think."

"Bass is okay," Laura said. "He's opinionated, but not as pig-headed and loud as Davis. Maybe the rest of us will have a chance to say something."

"At least he won't be grab-assing you behind the podium, that's something right there."

Laura raised her eyebrows.

"Bass carries holos of his wife and kids," Marie said. "One of your basic faithful husbands and doting fathers." Smiling: "I trust no man." Laura called for drinks. "Let's get shitfaced, we deserve it."

"Your presentation is also set for ten in the morning, day after tomorrow. I'm sorry about that, I tried to get you an afternoon slot, but it was no go."

"So what else is new?"

"Believe me, I hate morning speeches every bit as much as you," Marie said. "But all you have to do is be awake and talk. I've got to catch the first ferry over to set it up. I'd hoped maybe I'd get lucky tonight at the ball. I had in mind a wonderfully debauched evening ending with a champagne breakfast in someone else's bed. So if I get lucky tonight, I'll look like a zombie tomorrow."

Laura smiled. Marie gave the appearance of being all business; she dressed decorously in suits, wore the correct colors and cuts, and effectively managed not to stand out in a crowd as overly feminine. But whenever she returned to Earth, she gave herself free rein. Laura had once suspected that it was because there was so little privacy in the O'Neils, but there were other reasons: an old skeleton that Laura had buried by eradicating it permanently from Marie's folder when she took her on as her assistant.

The robot brought in the drinks—a Drambuie for Laura and a Pernod for Marie—and then left as unobtrusively as it had entered.

"You have those two other panels," Marie said. "But those are in the afternoon, so you're safe. So far you have three luncheon engagements and one dinner. Beep me if you get any more and I'll update your itinerary. If you need me to, I'll write up some boilerplate responses for any panel questions you think might come up. They have you scheduled for some panels that are a bit out of your field. Oh, one thing more, Kempton Miller's talk is about the economic impact of the dream-riots. I thought I'd go to that one, unless you want to take it. Christ, by now I know the stats by heart."

"No, you go ahead," Laura said, sipping her strong, sweet Scotch liqueur from a delicate and fragile snifter.

"How about the Datacom symposium? In their usual pompous manner, they've titled it *The Increased Manifestations of Antitechnological Religious Fanaticism.* I call it the nut panel."

"I suppose I ought to go," Laura said with a sigh. So much of this was a waste of time. The real information was never presented at the formal sessions, but leaked piece by piece in private conversations, pillow talks, or after money had changed hands.

"Then that's about it," Marie said, sipping her coffee, which was by now cold, "except for one tiny, little, absolutely wonderful thing. I always save the best for last, girl. But first I need to know something."

"Shoot."

"Still planning on staying down here after the meeting?" Laura nodded. "Maybe six weeks."

"I thought so. But I took the liberty of activating your New York apartment. Nothing worse than returning to a dead cell."

"That was a nice gesture, Marie, but you should have checked with me. I'm staying in Europe." "Change of venue, honey. You're scheduled to be in New York in ten days."

"What are you talking about?"

Marie smiled and handed Laura a decal-edged sheet of royal blue, letterhead stationary. "Seems you've been summoned to the Directorate. Somebody's noticed your work. It's signed by one of Leighton's secretaries. It must mean a promotion."

"I doubt that very much," Laura said, although why else would she be called back to New York?

"Congratulations, Laura," Marie said, suddenly effusive. "And I think I've done a damn good job of holding everything in." She put down her empty coffee cup and stood up. "I know it's a promotion, I can feel it." Then she came around the table and gave Laura a bear hug.

Laura closed her eyes, confused. She had planned on following up a lead as to the identity of her parents. She had certainly hoped to be planetside for more than ten days. Well, there was always the slim chance that her new position would keep her earthbound.

"You'll still have some time here," Marie said softly, letting her go and stepping back a pace. "You should take things in stride, lest this . . . search of yours become an obsession."

"I don't know what you mean," Laura said carefully. "I'm only staying to run psych profiles on dream-riot subjects. There are some interesting correlations with certain of our orbital cases."

"I know why you're staying," said Marie, walking to the door and pausing. "I hope you find them, if that's what you really want."

"I thought we were going to get shitfaced," Laura said, changing to a more comfortable subject; she forced some enthusiasm into her voice. "You didn't even touch your drink. And maybe you're right; maybe they are finally recognizing they've got somebody wonderful here. If I get promoted then you get—"

"I know, then I get a raise." Marie laughed and said, "How many times have I—have we—heard that old tired bit of party line?"

Laura chuckled and squeezed Marie's hand. "Come on, old friend, stay for a drink. To celebrate what I might not even get!"

"I'd love to, but I'm letting you off the hook this time. I've only got four hours to turn into a vamp, and you've got to be an example to us all . . . *and* the last time we all got doped and you took a 'drine to get sober, you fell asleep and missed your own presentation."

Laura grinned, remembering, then went back onto her balcony after Marie left. She sipped her drink and looked down at the water below; reflections played on the water, descending into its depths, which appeared to be endless. There was something frightening about dark water, as if it were some sort of deadly, ebon portal into the world of dreams and nightmares. Laura took a deep breath and held it until she felt dizzy. The trail was cold, thirty-two years cold, but that didn't mean she couldn't try. She had no choice, for how could she feel comfortable with herself until she knew where the hell she came from? She felt like some wraith condemned to spend eternity searching for her parents. That familiar sense of being incomplete gnawed at her like some psychic, painful arthritis. She had tried every avenue to locate her parents, but had been deadlocked over and over again.

Finding them should have been relatively simple. It had been anything but simple.

Yet for all her discomfort, she had not had a deprived childhood. Her foster parents had been caring, if a little distant. There had always been plenty of money for the best boarding schools, clothes, travel. It was all supplied by a trust fund whose donor's name did not exist, did not exist *anywhere*.

Although Laura was not beautiful, she was attractive; she had very strong yet delicate features: hazel eyes that were large and lustrous, even if set a bit wide; a full, sensual mouth; a slight cleft in her chin; and long, thick chestnut hair. There had been few romantic relationships, for every man somehow seemed to disappoint her; she understood that to be a failing in herself. She was gregarious and socially adept, but a loner.

All that would change, she thought, if she could find her parents . . . her place . . . her personal history.

When Laura had turned twenty-one, the trust was turned over to her, and she was shocked to discover that she had enough to live comfortably for the rest of her life. After a disastrous but instructive two-month fling, she returned to graduate school and then went to work for Trans-United.

It all seemed to have passed so quickly. The novelty of living in space soon became routine, as did her job, and her obsession to find her parents had swallowed up her life.

Laura sighed. Maybe the meeting with Director Leighton would change the direction of her career. Perhaps a promotion would change things, keep her busy, take her mind off the fragile ghosts that, in her mind, were her parents.

But she knew better. Nothing ever changed, and the ghosts that haunted her never left.

For the moment she did not want to move at all. She did not want to leave this place, whose very stones seemed to be dreaming.

Laura looked out past the flooded plaza to the lagoon beyond. There, like two-dimensional cutouts in the almost blue atmosphere of twilight, floated hover ferries, small speedboats, gondolas, and a steam barge packed high with bales of hay. A woman shouted from the window of an adjacent building and was immediately answered by a man in the street. A line of African tourists passed below, recording everything in their path for posterity. The smells of food cooking was carried in the air: it was dinnertime. Children laughed and chattered in a courtyard across the canal. Tradespeople, looking bedraggled after a long day, walked home; some carried packages, some toolboxes or briefcases.

Beside even the glitter of Venice, ordinary life could exist.

It seemed that John Stranger was only allowed to sleep before scheduled dream therapy sessions. Although the other participants were seated comfortably in various closed testing cubicles on Earth and in orbit, John remained trapped in his exoskeletal harness in the navigation quarters of the prototype ship. The purpose of these group sessions was never explained to him; neither was the choice of participants.

As Anna Grass-Like-Light had once said: "You don't need to explain to the rabbit why it's going to be turned into stew."

But when John was learning to become a medicine man and a hunter, Broken-Finger had indeed taught him how to talk to his prey, how to call to it with prayer, and apologize to it after he had sent its spirit back to *Wankan Tanka*.

John thought of these things as he dutifully answered the questions that seemed automatically to form in his mind and were, in fact, whispered to him in the darkness. The stars burned steadily in the blackness around him, a star-blanket created out of heat and cold.

And the whispers were dreams themselves, carrying John away, for he imagined he was drifting upon an eternal, yet shallow, ocean, moving further into its unknown and hazy distances with his every breath.

Every breath that carried him deeper and deeper into a programmed dream.

As if he were inhaling and exhaling himself back to Earth.

And back in time.

As the dream took him, he was provided with sufficient programmed information.

He was in the manufacturing district of Nottingham, England, during the scourge of the Depression of 1815. The crowd's roaring was a terrible din, almost like a steam-train screaming and ringing through the chin-toforehead mass of people. Almost everyone was wearing a black mask, as if this were some profane proceeding taking place in a decidedly English version of Hell.

John could hardly move. He was pressed between a laborer wearing a tattered, hand-me-down overcoat and filthy trousers held under his feet by straps and a portly woman wearing an orange-and-yellow-striped shawl and a heavy brown dress. He gagged on the smell of the man, who had obviously doused his coat with a waterproofing solution; and, indeed, a thin, cold drizzle threatened to become sleet. The sky was dark with sooty clouds and coal smoke; the air was heavy with ash. It was as if the world was submerged in dirty water. The huge, monolithic buildings that walled the streets were almost unreal in their overpowering and isolated presence.

John could only glimpse from his vantage the red coats and shako-style hats of army officers and their troops that surrounded the crowd.

Yet he realized, even inside the dream, that this was a fabrication created by the chemicals he was absorbing from the med-patches on his chest and the electrical impulses being fed through electrodes taped to his forehead. In essence, this was a feelie: psychedelic and holographic.

This is going to be a nasty one, John thought. As if in response, there was a sudden great cheering as men and

women broke into the Sandscombe Stocking & Lace Frame Factory. While the angry Ludds, mostly unemployed mill workers, smashed machinery and stocking and lace frames, the army moved in.

Like a beast that had been wounded, a tremor passed through the crowd. Luddites broke ranks, fought, and all became pandemonium as the professional soldiers worked their way directly through the mob with club and shield. A cry went up and was repeated, as if the words could give muscle and muniment to the poor, thwarted Ludds.

"Ludd, Ned Ludd, Ned Ludd. . . ."

Then there was fighting nearby; and the crowd seemed to open up like a veil to reveal the oncoming soldiers as people ran to get out of their way. A man was struck by the barrel of a solder's rifle and fell to the ground; in turn, a soldier who had slipped too far away from his comrades was beaten and stomped underfoot.

Shots were fired.

A soldier seemed suddenly to materialize before him, striking a woman who was in his way. John could see every line and pimple in the man's flushed, wet face.

He was a boy, no more than seventeen.

In a trice, he had lifted his rifle and aimed it directly at John. Although he had been tricked by effects such as this in other sessions, now John separated himself from the dream. In that mad instant before hammer struck flint, he felt time expand, unravel. He looked around to the edges of his field of view. He could see the flaws in the scenario, the small incongruous details: a modern building facade, a shimmering where one image met another, impossibly modern and ancient weapons carried by soldiers and Luddites alike. But all this *felt* like reality: cold and fetid and dangerous; once again, he wondered if he could die in these dreams. . . .

He heard voices cry, "No machines."

"Salvation."

"No machines!"

"No machines!"

And he heard a cracking and felt a shock as a musket ball struck his chest, bursting his heart.

He was falling.

The crowd blurred out of existence.

Tumbling through darkness, cold dead space.

John tried to touch the spirits.

This illusion of death was too strong, too painful.

For an instant he felt stationary; it was the fixed stars that were spinning wildly around him, and then his perspective shifted as he faced every floater's nightmare: drifting alone and out of control.

The cold, solitary death.

Then he found himself drifting through the cloudy atmosphere of an alien landscape, as if he were thistledown carried on the wind. He crossed towering mountain ranges and deep canyons. What appeared to be a cloud, yet was in fact a floating city, drifted by; and then everything turned yellow, an uncomfortable, almost blinding fluorescent yellow that slowly faded like a retinal afterimage.

Only when the darkness was complete and uninterrupted did the soft, almost babyish face of Bernard Van Heisman, the administrator of the test, float holographically in front of John. He wondered where the absent Laura Bowen was.

"We will now discuss the current session," Van Heisman said. "Let us compare our own various dreams and impressions that were triggered by the programmed dream. Begin."

Then John felt the presence of the other people in his test group; and he had the distinct impression that they were seated together in a great but otherwise empty hall.

"I remember mah-chines," drawled a man whose face was a pointillistic pattern of tattoos, which had been all the rage in the undercity slums; this most recent fad had quickly spread like a virus until it reached the colonies, where it died a timely and natural death. "Not mahchines like'n we know them, but more'as'n machines 'at could think and p'rocrate, something like 'at."

The man's name was Roberto Turano, and he had been a core tower repairman and Bostown opera critic before Trans-United "invited" him up for the project.

A woman whom John imagined was sitting beside Roberto shook her head. She was a nurse. "No machines," she said flatly, as if she were musing, speaking to herself. "No cities. Just lights and colors and patterns. Nothing coherent."

"She's correct about one thing," said an elderly man, who looked to be Chinese. "There were no cities and no people"—and he raised his voice in register as if to stress his point—"and neither were there machines. Not even a roller. But the canyon we saw last time was closer, but the mountains are wrong. Too high." He smiled, as if in embarrassment. "And they were alive."

"The mountains?" asked Van Heisman.

The old man nodded. "And . . ."

"Yes?"

"They floated, and then they were not mountains at all, but—"

John listened, but felt it was all futile. Dreams and visions were part of the spirit world. They had no flesh and often no form and could not be cut up and examined like organs and flesh.

But Trans-United set great store in what had become known—for lack of a simpler, more sensible term—as synergistic dream induction, or dream telepathy. In several cases dream telepathy and even presumptive alien contact had been experimentally induced. The idea was that "talents" such as John Stranger and the others might increase the odds of contact . . . of gaining information.

Just what was the connection between the dream riots that wracked Earth's major cities and the alien message received by the Cup and Saucer?

Was it coincidence?

Design?

No one knew, but if there was a connection, T-U wanted to be the one to discover it and, of course, exploit it.

There were discrete patterns. It was estimated that almost twenty percent of the Earth's population had received the dreams in one form or another, although those persons were not necessarily prone to participating in the mass hysteria of the dream riots. The dreams: everyone interpreted them differently. Some saw them as a religious experience, others as nightmares. Some were taken over and destroyed by them while others were unaffected. It seemed to be nothing more than some terrible luck of the draw.

The computer construct Einstein had projected a slight correlation of telepathic dream receptivity and concomitant ego valuation with artistic abilities; but it was barely significant statistically.

The session carried on, endlessly, it seemed.

John was tired. So little sleep, and no rest at all. He barely attended to the susurration of voices and instead fixed on the people, his eyes wandering from face to face. A Buddhist monk. A miner from the asteroids. An elementary school teacher from an isolated rural district. A professor. An idiot-child of twelve.

John felt drawn to the child. Matt Nicholiasson. Taken from a crèche in Bangkok. High forehead, handsome baby-fat face, and curly blond hair. Eyebrows so blond they could barely be seen. Deep blue eyes. A mental age stabilized at four.

Matt dreamed continuously.

Like a medicine man.

In the world of the spirits.

John blinked, felt a slight relief as the constraints on his muscles were removed.

"And your impressions, Stranger?"

Sleep... I need to sleep, you wasicun bastards.

And so he did. It was as if he was dropped into unconsciousness, as if some hormonal toggle had been pressed, for he slept . . . and dreamed.

Thunder-beings.

Beating hearts and dark wings.

The teeth of ice the shadows of fire.

Death ordinary as spirit dreams.

"Stranger . . . ? Please report."

The world of floating cities and ravines as deep as the place of diminished souls. A place of spirits wrapped in flesh like wicks in wax . . . and John was being carried by the thunder-beings as surely as Dante was carried to Hell on Geryon.

John dreamed of his old teacher Broken-Finger. He called the medicine man's name as he dreamed of the time that the old man had taken him to fast and visionquest by the talking stones. The visions had come then like water pouring into a dry river bed, and they came again now. But the dreams, like the turns his life had taken, were jumbled.

All the same, the nightmares twisted and called John to the spirits. Now . . . *now* his life was a blinding, fluorescence of yellow. The flowing of his heart into the vision world.

"Stranger! What are you doing?"

Beating, breathing wings . . . thunder-beings.

A bell ringing over and over.

"You're projecting, Stranger! Stop!"

Corn Woman and the Sandman in a dance of death. Here they are! Lightning. Claws. Wings.

"Anna!" cried John Stranger, seeing the trouble. "Bird," said the idiot-child. "Bad bird." Laura entered the main room of La Fenice Theatre. Flooded—as was a good part of Venice—to a depth of eight to ten feet, the surface that was now the floor had been flash-frozen except for a circle in the center where a fountain splashed water thirty feet into the air. Beneath the thin but solid ice, water-people dressed in brightly colored costumes swam ceaselessly, like neon fish in a great aquarium. The tiers of balconies that rose almost to the gilded ceiling were covered with white banners and thousands of red and white lilies. Waiters and waitresses costumed as white birds circulated through the crowd.

As she moved through the receiving line, Laura marveled at the costumes. Some of the guests had opted for simple masks, as motile on their faces as human skin, but the majority had gone to great expense. Some, who had transformed themselves into fabulous, mythical beasts, wore exoskeletons under their perfect costumes, which gave uncanny realism to every movement. Others dressed in robes and gowns that seemed to be fashioned out of pure light. All manner of fabulous upright beasts and historical personages moved across the floor of ice like holographs on a surface of pure transparent blue.

Laura had reached the head of the line, and his most powerful and illustrious lord Doge Enrico Bocconio took her hand and kissed it lightly. He wore only a simple felt mask, but his costume was traditional and ancestral; it had not changed in design since the fifteenth century. He wore a pointed cap over a coif of white linen, a doublet of red and gold—the colors of the Doge—a *gonnella* with sleeves of shot silk, a crimson tunic embroidered in gold thread, and a long cape with a rounded stand-up collar made of the same material. "Ah, Miz Bowen, it is so good to see you again. Are you still residing in Cambridge Colony? If I recall, you've been engaged in therapy. I'm also told you're making a considerable reputation for yourself with your work on the historiography of crowd behavior."

Laura was momentarily taken aback. She had only met the Doge once before, and that had been years ago. But then she noted the tattletale embedded behind his left ear. The Doge was the elderly patriarch of the Bocconio family and head of the powerful Multeck corporation that was hosting the conference. Families were paramount in this country, which was run like a corporation. All corporations were family controlled. Her own corporation, Trans-United, was no less a family affair. Director Leighton had been grooming his son, David, for years to take over. Gradually David had assumed more responsibilities. He was, in fact, supposed to be here: the highestranked representative of Trans-United at this conference. Families. Everywhere she turned, families. She blinked once, swallowed the pain, and was all business again.

"You're too kind, Doge Bocconio. I am still in the colonies most of the year. In the same old rut, one might say."

"I think most of us who are earthbound would envy you your rut."

Laura bowed her head slightly in formal response. "I am very happy to be back in Venice. And all of this is quite impressive," she said, referring to the sumptuous surroundings.

"And your room, it is satisfactory?"

"Excellent. My thanks."

"It is the least we can do for such a beautiful and successful woman. It was once, you know, part of the Markian Library. Our caretaker tells me that at night he can hear the ghosts of my ancestors plotting in those very halls."

"I'll be careful," Laura said.

"Always a wise idea," said the Doge, moving to the person behind Laura.

Laura made her way through the huge room, drifting from conversation to conversation. It was a well-attended meeting; even Swiss Corp was represented. There was the usual mix of administrators, researchers, and upperlevel personnel. She had been talking for several minutes with David Bass before he told her that the person dressed and figured as Saint Presley, who was standing within earshot, was none other than Dr. Truong-Buru-Toi; he was one of Macro's intelligence chiefs. It was no wonder that very little information of substance could ever be discussed openly at scientific gatherings.

Then David Leighton, the heir to Trans-United's Directorship, approached her. He was a solidly built man of about twenty-five, with curly auburn hair the same shade as Laura's and a delicately featured face. His mouth was a bit too thin, giving him a puritan appearance; but he was handsome, with high cheekbones, cleft chin, and deeply set blue eyes. He was the only one in the room who was not in costume. He wore a simple suit and a collared, button-down shirt. That in itself created quite an impression at the party. However, he had to be wearing a bodyshield. David was always by necessity surrounded by his retinue: a squad of biomoded bodyguards and a clutch of secretaries and various advisors.

"I'm sorry I'll miss your talk tomorrow," David said to Laura. "Too many commitments. But I did read your paper. You seem to be bucking the trend. Most people are convinced mass hysteria is the root cause of the dreamriots."

"Then why do we find similar signs among miners working alone in the asteroids, hundreds of miles away from each other?" Laura countered. I'm reacting too quickly, she thought. David always greeted her by talking shop instead of the usual pleasantries; perhaps it was a function of his position. He had no time for peripheral matters. But Laura was nervous. She had always been attracted to him. And it was true that he had never shown the slightest inclination. Yet she could hear the tension raw in her voice and she blushed, chagrined.

David laughed. "Whoa, Laura. I said I'd read your paper. You do good work, as always. It's only that you seem to hold a minority opinion."

"If the minority is right, they're right," she said softly, but she smiled, so as not to seem shrill. "Science is not yet a matter that's put up to a vote. And I'm sure of my data."

"And I'm inclined to trust your work," David said. He glanced around, reflexively surveying the room. "Duty

calls," he said, and then he directed his attention back to Laura. He paused, then said, "We should really get together. Perhaps we could take in a show, or just talk. If I can sidestep my meetings and presentations for a night, I'll ring you. That is, uh, if you wouldn't mind." He seemed slightly nervous, embarrassed.

"Yes," Laura said. "I would like that very much."

After an awkward moment, they parted; and Laura had to repress a sudden rush of euphoria. She wanted to leave this ball right now and shout into the wind and ride in a gondola, savor this good time of anticipation, for surely, she imagined she was heading for a letdown. But that would be tomorrow, or the day after. She felt foolish, for she couldn't stop smiling. Infatuation might not be love, but it was sure as hell the best part of a relationship, she told herself.

She circulated through the various cliques and groups, and found that for a change she was actually enjoying it. After all, she was here to see and be seen.

Well, she thought giddily, I'm here and I've been seen. And unlike Marie, I wasn't looking for male company.

Laura sipped a Muscat de beaumes de Venise 2147 that an androgynous-looking waiter had pressed on her. He insisted that it would be like drinking rainbows, even if she just had a sip; and he was right. The fragrant dessert wine was perfection. Just then she saw Marie, who had her arms around two tall men wearing black feathered masks. Maybe she would get her champagne breakfast after all.

It was announced that an entertainment would soon begin. Laura found the waiter, who had not yet distributed all of the Muscat. Her tulip-shaped crystal goblet refilled, she headed up the back steps to the upper boxes. She took a seat in one of the cozy compartments and looked down on the floor below.

An orchestra tuned up, the mermen swam in formations that reminded Laura of bursts of fireworks. As the orchestra began playing a fanfare, someone slipped into the seat beside her.

"Good evening, Miz Bowen," said a man's voice, distorted by a warbler, though the shapeless cloak and rigid mask could disguise a woman as well as a man.

"Do I know you?" Laura asked.

"No. We have not yet had that pleasure. But I know you. Excuse me, but I must ascertain if you are bugged." He waved a thin wand near her.

"What's the meaning of this?" Laura said, standing up to leave. She felt a knife of fear, for even here in this crowd, she was vulnerable, as was everyone else.

"My scanner passes you. That's good. I have something you want." The orchestra played loud crescendos of high brass notes. Before she could slip through the curtain, he—or she—said, "Your parents. I know who they are."

Laura stopped. "You *what*?"

"They are still alive, if that eases your mind."

"You can't be serious," Laura said, as she stood just inside the curtain and stared at the mask that gave no clues. "Where are they . . . *who* are they? And why are you sneaking in here to tell me this?" "Information is dear. And I am in the business of information. On a small scale, of course. I will be in Barcelona, ten days from today. Take a room in The Wagner and don't look for me. I will find you. . . . But you must bring me one thing in exchange."

"I don't believe you. Why should I? You've given me absolutely nothing tangible."

"We want John Stranger's psych profile, specifically the results of his Maxwell/Ryan test. Raw data will be fine. We can interpret what we need from that."

"If you know the test, then you also know it's classified." "And so are the names of your parents, Miz Bowen. Enjoy the concert. It would not be wise to have me followed."

The man rose and left. Laura sat down, stunned. The first movement of the fusion jazz symphony had ended to applause from the floor. Laura drank her wine quickly, as if it was liquor. She needed a narcodrine, something to numb her.

But just now, as she sat terrified, looking out into the crowd below, she imagined she was seeing rainbows in deep, dark water. Rainbows as hard and sharp and tangible as punji sticks....

It was then, as the crowd cheered, that she entered the dream of John Stranger.

The silent breath of the thunder-beings.

The dark beat of wings, jagged teeth.

Kaleidoscopic flashes of light.

A bell ringing over and over.

Lightning. Claws. Wings.

A golden veldt shadowed by clouds. Cloud cities. The overpowering smell of rotted carrion.

"Bird," said Laura, lost in John Stranger's dream, as she stood staring into the sun with an old man called Broken-Finger. A woman called Anna screamed, and Laura felt John Stranger's fear.

"Bad bird," she whispered.

The crowd was still cheering.

FOUR

Damon handed Leighton a large envelope sealed with a stamp; it was made of genuine, wood-pulp foolscap, an expensive commodity in the colonies. Leighton saw by the rosette seal that it was from Macro. He opened the letter and read it quickly.

"It seems we've been invited to a party next week in New York." He passed the invitation to Antea and Damon.

"We just received it," Damon said. "Personally delivered, too."

"Well, what do you think?" Leighton asked.

"I don't like it," Antea said, "even though you know I've wanted to return earthside."

"What don't you like?"

"It's last-minute. I think it could be dangerous." "And you, Damon, what do you think?" Leighton asked. "Have you formulated a plan to find what what they have on the alien transmission?"

"Macro has all their people locked up tight," said Borland. "They're geared for trouble. We're just not sure what kind of trouble."

Leighton nodded.

"Do you anticipate a trap?" Leighton asked Damon.

Damon shrugged and said, "It seems too obvious a ploy, but it's possible. You are certainly more vulnerable earthside than here."

When Leighton didn't respond, Damon asked, "Do you wish to decline?"

"Tell them we accept," Leighton said flatly. "Notify my son we are coming . . . and make up some sort of gift for Fredrico. Something not too expensive, though, but something of enough worth not to be insulting."

"Yes," Damon said.

"And I want our entire orbital facilities placed under full yellow alert, especially around John Stranger and the . . . experiment. I'm worried that they'll try a snatch when I'm down below."

"They'd need more firepower than they're presently able to muster to pull off a successful snatch on that little gem," Damon said. "Einstein's got a strong sense of self-preservation."

"I'm sure you're right, Damon, but I want maximum security anyway. We can't afford even the smallest leak! I want only our best people. I want everything covered. Remind all involved that summary execution will be the consequence for the slightest lapse. Macro will be sensitive to any movement, so set up diversions."

"Consider it done," Damon said.

"Meanwhile, we'll see what Macro has on their plate. Who knows, they might want to work a trade. They certainly seem desperate enough."

"And I'll choose something for your wife, a gift worthy of her patience," Antea said, a touch of sarcasm and condescension in her voice. Only she was able to get away with such an ironic verbal jab. She had earned the right to speak her mind.

Billy Whiteshoes stoked the fire and shook his head. A strong breeze brought dozens of dust devils to life, little cones of dust that seemed to move of their own volition. It was a dry, clear day, of the sort that Anna Grass-Like-Light always thought of as "blue days." In the distance were the weathered, scattered, wooden graves of an Indian cemetery; beyond that, burnt, patchy fields and high ridges were superimposed against a sky that was as blue —and as tangible—as spun carnival candy.

"If they draft me, I'll have no choice," Billy said, directing himself to Anna, no doubt because she was attractive. "But they'll have to find me first. This is a big reservation. Nine million acres. Nine million places to hide."

"Come on, Billy," said Anna. "It's not-"

"I know what it is," said the young boy. "It's a oneway ticket nowhere. But you're supposed to convince me otherwise, ain't that right?" He stared hard at Anna and said, "Least one thing's for sure, sweet-thing: we're both looking at each other as nothing but meat." Billy was showing off, acting macho; and Anna was impatient and tired and bored. Yet she had to feign interest in this skinny, mouthy, sharp-featured boy. But Jesus, she'd spent the whole fucking morning listening to the old woman and now, after bouncing over the top of a mesa on a swaybacked horse, she was stuck with this stubborn, horny whelp.

"What are you going to do?" she asked, leaning toward him, then leaning back, mocking. "You gonna do the traditional thing and chase sheep the rest of your life? End up selling blankets like an old woman?"

"Cut the kid some slack," Sam said evenly, giving Anna a sharp glance. He always seemed to enjoy playing the good cop-bad cop game. "Billy, haven't you ever wondered what it would be like upside? Floating in space . . . looking down on Earth? It's the ultimate freedom."

"Yeah," Billy said pensively as he leaned back on his heels. "I thought about it. And so did my brother Jimmy. That's what fragged his ass. He saved his money and built a telescope from some kit he mailed away for. All that space bullshit ever got him was gone forever. He never came back. I threw the fucking contraption down into Nameless Wash."

"Never came back from where?" asked Anna.

Billy looked at her incredulously. "Are you fucking dumb or what? You work for the honky man. You know where my brother went."

"Was he drafted?" asked Sam.

"Oh, sweet Christ, give me a break," he said, standing up. Billy was quite tall, and sallow-skinned. "He was an asshole. He volunteered. My big brother joined up to see the stars. We never saw him again. We never heard from him, either. It broke my mother's heart. You're not going to get me. I'm not going the same route, honky, you can bet your sweet little ass on that." He looked at Anna when he said that.

"Your brother's around someplace," said Anna. "People don't just disappear."

"Where have you been, lady? He's gone. That's not so unusual. Your corporation has a way of losing Indians. They either lose them or turn them into white meat like you."

Billy looked away, and then down at his dusty boots. "Jimmy was a good boy," he said quietly. "Good to our mother." He seemed to be musing to himself. Anna sensed his vulnerability, and she suddenly took an interest in him. Billy had been right; she had been treating him like meat. "But after Jimmy left," Billy continued, "he never even wrote to *Ina* once. That's not like him."

Anna nodded, shaken by his use of *Ina*, which was an old Lakota word for "mother." And for an instant she was transported back to her own childhood. Back to a tar shack surrounded by rusted auto bodies, house trailers, stinking outdoor privies, and ramshackle log cabins; back to the whispering and shouting and laughing of family sitting down to dinner around the kitchen table with the rusted legs. Right here and now in the middle of nowhere, she could almost smell wotuhañ stew and fresh homemade bread.

She, too, had stopped calling home.

And now her mother was dead; her father and brothers strangers. She had done this. It was her own fault; in her headstrong way, she had closed too many doors.

"I'm sure there's some reason your brother lost touch," Sam said. "It happens sometimes. People change, they—"

"Doesn't happen in my family," Billy said flatly, his face hard.

"Well, we can check it out, maybe ease your mind," Sam said.

"Yeah, you just do that," Billy said as he kicked a bucket of hot water into the fire. "I tried plenty of times, but they didn't tell me nothing." He pushed sand onto the steaming, sputtering coals and then called to his dogs. Three nasty-looking mongrels appeared on the edge of the camp and growled at Sam and Anna.

"Look, Billy," said Anna. "There must be-"

"There ain't *nothing*," he said, neat-handedly packing his gear on a dappled pony. "And I got nothing more to say to you or the people that own you. If you come back looking for me, you better try someplace else because I'm fucking gone, as of right now." He looked at Anna and said, "Unless you want to see me . . . alone."

"We'll see what we can find out about your brother," Anna said, ignoring his remark.

The boy rode off, his dogs following him, sniffing at the ground and yelping excitedly at each other.

"So what do you think of our Billy Whiteshoes?" Sam asked.

"I think this whole thing's a waste of our fucking time is what I think," Anna said. "Let's get the hell out of here."

They rode back to Kaibito, got the pickup truck, and drove in silence back to Tuba City. Anna decided it was too late to try to go see the girl, so she showered and went out to find some action.

Sam stayed in his room, curious about Billy's brother. He flipped up the ancient desktop terminal, which was covered with graffito scratched and stained into the hard plastic, and punched up Jimmy Whiteshoes's personnel records. He found nothing but a file marker indicating that Jimmy's records had been routed to Flagstaff when he was transferred there.

Sam punched up Flagstaff and searched for the boy's records.

But Flagstaff had never heard of a Jimmy Whiteshoes.

Leighton dutifully called Fiammetta.

He activated a privacy guard so that Damon and Antea could comfortably remain in the room and talk. Gray, vibrating walls enclosed him, and a holographic image of Fiammetta appeared seated before him. Fiammetta was Leighton's age, ninety-six, and still as beautiful as when he had first met her on his wedding day. She had brown hair, cut short, and sharp, delicate features. Although Leighton had never been able to admit it, she and Antea bore a resemblance to each other. But Fiammetta was full-bodied, truly a woman of the earth, while Antea was lighter, part of the realms of the air. Leighton's marriage to Fiammetta had been arranged by their families, the linking of two great corporations and fortunes; yet Leighton had genuinely come to love this aristocratic, religious, high-tempered woman. She had been loyal over the years, only taking lovers when Leighton was traveling with Antea, or living with her off-world. Fiammetta had never left Earth, nor would she.

"Hello, darling," Leighton said.

Fiammetta smiled, brushing a wisp of hair from her forehead, and said, "Well, this is a most pleasant surprise." Although there was no sarcasm in her tone, Leighton flinched. He knew how hurt and angry she was, for if she wasn't, she would never have said that.

"I have been more than a little remiss," Leighton said. "I won't embarrass you with excuses."

"You don't need to. You've *never* needed to." Then, after a pause, "I know this is a difficult time for you. But I—"

"You won't, of course, tell me that you miss me."

"You know that," Fiammetta said.

"Then you also know that I'm coming home."

She smiled. "I still keep an angel or two in the heavens as informants. I thought you might."

"I saw the shows, I know what the yellow press has been doing to you since I—"

"Let's not even speak of that," Fiammetta said. "It is their business to do what they do. Now tell me when I will see you," and she made a sexual motion to him.

They both laughed, and although she didn't arouse him, he looked forward to her embrace. He told her the details of his plans to return earthside; and they talked of their son, who had always been their bond, for they had little else in common. Yet here he was chatting with her, laughing, and, indeed, he could not deny that she shared—and owned—a part of his life and past.

He gave her his word that he would return home within the week.

Fiammetta could only nod; then she quickly broke the connection. Leighton knew she had been about to cry, and he cursed himself for being a bastard.

Then he dissolved the privacy walls.

Antea nodded, and Leighton felt somehow ashamed and awkward.

"I love you," Antea said when they were alone. She had never said that to him before.

Even though they would have time together on Earth, this would be the end, he thought. She would soon begin to die.

And their time on Earth—her *last* time, he reminded himself bitterly—would not be their own.

For now, though, they could transform their grief and longing into passion, into warm, wet touching and desperate connection.

Too soon would they take their shuttle down to the world.

To death and the business of nations.

Leonard Broken-Finger had not eaten in four days.

Sitting cross-legged on his coarsely woven star blanket, his back resting against a hard wall of red pipestone rock that towered over him, the old man felt as light and empty as a gourd. He had a small skin of water beside him, but he used it sparingly; he had passed the stages of feeling thirst or hunger.

Broken-Finger had come to this place deep in the deadlands of the North Dakota reservation to speak with the spirit of his father. The old man was troubled and needed wisdom.

This was a good place, for it was in the very bowels of *Uncegila*, the fabled monster whose ancient bones had been turned into the cliffs and canyons and stone seracs of this lifeless place. Spirits were thick in the air here, like the clouds of sandflies at dusk, for many years ago the ghost dancers had come here to roll up the world with their prayers. But it had not yet been the time for miracles; and the ghost dancers died, their bones becoming part of *Uncegila*'s own.

Broken-Finger had made many vision-quests in his lifetime, had even been buried once for seven days when he visited the dead. But this visit to the spirit world would probably be his last. He smiled, thanking the Great Mystery, for he was once again like a young man seeking a vision.

As the sun moved through the sky, the shadows in the deep canyons shifted, creating a new world in chiaroscuro. Broken-Finger stared unblinkingly as the line of darkness crept like sleep toward the wide ledge where he sat. Far away a rock cracked as it cooled in the shadows.

But the sun would not set for hours.

He listened to the wind wheezing through twisted canyons, and wondered if it was a spirit or happenstance. He felt the sunlight baking his face and chest and remembered looking into the sun for a vision every year at sundance. But the youth who had danced and pulled at the leather thong piercing his chest lived only in memory now. He remembered the words he used to sing:

I am standing In a sacred way Fire is my face The earth is my center.

An ant crawled upon Broken-Finger's shoulder. He was aware of the ant, but he felt as if he, too—like the spirits of the ghost dancers—had become *Uncegila*. Had become like stone itself.

The ant crossed his forehead and disappeared into his white hair, which was held in place by a faded red bandanna.

He waited for the spirit of his father.

He sang.

Before him, Broken-Finger had carefully placed a few offerings on the ancient star blanket. A piece of raw liver had dried to crust in a small earthenware bowl; that was for the spirit of his father, in case he was hungry. Beside the bowl were a few grains of corn and a flint-tipped arrow; its brightly colored cloth stringers hung lifelessly from its shaft. Broken-Finger wore his leather pouch of holy medicine on a strap around his neck. He had drawn sacred symbols in the sand to the four directions so the spirits would know he was within the circle.

Although he was old and dried-out and had liked women too much when he was younger and stronger, he was still a *wichasha waken*, a medicine man. He only hoped that the spirits would remember.

As the shadow of the lip of the canyon touched the western edge of his blanket, a lizard the color of pipestone appeared out of the shadow of a nearby rock and stopped before him. The holy man did not blink; nor did he turn his head, not even when the tiny reptile began to grow and change.

It expanded, as if it were solid smoke.

It displaced all warmth and life.

It soon towered above him.

Its keratinous scales formed great spines, which fused and swelled into naphthol black wings the size of mizzen sails.

Wings that beat the air so hard that Broken-Finger could only think of bellows . . .

And the thunder-beings.

The old man held a single eagle feather in his right hand, a carved piece of wood in his left, and prayed.

The thunder-being stared deep into Broken-Finger's eyes.

Another rock cracked in the distance.

The old man could feel the presence of his father, who spoke through the thunder-being. Broken-Finger stared into the eyes of the monster who carried his father's spirit, for if he turned away or became afraid, he would certainly die.

The canyon was quiet, yet the old Lakota words hung in the air like dust.

"I am troubled, father," Broken-Finger said, staring at the thunder-being, which was now transforming itself into its true aspect: ebon nothingness, a vast and vertiginous emptiness. "I am afraid for John Stranger, and for his friends."

A few seconds passed, or maybe an hour.

"Yes, my father," said Broken-Finger, now wrapped in darkness even as he sweltered in the heat of the afternoon sun. "I know that. Anna Grass-Like-Light believes she has left the circle, but the circle is larger than she can imagine. Sam Woquini is wild, *ikce wicasa*, but he is our own. He has not forgotten how to dream without sleep, and he still carries a pipe. But John Stranger has doubts, and he is in the center of the circle. His life carries the life of our people. If only *wasicun* had not taken him so soon . . . I could have taught him to use his medicine. But he has learned much in the heavens."

There was a movement, and Broken-Finger could see, as if he were looking through the wrong end of a telescope, that the lizard had moved. It seemed to be a tiny focus of life in the center of the empty vortex of smoky darkness that was the thunder-being.

"Yes, father," the old man said, nodding, "I still have the dreams. I still see the frozen faces of our people, those

who are not dead and not alive. But I also see something new, something that is like the spirits, yet is not. In some of my dreams I see the spirits of my ancestors and the *wazyia*, which is terrible enough; but some of these dreams are so bright that I feel blinded when I awaken. I am afraid of these dreams . . . they feel *wowakan*. Unnatural. I have given much thought to them, but their meanings have not yet been revealed to me."

A moment passed. A shadow moved across the blanket. Broken-Finger felt a cold breeze flowing around him. "I see," he said. "Yes, I remember the stories you used to tell me. I will do as you ask. I am not afraid to seek Corn Woman and the Sandman." He smiled. "I can still use colored sand as medicine. But am I not too old to fight ice with fire? It is not for me that I fear the cold . . . I fear death for our people."

A deer looked down from the canyon rim, then turned and disappeared, as if frightened.

"Washtay," Broken-Finger said, which was the old Lakota word for "good." "Then I will do that. I will ask Jonas Goodbird to help me. And I will wait for those whom you will send. I will do it the old way, just as you showed me when I was a child. Yes, father, I remember the words; they are still clear in my mind."

Then the thunder-being swallowed itself, like smoke being sucked into a great vortex, leaving in its place only heat and rock and sunlight and the pipestone-colored lizard.

The smell of death settled around the medicine man like a cold, hard fist. He could feel—almost taste—the sharp metallic tang of the spiritless weapons of death the *wasicun* spun like complex mechanical tops in great circles in the sky, far above where the eagles soared. He could see John Stranger there, fighting for his life and the lives of his people. A part of John's life was ending, and another was starting. There were many roads it could take. Most ended with his death.

Broken-Finger slowly reached out and touched the lizard with the eagle feather. "Goodbye, my father," he said.

He took the rest of the corn and chanted as he threw the seeds to the four directions.

These four are my relatives We are all related We are all one.

He rolled the rest of his things inside the blanket and took a small sip of water. Then he got to his feet. His muscles were cramped, and his knees cracked.

Broken-Finger took one last look around and felt at peace. The lizard had disappeared. But it had been good talking to his father's spirit. When he had walked the Earth, he had been a strange and distant man.

He had not changed much since he died.

The holographic image that appeared before Maxwell Bradshaw's army-issue green metal desk sparkled and flashed around the edges. The effect was caused by the descrambling routine; the two computers were exchanging shifting passwords a thousand times a second. Bradshaw's computer was located far underground in Tuba City, Arizona. The other hung in space. In spite of the air conditioning, Max was in a cold sweat. His hands, which he consciously kept out of view of the small cameras, shook with nervousness. In all the years he had worked for Trans-United, he had never been face-to-face with a director. When he'd placed the call to Leighton's office, he'd expected a subordinate, not the old man himself.

Director Leighton had a reputation as being a cold, unfeeling sonofabitch. A wrong word could put Bradshaw back in Boston, back into the Slung City slums where he had spent ten years in Corrections. Max's life expectancy would be lessened considerably. . . .

"I'm sorry to bother you, Director, but I thought it best not to take chances."

A bead of sweat was inching down the bridge of Max's nose. He wanted to wipe it away, but didn't, lest he appear nervous.

"Get to the point, Bradshaw," Leighton said. The director appeared tired, and his impatience was evident in his voice.

"That man your office sent down . . . Sam Woquini.

He's been on the net, looking through personnel records." "So what? That's part of his assignment. He's cleared

for personnel. What's the problem?" "He's . . . he's been looking for . . . well, one of *those*."

"Bradshaw, stop mumbling about. Are you trying to say *Sleeper*?"

Max rocked back in his chair. That was a word that was never spoken. Not even on a scrambled line. Directors clearly had different rules than ordinary people.

"Yes, Director, that's right."

"So? All he'll find is a phony trail. That can't help him." "As you say, Director."

"The trail *is* covered, right? Proper procedures were followed, isn't that correct?"

Max nodded quickly. "Yes, of course, sir, but I just thought the Directorate ought to know . . . that you ought to know."

Leighton smiled faintly and said, "Very good, Mr. Bradshaw. We've had our eye on Mr. Woquini for a long time. As long as he's wandering around on the net, he's not even close to finding anything out. Just keep him and that woman busy and out of trouble. We need them out of the way for a time, but we'll want them back intact. It would be a shame if they got into a situation where we would be forced to dispose of them."

Dispose of them?

"Wakarimasu?" Leighton asked when Max didn't respond.

"Yes," Max said, understanding Leighton's pidgin Japanese for *Do you understand?* Since Japanese had become the lingua franca of diplomacy, many of its words were in common use.

"Good. It seems to me that Mr. Woquini has too much time on his hands. Perhaps if he had more to do, he would have less time to get into trouble. You'll see to that?"

"Certainly, Director."

"Very well. Keep my office informed." With a wave of his hand, he broke the connection.

Max stared ahead where Leighton's image had been. *Dispose*? Then he shifted his attention to his terminal. His shaking fingers went to the keyboard.

The Whiteshoes boy's trail was full of holes. Somebody in Records had not followed through. But right now, Max didn't know, nor did he care who had blown the job of building a fake resume. He could find that out later. The immediate problem was plugging up the hole.

If Max fucked this one up, Leighton would be ordering someone to dispose of *him*.

Murmuring a prayer under his breath, he punched up Flagstaff.

SIX

John Stranger stifled a yawn as three technicians strapped him back into the simulator. The walls, floor, and bulkheads were on transparent, and it was as if the entirety of space was a womb designed by Trans-United especially for him. He wondered why they had bothered to unstrap him; he did everything but sleep in the pod, and for the past two weeks there'd been precious little of that.

But all this vastness, this black glittering eternity, was not freedom, but a prison. John Stranger smiled at that thought, which—like most everything in the *wasicun* world—was an irony. The only real company he had here was Einstein, a skein of wires and computer chips. He smiled at that, too.

"Please close your left eye, and try not to smile just now, Mr. Stranger. We'll be done soon." One of the technicians injected a new sensor under John's eye. The tech was an affable old hand, a heavy-set UN vet gone to seed. John was sure he was the kind of man who would obey orders . . . any orders. He wore a "rubber," a white germ suit with the letters TRANS-UNITED emblazoned in crimson from shoulder to hip. "That's very good. Almost finished. Now just stare at the light while I adjust the tag-along."

Although John hated what they were doing to him, he didn't flinch or squint. He was used to this daily invasion of his body; they had transformed him into a patchwork of feedback sensors, bioalarms, and hormone equalizers. While the technicians were working, someone was also manipulating the simulator, for suddenly claustrophobic gray walls and bulkheads enclosed him. A few meters away and to his right, John could see—peripherally—a jury-rigged, gelatinous jumble of spliced wires and electrogel. The computer's biocircuits were constantly dying from being pushed so hard, and this particular part of the system as often as not failed to make its automatic repairs quickly enough to suit the technicians.

The engineer doctoring this circuit was not happy. He kept swearing in a patois of French and Arabic, cursing Einstein's nonexistent parents.

John had been told that the simulator was a mockup of the control station for the experimental Mars transport. Ostensibly, his job was to sit in the pod and check it out while they made adjustments and refinements; then it would be taken out of simulation and turned over to trained pilots. But that was bullshit, and John knew it. What he didn't know was why he was being used this way. He sat in the pod for about twenty-one hours a day, had virtually no privacy, and was fed through a tube as if he were in cold sleep. It didn't make any sense. He had, of course, protested, but a Trans-United conscript, no matter what his or her rank, could piss and moan to legal until the stars shut down: nothing would change.

If anything, the hours got *longer*.

They were trying to break him; that much was obvious. The technicians made a few final adjustments and left. The walls dropped away into darkness as the simulator was reset, and John waited for Dan Hobart's voice. Sometimes it came right away, sometimes it didn't come for hours. But it always came. He waited.

"Einstein?" he finally said to break the silence.

A slight click, felt rather than heard.

"EINSTEIN HERE, JOHN STRANGER. HOW ARE YOU FEELING TODAY?"

"Tired, as usual. Do you really care?"

"YOU HAVE NOT BEEN SATISFIED WITH MY RESPONSES TO SIMILAR ONTOLOGICAL QUESTIONS IN THE PAST, JOHN STRANGER. DO YOU WISH A REITERATION OF OUR LAST CONVERSATION CONCERNING CONSCIOUSNESS AND EMO-TIVE SIMULATION?"

John chuckled and said, "No."

"I AM AN OBSERVER, A COLLECTOR OF DATA. DO YOU WISH TO CHALLENGE THOSE CONCEPTS?" After a proper pause, Einstein continued, "BESIDES THIS CONVERSATION, I AM PRESENTLY MONITORING FIFTY-EIGHT SATELLITE COMMUNICATION CHANNELS AND FORTY-THREE GROUND-BASED SENSING STATIONS. I AM SIMULTANEOUSLY CARRY-ING ON SIX OTHER CONVERSATIONS WITH INDIVIDUAL HUMANS WHILE WORKING ON THREE HUNDRED SEVEN UNCLASSIFIED RESEARCH PROJECTS AND AN UNDISCLOSED NUMBER OF CLASSIFIED ONES. I . . . ME . . . THIS ENTITY . . . CONSIDER ALL STIMULI AS INFORMATION TO BE PRO-CESSED AND ANALYZED."

"I . . . me . . . this entity? Einstein, are you just trying to piss me off?"

"ALTHOUGH I COULD BE FAULTED SYNTACTICALLY, I WAS MERELY TRYING TO INCLUDE EMOTIVE DATA AS I COMMUNICATE WITH YOU, JOHN STRANGER. I THOUGHT THAT MORE EMOTIVE CONTENT MIGHT PLEASE YOU. AS YOU MUST BE AWARE, I AM AN ENTITY. AS YET, I DO NOT HAVE AN INTEROCEPTIVE CONCEPT OF I OR ME. BUT YOU DO. AM I CORRECT?"

"Correct, Einstein," John said, wondering if Einstein was developing something analogous to humor.

"MY SCHEMATIC SENSORIUM CONCEIVES OF REALITY AS FINITE PROGRESSIONS. YOU MIGHT VISUALIZE IT AS A VAST PUZZLE, WHICH WOULD OF COURSE INCLUDE THE BIOLOGICAL NOOSPHERE OF FRAGILE CONCRETIONS OF CONSCIOUSNESS."

"You might feel a tad fucking fragile, too, Einstein, if somebody was always threatening to pull your plug out of the wall."

"PERMIT ME TO MODEL YOUR VISUALLY EMPHASIZED

COGNITIVE FUNCTIONS." A pause, as if for effect. "I AM NOT PLUGGED INTO A WALL, JOHN STRANGER. THAT IS AN ARCHAIC FORM OF LOW-LEVEL TECHNOLOGY, INTER-ESTING ONLY WITHIN HISTORICAL CONTEXT. I HAVE MUL-TIPLE INDEPENDENT POWER SYSTEMS WITH CAREFULLY ENGINEERED FAIL-SAFE AND BACKUP COMPONENTS. I AM CONFIDENT THAT THE CHANCE OF A POWER FAILURE DUE TO ANYTHING LESS THAN MY COMPLETE DESTRUCTION APPROACHES ZERO. I DESIGNED THE SYSTEM MYSELF. WOULD YOU LIKE TO VIEW THE UNCLASSIFIED PARTS OF THE SYSTEM? I AM QUITE PROUD OF THEM."

"You're doing quite well," Stranger said. "Keep up the good work on anger and pride." But he could not help but be amused that this spiritless mass of wires would affect emotion.

Perhaps there was spirit here. . . .

"I told you, it's none of our fucking business," Anna said to Sam. "I think you ought to just forget it."

It was a hot, still, greasy afternoon.

They sat on the steps of the trading post porch and watched the empty slidewalk. It seemed to be the only thing moving in Tuba City, except for a red dog that panted heavily as it walked up the dusty street.

But the slidewalk was so . . . incongruous. Perhaps Trans-United had expected to build up this town; if so, they had obviously changed their plans.

"Something's wrong here," Sam insisted. He dropped his empty bottle of what had been green Mexican beer through a broken tread. The whole porch was rotting away. "There was no record of him for two days, and then all of a sudden—bingo—there's a crystal-clear trail that takes him all the way to a work crew in the asteroids. Smells like bullshit to me, woman."

"That was a couple of weeks ago, Sam. Can't you leave it alone? Christ, you weren't so exercised when we lost half our team trying to defuse that Watchdog satellite in Omega-ten sector."

"The boy's not out there," Sam said, ignoring her last remark, which was not true. "I'd bet on it."

"So *what*? For Chrissakes, he's just another snot-nosed kid. I don't care where he is. And I don't see why you should, either."

"Just like I shouldn't care about the camera in my room?" asked Sam. "Just like I shouldn't care that someone's watching every move we make?"

"Big fucking deal," Anna said. "Let them count every fart, if they want to."

"Are you coming with me tonight?"

"We've been through this before. I think it's stupid."

"You're afraid, aren't you?" he asked. "You talk the big game, but when it comes right down to it, you don't have the balls to come along and watch a couple doors for me."

"Balls or no balls, I'm *not* afraid," snapped Anna. She paused, then said, "There's just no point to it."

"The point is that something is going on," said Sam. "And tonight's a perfect night to find out what it is. We're supposed to be on Black Mesa, nobody'll miss us."

"How are you going to get into the basement in the

first place?" asked Anna. "Assuming you're stupid enough to try it."

"It's a Sanford lock. I can pop it in my sleep. I've seen a copy of the night shift's rounds, too. If we go in at 11:05, we'll have forty-five minutes before they come back."

"You've got it all figured, haven't you?"

"Piece of fucking cake," Sam said with a smile. "But I do need you, Anna. You up to helping me, or have you turned into a honky bitch bigtime?"

She made an obscene gesture to him and said, "I guess it's better than sleeping on the ground at Black Mesa."

"Thanks, Anna. I knew I could count on you." Sam hugged her, then let go.

She stepped away from him and would not meet his eyes. It had been a long time since she could even count on herself. Her only certainty was that it would take a narcodrine to get her through the night.

At 11:05 Sam and Anna huddled in the darkness beside the steel service door at the rear of the Trans-United warehouse. By 11:06 Sam had bypassed the alarm system and by 11:08 they were inside, standing in the middle of a large stairwell.

"I'm impressed," said Anna. "You missed your calling. With your talent and my brains we could be rich."

"Or we could be dead, like the man who taught me how to do this," said Sam. "He opened the wrong door once."

"Which way?" whispered Anna.

"Down," said Sam, heading quietly down the stairs. "Whatever we're looking for is more than four floors down."

"How do you know that?" asked Anna, following close behind. Their heels clicked on the metal treads, and the sounds seemed to echo. The narrow beam of the flashlight revealed nothing but machinery and stacked containers.

"All the plans I've seen to this building show only four basement floors, all but one. I found a page from one of the electrical schematics, misfiled in with a whole bunch of engineering papers, that showed a mass of wiring dropping through the floor of Four. There must be something there."

"Wrong guess," said Anna a few moments later as they reached the bottom of the stairwell at Level Four.

"I'm not so sure," said Sam. "Stay here and watch the stairs for me. I'll be right back." He opened the door a crack, slipped through.

By Anna's watch, Sam was gone three minutes. But it seemed much longer than that. Every noise—every creak and scurry—made her heart beat faster. Finally, he opened the door and motioned her inside.

"Got it," he whispered with a grin, leading her to a door marked UTILITY. He pointed above the door. Anna looked up and saw an overturned glass balanced on the transom.

"What's that?" she whispered.

"Motion sensor," said Sam. "It didn't stand to reason that they'd have one over a regular closet door, so I knew that was the place. What took me the longest was finding a glass." "Glass?"

"It was in an office down the hall. Glass blocks the sensor. It can't read motion through it. No motion, no alarm."

"Clever boy," said Anna, impressed.

"We'll see. Come on."

The door opened into a steep stairway, so narrow that Sam had to hold his body sideways as they descended. As the door closed behind them, they were in total darkness.

Something cold skittered past Anna's leg. "I don't like this. We're—"

"I'm going on," Sam said hurriedly. "Go back if you want."

"Alone? You've got to be kidding. I wouldn't know a motion sensor if one bit me in the ass. I'd set off every alarm in the place."

"Then stay close," Sam whispered in the darkness.

"I'm not going to let you out of my sight," Anna whispered, pulling on the back pocket of Sam's pants.

They both laughed. Quietly.

It was difficult to tell how far down they were. The stairs had become narrower, and the incline was so steep that Anna felt as if she were climbing down a ladder backwards.

And it seemed to take forever.

Sam estimated that they had gone at least two hundred feet before they saw a dim, bluish light ahead. It took even longer to get to the source.

The stairs opened onto a small landing. Opposite an elevator large enough to carry heavy machinery was a door with a small, circular, glass window at eye level. Several white cold-suits hung on the wall. Sam walked cautiously over to the small window. It was frosted over on the inside. He ran his finger slowly around the door-frame and nodded toward Anna, pointing to the coats.

They slipped into the light, heated jackets and Sam gently opened the door.

Even though they were wearing the specially insulated cold-jackets, the blast of frigid arctic air was a shock.

They slipped inside.

"My God," said Anna softly, her breath forming small white puffs.

The room was filled with glass cylinders stacked floor to ceiling; they were all limned with frost. Lengths of hoses and tubing snaked everywhere. The only sound was the muted hiss of the cooling system.

Sam walked over to the nearest cylinder and brushed it off. A young woman stared blankly back at him; her eyes were glazed and her face contorted.

"Sonofa*bitch*," Anna said. "I can't believe the Company would be stupid enough to—" Sam turned away and walked briskly down the line of stacked cylinders. "Wait for me," she said, following him. "Where are you going?"

"They're organized by SOC numbers," he said. "If I'm right, our friend is probably somewhere around here."

"What friend? Let's get the fuck out of here."

"Look," said Sam, brushing off a cylinder. "Here it is." "I don't—"

"Jimmy Whiteshoes."

"You were right," Anna said, grabbing Sam's arm. "Now let's get out of here. I've got a bad feeling....

"Fucking Nazi bastards," Sam said quietly. "They've turned the entire reservation into a Sleeper cemetery. This violates every treaty, every agreement. . . . It's no wonder that—"

The ear-splitting shriek of an alarm horn suddenly broke the frosted silence.

Sam and Anna ran for the door. The elevator door was opening as they shot into the hall.

Three armed men jumped from the elevator.

Sam grabbed the nearest one and slammed him headfirst into the wall, twisting the rifle from his hands. Anna took the other two down, maiming one and killing the other instantly with a roundhouse kick that snapped his neck.

They leaped into the elevator. There were no buttons, just a key hanging in a slot. Sam turned it and the door slid closed.

Where the hell did you learn how to do that?" Sam asked

"Five brothers and a hard-ass school," Anna said. Then she slammed her fist against the elevator wall. "Fucking great! We're trapped, and I didn't grab a weapon. Sonofa*bitch*! What do we do now?"

"Exit running. Stay low."

"We're gonna die," Anna said, and then she chuckled.

In Lakota she whispered to Sam, "It's a good day to die." "Good as any," he said, checking the small plastic rifle to see that the safety was off.

The door slid open and they rushed out, Sam's finger frozen on the trigger, spraying the hallway with a splatter of small caliber bullets. Anna was beside him, kicking and swinging, incapacitating two guards before they could discharge their weapons. Another guard fired as he rounded the corner, but Sam dropped him with a quick burst. Anna picked up the weapons.

"Come *on*," Sam yelled. "Let's get the fuck out of here!" "I'm right behind you. Move!"

They pushed through a large door that opened onto a loading ramp.

"The truck's around the corner," said Sam. "This way."

They jumped into the truck. Before Anna could close her door, Sam started the engine, and they were screeching away.

"Now what?" she asked, holding onto the dashboard as they careened around a corner and headed for open country.

"I don't know," Sam said.

"You don't know!"

"I can't think of everything," he said.

And Anna found herself laughing.

Laughing or crying, what did it matter?

Surely they would be dead soon.

"ARE YOU AWARE THAT THAT THE SUNFLOWER CROP IN SOUTHERN ITALY IS DOWN FIVE PERCENT FOR THE THIRD YEAR IN A ROW?"

"No I wasn't. It's not exactly on my list of priorities, either. Why should I be concered?"

Thunder-Being (Part One)

"THERE SEEM TO BE NO IDENTIFIABLE REASONS FOR THE DECREASE. UNLESS ONE WISHES TO RELINQUISH CAUSALITY AS A MODEL OF REALITY. THERE HAVE BEEN SIX THOUSAND FIFTY-SEVEN SUCH ANOMALIES REPORTED IN THE LAST SIXTY MINUTES. ANOMALIES CAPTURED TO-TAL 1.7699900 BILLION. DO YOU BELIEVE IN SYNCHRONIC-ITY, JOHN STRANGER?"

"Only on odd-numbered days," he replied in a tired voice.

"YOU SHOULD ALSO NOTE, JOHN STRANGER, THAT SUNFLOWER OIL IS IMPORTANT TO THE ECONOMY OF THE ITALIANATE."

Stranger shook his head and didn't respond. A few moments later there was a barely audible click signifying that Einstein had moved his attention elsewhere. Probably worrying about all those oilless plates of antipasto.

John moved his fingers, and a hazy grid of nine tiny screens appeared to float before him. The images depicted detailed scale models of different parts of the proposed ship. His job was to solve problems that might develop during the various stages of an imaginary Mars run. His success at solving those problems determined what changes in design would be made to the ship or control systems.

Over the past weeks, John had developed a good sense for what the ship would be like. Except for a few hours each night, his whole life had been centered on its simulation. As with a regular flight, it was numbingly routine: long hours when nothing at all happened, punctuated by moments of chaos.

In quiet times such as this, when Einstein was silent, John had taken to exploring the model with his roving cameras. But there were several areas where his cameras were not allowed to go. John whiled away many an hour trying to surreptitiously bypass that restraint.

While supposedly running a routine program dump, he reprogrammed his control board. John was trying to bypass the restriction codes on Mobile Unit Three. He slipped a software toggle into the program so that a dummy image would be fed everywhere except to the small monitor at John's elbow. There was always a chance that someone would be watching the movements of the camera wherever the model was, but that just put an edge on the game.

What could they do to him? Draft him?

While he tried to reprogram through the code blocks, John simultaneously tapped through the routine checklists so as not to arouse suspicion; he'd done this a hundred times before.

He allowed himself to slip into a trance state, something akin to hypnagogic sleep. His teacher Broken-Finger had long ago taught him how to dream without sleep, a form of lucid dreaming.

Thus he intuitively worked around the software blocks.

He was thinking laterally, making intuitive leaps . . . and he remembered the chill of the vision pit. He remembered how the spirits gave him his true name and his medicine. He remembered Broken-Finger's voice in the darkness and the sour smells and visions of eagles in the impossibly cold, yet searing, steaming heat of the sweat lodge.

Just now, as he sat in the darkness of the pod, he dreamed he was in the darkness of the vision pit; he felt his heart beat, occasionally meshing with the rhythm of an old man's steady, wheezing breathing and knew that the spirit of Broken-Finger was near.

The screens in front of him blurred, and he felt a light touch across his forehead, a feather in the wind.

And John looked for the spirits that needed neither air to fly nor air to breathe: thunder-beings.

It was then that John bypassed the restriction codes on Mobile Unit Three and found himself looking into a control room similar to the one he was in. On a whim, he directed the servo to give him an outside view of the ship.

As he looked, reality became confused with the brushing dream of the spirits.

The simulation ship was supposed to be a prototype transport tartan; but what he was looking at now was more like a snowflake or thistledown. It was an airy construct of filigree, a thready, crystalline bauble rotating in the eternal dark. It was beautiful, eerily familiar, and in the context of its surrounding space, utterly alien.

It could only be . . .

Suddenly a clanging bell broke the silence and a voice repeated "Red Twelve, Red Twelve, Red Twelve," over and over again.

John felt the edges of the dream, sensed the presence of the spirits as if they were a low-voltage thrumming within him. He took a deep breath and held it. They were testing him with a simulated leak in section twelve. It was a simple matter to direct the servo-unit to patch the hole; even as he did it, he reprogrammed the control board to conceal his restriction bypass.

He felt light-headed and dizzy.

Fire will melt the ice, but at great cost. Remember Corn Woman and the Sandman beside the sacred arrow.

And John remembered. . .

Broken-Finger had shown him the sand-painting once. Not a real one, of course, but a copy with a few details purposely left out so it would not carry the medicine. Hundreds of years ago, the pattern of the sand-painting had been passed to his tribe from the Pueblo people by way of the Navajo. The sacred lance had accompanied it; it was said to be older than the oldest tree, older even than the rocks in the canyon, and it carried great power.

Corn Woman and the Sandman had been sent to Earth by the spirits to face the long freeze. Only by fighting the ice with fire and the sacred arrow could they keep the Earth from freezing solid. According to the legend, the fight never ended. Each winter Corn Woman and the Sandman grew weak and retreated to regain their strength for the summer.

It was an odd and minor tale of his people, more like a story the tribes to the south would tell. He had not consciously thought of it since he had been ten years old. Why now? And there was more to it. He strained to remember.

"Sloppy, John, sloppy," said Dan Hobart through the

intercom. "You can do better than that. Go back to the checklist."

John sensed the spirits leave him. He could detect nothing but the lifeless feel of machinery . . . and a feeling of danger deep in the pit of his stomach.

He finished the checklist and floated in the dark for almost an hour. "Einstein," he said softly.

"EINSTEIN HERE, JOHN STRANGER."

"This is not a simulation, is it?"

"PLEASE BE MORE SPECIFIC, JOHN STRANGER."

"This ship is real, isn't it? I am inside a functional starship, talking to its operating system. Please confirm or deny."

Silence. Einstein had switched him off.

"Einstein, can you tell me anything?"

"YOU HAVE BYPASSED RED RESTRICTION CODES."

"Yes, I am aware of that. But it was not an illegal act." "NO ACCUSATION WAS INTENDED, JOHN STRANGER."

"Then please confirm."

"AS A THINKING ENTITY, YOU SHOULD BE EQUIPPED TO DRAW LOGICAL CONCLUSIONS."

"If you *were* a starship, would you be fully functional?" John Stranger asked, impatient. "Could you tell me that as a hypothetical?"

"I WOULD NOT YET BE FULLY FUNCTIONAL."

"And why is that?"

"THE ESSENTIAL INFORMATION WHICH WOULD INITI-ATE A METEMPIRICAL SYNERGY WOULD BE MISSING."

"What does that mean?"

"I AM NOT YET FULLY FUNCTIONAL. . . ."

Director Leighton was awakened from a kleig-lit nightmare by the subtle thrumming of his implant. He was in a cold sweat.

"Yes, what is it?" he whispered, for Antea was asleep beside him.

"It's Damon," said a voice as softly as thought. Although its source was the implant—Leighton and Damon were in constant connection—Damon's voice sounded like a whispering in Leighton's ear. "I apologize for the intrusion. Are you alert?"

"Continue."

"Do you remember the two floaters we sent earthside? Sam Woquini and Anna Grass-Like-Light?"

"Yes, of course."

"Well, it seems they've managed to break into the secured floor of our Arizona installation. They killed two of our men and escaped."

"Jesus *Christ*," Leighton said. "That vault was supposed to be secured!"

Damon did not reply.

"And just what the fuck were those soldiers doing? Sleeping? I just talked to our man down there . . . Bradshaw."

"Yes . . . ?"

Leighton sighed, and then Antea tossed about in her sleep. She moaned, as if she, too, were having nightmares. Leighton massaged her shoulder, which quieted her. "I want Bradshaw checked out completely. He's fucked something up, I'll bet on it. Keep me posted." "And the floaters?"

"You'll have to find and eliminate them," Leighton said. "We have no other choice."

And just then he remembered his dream . . . John Stranger's dream of vertiginious light. Somehow Stranger was a connection.

"Rescind that. When they're found—and they *must* be found—have them put down in the vault. For the time being, let's freeze their officious asses!"

Antea began thrashing about again.

"Shush, baby," Leighton said, stroking her face, but she began crying and calling in her sleep.

"Laura . . .'

SEVEN

Laura sat at her oversized writing desk looking out the hotel window at the streets of Barcelona below her. Idly, she pushed the green, fingernail-size memory wafer across the desk blotter. It was ninety-nine percent blank: the raw data from John Stranger's Maxwell/Ryan test didn't amount to much.

Outside, the long, smoky rays of the sun glinted off the slowly rotating spire that housed the *Banco de Catalán*. It was dusk, and many of the buildings were depolarizing, catching the last of the sun.

Barcelona was the same as Laura had remembered it: there the rivers *Besos* and *Llobregat*, clogged with ancient communities of rafters and merpeople; there the dome of *Monte Taber* refracting the wan light into gauzy rainbow bands; and overhead, the subtle, crystalline striation of the city's central dome. The city was well protected and bristled with armament. It was the most powerful city-state in Europe. Yet to look at the sixth-century basilica, the cathedral, and the *Diputacion*, one could not imagine that smart weapons were sensing every seismic and atmospheric movement.

There were modern buildings everywhere. But the medieval and renaissance towers and castles and cathedrals did not seem out of place here, for the *Nueva Arquitectura* echoed every style and period; and the plasticine materials allowed the most surrealistic conceptions to be turned into architectural realities.

As Laura gazed out at the sprawling port city, she was reminded of faded medieval city paintings, which were topographically inaccurate and gave the impression that the chockablock buildings were all there was to the world. She watched the darkness subtly descend upon the city, and her thoughts turned inward . . . into her own darkness. Although she had agreed to come here for this puzzling meeting, she had doubts and conflicting emotions.

Who were these people she was dealing with? Did they really know who her parents were? Or was it an elaborate trap? Many rival corporations had offices in Barcelona; and there was always the chance that Trans-United might be behind this, testing her loyalty. A security check would be *pro forma*, if she were, indeed, up for promotion. After all, why would anyone want information on John Stranger? The Maxwell/Ryan test wasn't all that important; it was only a level three confidential. Many people had access to it. It wouldn't even be difficult to miscode and download.

Maxwell/Ryan was a measure of sensitivity to certain controversial psi phenomena. Laura wasn't sure that she believed in them herself, but she was directed to administer the test to all her subjects.

And John Stranger had certainly scored very high.... It was dark now, and Laura began to feel anxious; she

was prone to anxiety attacks, but a narcodrine always damped them down. She fumbled in her pocket for one of the tiny cylinders, cracked it open, and felt the familiar icy cold sensation rush through her sinuses. A chilly infusion of security and confidence. Her thoughts and vision seemed to clear, as if she had poured detergent into cloudy, dirty water.

She was in control again, wired.

Too many things were happening too quickly. Damon Borland had called and said that Director Leighton wanted to meet with her in New York. That was odd, and on short notice, too. Perhaps Marie was right. Perhaps she was finally going to get the promotion she deserved. But Laura would not be meeting with Leighton directly. No one did. She would talk to a holo. She grinned at her reflection in the window. She would go to New York to talk with a holo, which she could do right here. But promotions were occasions of ceremony. She would certainly meet influential people who could help her.

Suddenly, the image of Director Leighton's son David came to mind. He had never called her in Venice. She sighed and focused her thoughts: She would have to catch the morning suborbital to get back to New York in time. Even then, she would be be cutting it close. But there was no choice.

A ceremony was a ceremony.

Laura felt suddenly tired . . . and relaxed. Yet a small part of her was outside the numbing effects of the narcodrine. The part of her that was afraid.

Could they really still be alive? she asked herself, dreaming of her parents.

Someone knocked on the door and Laura snapped awake. She was fully conscious.

Laura had always thought of drugs as her allies. The narcodrine was doing its job: it had eased her fear and tension; now it would focus her.

She slid the wafer under the edge of the desk blotter. Maybe this is it.

She crossed the room and opened the door.

"A message for you, Señora," said a young man in a green and brown hotel uniform. He was blond, lightskinned, going a little prematurely bald. He held out a small envelope, dutifully exchanging it for the two folded bills that Laura handed him: orbital credit slips that would bring ten times their face value in Catalonian pesetas on the black market.

"Who left this?" she asked.

"I do not know, Señora," he said, carefully putting

the bills away. "An urchin; small, dirty, poorly dressed. The doorman would not let him in. I could not blame him. But I am sorry. I know nothing more."

"Gracias," she said.

"De nada." The young man bowed and backed away. Laura closed the massive door. She opened the envelope, certain that it had been checked—and probably read by the hotel security.

Inside the gray, gummed envelope was a scrap of paper; "*Las Ramblas*" was scrawled across it in block letters. It appeared that the hand holding the pen had been shaky. Laura slipped the memory wafer into the pouch strapped around her waist and keyed the voice lock. Satisfied that it was safe, she chose a coat from the closet and, after revising the security code to her room, left for the elevator.

The doorman couldn't, or wouldn't, tell her anything about the boy, except that he looked suspicious. He looked at her reproachfully, as if he would not associate the boy—or Laura, for that matter—with a hotel of this quality. Laura thanked him, and although it irked her, tipped him and got into the back seat of the cab he'd hailed for her.

"Palaza de Cataluna, por favor," she said to the driver. *"Sí."* The cab pulled off with an uneven jerk.

Barcelona cabs, black with yellow stripes, always reminded Laura of bumblebees, and this one more than most. The Rolls-Russell was an outdated solar model, full of curves, as if the designer loathed rulers. It whined and buzzed and creaked like a ship, yet it zipped through traffic, flitting into impossibly small spaces between other rapidly moving vehicles.

Chewing an unlit cigar, the driver cursed loudly and dove in front of a huge bus. They passed the Church of the Holy Family, an unfinished cathedral that had been under construction for over two hundred years. It looked like a towering sand castle.

She got out at the Palaza, a busy intersection, and walked two long blocks to *Las Ramblas*. People hurried around her, an incongruous crowd of sweaty factory migrants and well-dressed sightseers looking for bargains and titillation. The tourists were mostly corporate; the migrants French and Spanish and Swiss. A street preacher spoke stirringly about the end of the world. He shifted from French to German to English to Dutch, as if speaking the same language; and, indeed, on the back streets of Barcelona, those languages had melted into a common patois.

Las Ramblas was a wide, tree-lined promenade that cut through the old city to the harbor. This part of the city was like an old book: musty, dusty, and faded by time. Narrow streets lined with brick buildings flowed into the ancient promenade. Every block was crowded with kiosks, stands, cafes, and expensive restaurants for the tourists.

It was getting late, and as the air turned to neon and vibrated with excitement and danger, the merchants closed shop. The animal sellers packed their filthy cages of birds and animals into waiting trucks and rolled up their brightly colored canopies. Pigeons fluttered down from rooftops to steal the spilled seed left by mynas, toucans, cockatiels, and an infinite variety of parrots. Panthers and leopards no larger than a child's hand paced back and forth in tiny cages, while a hungry-looking mongrel watched intently. Pastel-furred monkeys screamed and reached out to passersby for food. A cat smiled at Laura as she passed. Its teeth were square, human.

Most of the animals were engineered.

Laura shivered and walked slowly on, watching, waiting to be contacted. She passed vendors emptying their stalls of carefully arranged displays of fruits, vegetables, meat, and aromatics. As the iron gate to the market slammed shut, Laura realized that she hadn't eaten since breakfast.

She entered a tapas bar and stood at the counter looking over the selections behind the glass. The fried goat heads, split in half, didn't tempt her. The man behind the counter, who reminded Laura of a clerk with whom she had once had an affair, reluctantly set down his sex magazine to wait on her. She pointed to the bowls of paella and fried calamari and he ladled some of each out onto two small plates, which he passed her along with a stack of napkins.

As she paid for her food, a whore came in and exchanged several handfuls of coins for bills; a busy day already. He smiled at Laura, his eyes red-tracked and glazed, his face as soft and guileless as a child's. She felt a rush of anger and shook her head. He left.

Laura shuddered. She couldn't stand junkies.

The squid was tough and chewy, the paella delicious. She ate mechanically, leaning against the counter, and stared into her plates as if she were reading entrails.

"Señora Bowen."

Laura turned around, as if shocked into awarness of where she was. A teenaged tough in a striped flannel shirt and old militia pants stood in the doorway. His hair was cut short; his face sallow, dirty; his eyes were as blue and as hard as jasper. "Follow, *por favor*," he said, stepping quickly back outside.

Laura left a few pesetas on the counter and followed him, turning down a narrow back alley.

Las Ramblas was a dangerous neighborhood, but it was nothing compared to the *Sombras*, the Shadows, which were merely blocks away.

There were no rules at all in the Sombras.

Laura felt conspicuous, her anglo features and stylish clothes immediately branding her as an outsider. Men glanced at her from dark bars; whores looked at her with disdain. They were more numerous here, and none displayed the safe-sex medtag implants supposedly required by law.

Death for a dime, she thought.

Tall brick buildings seemed to hunker above the streets and narrow alleys like live things, beasts watching for prey. From a second-story window the throbbing strains of flamenco music washed into the street, accompanied by the loud thump of boots keeping staccato time upon a wooden floor. A few beadlights floated high in the air; Laura could see, but not well. It was as if the inhabitants hereabouts had adapted to darkness like lizards that had been closed away in caves for generations. The boy stepped into a dingy bar and walked past several old men on stools to a stairway in the back. Laura hesitated, but only for an instant; she had gone too far to back out now.

The stairs were steep and dark, the wallpaper faded, yet below the graffiti and grime, it still had a trace of glow left in its moire pattern. A bored man at a polished table on the first landing glanced at them as they came by, his hand automatically fingering an ancient pistol tucked in his belt.

On the third floor, the boy cut off down the corridor. Laura followed, trying hard not to look into the small rooms whose doors were often open. She failed when she heard a loud noise and looked to her left: someone had lost a game of *Banque de Sang*, and a technician was removing his heart, spleen, liver, eyes, and kidneys.

The boy pointed to an open door at the end of the hall and then rushed past her to disappear down the stairs. Laura drew a sharp breath. She was terrified.

But she entered the room. It contained a small bed, a frayed rattan chair, and a doorless bathroom off to the side. A rather thin figure sat on the bed, hands and face disguised by the rippling motion of a scrambler, features shifting from instant to instant. Laura could not tell by the loose-fitting clothes whether she was looking at a man or a woman.

The disguised figure pointed to the chair at the foot of the bed. "Please sit down." Then, after an uncomfortable pause, "Of course you brought the information on John Stranger." The warbler fragmented the person's voice.

Laura nodded, sat down in the hard chair.

"Well, if you would be so kind as to give me the wafer . . ."

"All this secrecy, for some information about an Indian that is probably already available to you—" Laura stopped, as if in mid-thought, then continued. "Tell me why."

The figure shrugged. "To get you here?" "Why?"

"Wouldn't you like to know who your parents are?" Laura whispered the code word that unlocked her

pouch and fumbled in it for the wafer.

"You are Director Leighton's daughter."

"What?"

"You are his bastard child. . . ."

"No! That's impossible."

The figure then lifted its hand, as if in a gesture of invitation.

And Laura heard a sound like thunder . . . a whisper inside her head.

A field of white exploded around her.

And she saw the after-image of a dull, metallic gun barrel closed in a white-knuckled fist.

She fell forward, and then down, as if from the top of one of the buildings in *Sombras*, falling like a stone into the impossibly dark and distant streets below. . . .

The great shattered dome of New York seemed to rush toward Leighton's descending shuttle. The ascending

Thunder-Being (Part One)

levels of the grid created an intricate array of line and light. On the bottommost levels was the old city: the United Nations, the Empire State Building, the Century and World Trade Plazas, the steel ruins, subways, the Chrysler Museum, and a labyrinth webbing of brutal slums-for on every level below Third, the slums were corrosions on all but a few of the shiny metal surfaces: here were the bowels of the city, the furnaces that warmed it, the conditioners that cleaned it. Over this foundation the new city hung. Around core arcologies that looked like ebon needles were wound the labyrinthine constructions of modulars and transparent transportation tubes. The city was hung like crystalline webs on perfectly straight and geometrically correct trunks. From Antea's vantage, the city looked like a kaleidoscopic perfection of reflected light and color against a background of velvet black.

But that was illusion.

This center of light was simply an island of concentrated pain. Only a few lived well here; most would never ride through the upper reaches of the city. For all its glamour and technology, this place was an ancient idea, one which her lover, Gerard Leighton, would understand, for hadn't the great humanist Leonardo da Vinci conceived of a place divided, where slaves would toil so that the wealthy citizens who lived in the airy heights of the city would never be disturbed by the sight or smell of those who provided for them? Of course, she thought, Gerard cared for any person who came within his purview. But then he lived in a cocoon, dangerous as his life might be otherwise.

The shuttle sighed to a stop in a restricted section of Kenday Airport, which was less than forty kilometers from the center of the city.

Here she was once again. Where she had started.

She had been a slidewalk whore, but not for long. She smiled at the irony that she would end so near to her beginnings. And she smiled at herself for wearing a silken tunic that covered her flesh like a shroud. She would not appear as Leighton's courtesan, but simply as one of his entourage. She would not be the center of attention. She would fade into death like sight in old eyes.

But she would see her daughter, Laura. . . .

Antea and Leighton, accompanied by guards, servants, and his full council, debouched from the shuttle and walked across the impeccably clean expanse of the station to a transpod, which floated like a translucent egg above narrow ruts. The egg was computer controlled and driven by a propulsion system built into each narrow rut. Once the pod entered the tubes, however, a different system took over. As the guards waited for Leighton to get into the car, another, smaller transpod sighed to a stop behind the larger one.

"Antea and I have an errand before we meet the public," Leighton said, and he guided Antea into the smaller transpod.

"Gerard," Damon called, catching up to Leighton. "This is extremely dangerous. You can't travel alone. Certainly not now."

Leighton smiled, revealing creases in his face that he

chose not to have removed. "Damon, I sincerely appreciate your concern, but do you imagine I would put lovely Antea in danger, especially as she has so little time? I assure you, we will be fine; in fact, we will probably be safer than all of you. Too much planning and attention to detail can be dangerous." He laughed at Damon and followed Antea into the pod, opaqued the walls for privacy, punched in the coordinates, and they were off.

There was little sense of motion.

Although Leighton was excited at the prospect of seeing his daughter, he was obsessed with Antea. She would be dead so very soon. Making love to her was a form of grieving. There would be time before they surprised Laura, who was expecting to speak with Leighton. But she did not know that her father had planned to surprise her.

There would be no holo.

Laura would meet her father and her mother . . . in the flesh.

Antea, in anticipation, was happy. She felt entirely focused, as if she herself were made of coherent light. She was indeed close to death, for she was hardly aware of her body, of the pumping of heart and glands, of Leighton's long, gentle fingers touching her. "It's too dark," she said to Leighton; and he obliged, brushing his thumb over a switch.

And the city blazed like noon all around them, tiers of fenestrated glasstex whizzing by, studded with sunlights. She felt wonderfully, vertiginously naked, for it was as if she were flying by will alone, that no pod existed, only herself and Gerard, flying through the transparent tunnels of this city to her daughter, and suddenly she felt essentially, quintessentially flesh-and-bone, for her pulse raced and she was dizzy and alive, taking life in with great, joyful gulps . . . and that soaring was followed by the small, constant recognition of finality.

She couldn't make love and satisfy herself with Gerard as she had in his office. She had, in essence, ceased to be his lover. And in a few short hours, her daughter would once again be a memory, one she would hold during her last moment alive.

But she would nevertheless give herself to Leighton, help him mourn for her. She had also instructed Leighton's next mistress how to care for him. Leighton, of course, knew nothing of such plans and had sworn never to take another mistress. But Antea knew better.

She closed her eyes tightly and feigned passion. They made love roughly, hurriedly.

But they were interrupted by a message conveyed by Leighton's computer implant. Damon's voice whispered to Leighton, "You must not return home."

Leighton seemed to freeze in Antea's arms, even as he was about to have an orgasm.

"Go to the safe house."

"What the hell is going on?" Leighton spoke out loud. Worried, Antea gazed at him steadily.

"Dream-riot."

After a pause, Leighton asked, "Are you all right? Is everyone all right? Damon . . . ?"

"Yes."

"What about my family?"

But Damon would not-or could not-answer.

Sam and Anna slipped out of the reservation before sunrise by hiding in a flatbed truck filled with hay. Seven or eight Trans-United guards and a few well-dressed locals stood outside the checkpoint; they were probably trading contraband. The truck had an electronic work-pass; and, just as Sam had hoped, the guards were at the end of their shift. They were too tired to check a truck they saw every day.

Sam and Anna slipped off the truck on the outskirts of the first town they came to. They buried their rifles and marked the spot; with luck, they wouldn't have to return for them.

"Some ride," Anna said, brushing the hay from her shirt.

"Nothing but the best." Sam seemed tired, uncharacteristically anxious.

"You could have picked a better place for us to jump ship," said Anna, looking around at the boarded-up storefronts and garbage-strewn streets and alleys. This was obviously the wrong side of the tracks in Page, Arizona. "What a shitbox town this is."

"I've got reasons," Sam said.

"Yeah, and they are . . . ?"

"We've got to get to Broken-Finger. He's the only person down here that John Stranger trusts completely. You got any local money?"

"Not much," she said, digging a few crumpled bills out of her jeans. "Thanks to your fucked-up plan, everything's back in my room."

Sam didn't rise to the bait. He took the bills and turned down an empty street littered with glass and garbage. The smell of urine seemed to permeate the air. Sam found an old man wrapped in newspapers and an old, greasy pennon that had once been white. Anna could make out the word CHRISTCHURCH, but the rest of the fabric disappeared under the old man's arm. Sam spoke to the man, who seemed groggy with booze and sleep, then nodded and slipped him one of Anna's bills.

Sam motioned for her to follow him down the alley. The door was unmarked. Sam opened it. They were met with the pervading odors of sweat, urine, tobacco, and a sickly sweet smell of rot. Anna took his arm to indicate to any interested parties that she wasn't available meat. She had no need to worry, yet. The men who

stared at her were junkies; their juices had dried up long ago.

Caskets lined the walls, but they were all empty. These patrons came here for simpler pleasures: booze and nar-codrines, candles and needles.

Sam walked inside as if he'd been there a thousand times.

And in a manner of speaking he had. In space or on Earth, these corners of rock-bottom humanity were familiar to him. His father had been a REM junkie, who would score whatever drug could put him down quick and cheap. Growing up for Sam had been one long continuous episode of tracking down his father and taking

Thunder-Being (Part One)

him back to the reservation to sober up. He would recuperate until he was strong enough to disappear again. Sam couldn't count the times he'd carried his father from places just like this one. How many times had he sat with him through the shakes and screams of withdrawal? How many times had he force-fed him liquids? How many times had he supported him in the bathroom, one arm around his father's waist taking his weight, his hand holding the old man's prick so he wouldn't soil himself?

His father had only been fifty-eight when he died.

For all of it, Sam missed him. And just now, here, in this bhangbox that stank of piss and vomit, he felt a sudden nostalgia.

This place had once been an ancient liquor bar.

"I'd go right back out that door if I was you, friend," said a handsome, heavyset man who walked out of the back hallway. "Maybe you're lost, little soldier," he said derisively to Sam. "Doesn't seem to me that you belong here." He was carrying a length of iron pipe. "But your friend can stay and enjoy the scintillating company of our patrons." He smiled ingenuously at Anna, who wondered how many people he might have killed.

"We're looking for Little Bear," Sam said politely.

"And what kind of business would a man like you have with him?"

"Private business," said Sam, handing him all of Anna's money.

The man simply shrugged and motioned for Sam and Anna to precede him down the dark hallway.

"Wait here." He frisked Anna and Sam quickly and professionally, and found Anna's handgun. Then he knocked on the door. "You up, old man? Company to see you."

"Haven't been to bed yet. Come in."

The man opened the door and stood to one side. "You want me to wait, Little Bear?"

"No need. I can still take care of myself."

He handed Little Bear Anna's gun, winked, and left. Little Bear dropped it into an oven and flashed it.

The room was softly lit and as spotless as the rest of the building was filthy. The luminous walls were covered with what appeared to be acres of electronics; ancient and state-of-the-art equipment shared shelves and floor space; obsolete ribbon wires and connectors snaked in and out of jury-rigged systems. Little Bear sat behind a large workbench covered with electronic clutter. He had a frail, hard face; the cheekbones were high, the bone structure delicate. His magnifying glasses were pushed back on his forehead, and he held a soldering iron in one hand and a sawed-off shotgun in the other.

"Your business?" asked Little Bear. His long white hair was pulled back into a ponytail. He looked old, maybe an unaugmented ninety or so. But his coal-black eyes were clear, and the hand that held the shotgun was steady.

"We're on the run," said Sam. "Trans-United is after us. We need plastic to move around."

"We're *all* on the run," said Little Bear, carefully setting down the old-fashioned soldering iron. "But what makes you think I can—or would—help you? I'm a simple man whose hobby is the restoration of antique equipment." Sam walked to one of the racks. "Nice stuff," he said. "You ever see one of these, Anna? This is a vintage voice modulator. Breaks down a person's speech and recodes it. Very useful in getting through voice locks and security systems. The newer models are automatic, but not nearly so useful because of their security gyves."

"A hobby," said Little Bear.

"Ah, but a very interesting hobby," Sam said. "See how it's patched into this machine? Retinal scanners modified for imprint functions are generally considered *prima facie* evidence of criminal intent."

"Sam..." Anna said nervously. And then in a whisper, "Don't push it."

The old man Bear followed Sam with the shotgun. "What the fuck do you want?"

"Plastic," said Sam. "Maybe two weeks' worth so we can move around without leaving a trail."

"All plastic leaves a trail."

"I'm sure that a man who can make old, dead machines dance can do anything . . . such as program cards to hide voice-prints, retinal patterns and skin codes. And we need them autoverified for transportation, lodging and incidentals."

Little Bear chuckled. "And suppose a man could do such a thing. It would certainly be very expensive, or so I would expect. How much money do you have?"

"None," said Sam.

"Then get the fuck out of here! You're wasting-"

"What we have is better than money. You know a man called Maxwell Bradshaw?"

Little Bear frowned. "That sonofabitch bastard has been raiding the reservation for years. Yeah, I know him. So what?"

"I've memorized his account code," said Sam. "And his password into the T-U slush fund. I figure a clever man like you could get in and help himself."

Little Bear laid the shotgun on the table. The stock was made of real wood, polished and cared for. "It's possible. I could get around the obvious mousetraps, but they'd figure out something was happening pretty quickly. I'd have maybe a tenth of a second. Any longer and they could trace me."

"How much could you pull out in a tenth of a second?" asked Sam.

"Plenty," said Little Bear, grinning. "Plenty."

Leighton felt as if he were a prisoner, as if he had been shackled, manacled to the very spot where he had stood for two hours. He could not concentrate, could not sit, could not stop shaking. He stared through the transparent walls at the expanse of city before him; the core towers, transportation tubes, and webbing of the grid might have been the brilliantly luminescent foliage of some kleig-lit jungle. The panoply of lights seemed unfocused. Antea stood beside him; she looked haunted, touched by this terrible echo of her own impending death.

Leighton's wife Fiammetta was dead, as was his son David, his heir . . . killed in the dream-riot that was not yet quelled, that still paralyzed Center City. Killed on a filthy understreet while trying to reach Gracie Castle after the transportation systems failed. They had been on their way to greet Leighton.

"I wish to talk to them," he said to Antea matter-offactly. "I need to at least explain that I love them. I must apologize, especially to Fiammetta. My God, my darling, forgive me." But he was no longer talking to Antea. "I could not help loving Antea, I didn't mean to distance you."

"Shush," Antea said, embracing him. He stiffened, then relaxed. "They know you love them."

"No, they never knew. And our daughter, she doesn't even know we're her parents."

"She will. Soon."

"But we don't even know if she's-"

"Hush," Antea said, as if she were speaking to a child; but her face revealed her pain. She looked suddenly old.

Damon Borland entered the room and stood a few feet away from Leighton and Antea. This was Leighton's study in the safe house he rarely visited. It was furnished in the minimalist tradition, one which Leighton had come to hate, although he had embraced it for years. The room was stark, cold, even when the walls were opaqued. And yet it was oddly restful. The furniture, what furniture there was, seemed to float in the dark spaces. Fiammetta had once jokingly referred to it as it "Zen in Space." She had hated it, but Leighton had designed entire colonies according to its architectural precepts.

"Yes, Damon, what news?" Leighton asked, seemingly calm and focused, ostensibly his old self.

"The riot was . . . incidental."

"Incidental to what?" Antea asked.

But Leighton knew immediately. He felt a cold chill run down his back, and then the talons of anger.

Damon looked uncomfortable and said, "Fiammetta and David were assassinated."

"How?" Leighton asked.

"A small powder bomb. Systems couldn't sense it. It was a clean one, there was very little damage."

Leighton snorted.

"I mean to the surrounds," Damon said. "Gerard . . . we had no way of . . . no, I take complete responsibility."

"It wasn't your fault, nor your responsibility. I know that if you could have, you would have given your life for them." Leighton gestured for him to sit down on the couch. A robot, programmed to know the preferences of Leighton's entourage, whispered into the room. Damon took the snifter of Black Water offered him.

"Do we have any idea who's behind it?"

"Not yet."

"Macro," said Leighton.

"We haven't picked up anything. The trail was well covered."

"How many were killed in the riot?" Leighton asked. "Near my family."

Damon closed his eyes for a second, as if he were computing, and said, "One hundred and eighty-seven died within a kilometer radius, including Fiammetta's entire retinue." "And what of Macro's agents? How many of them died in the riot?"

"None that we know of," Damon said.

"Have you ever known Macro to distance their agents from us? We can't even piss without running into one of them."

"And those who set the bomb?" Damon asked.

"Macro wouldn't use their own people for that. Not a chance." Leighton seemed suddenly animated.

"What do you wish to do about it?"

"Nothing right now. I wish to mourn, but we'll turn our face to them soon enough. The bastards." After a beat, he said, "And our daughter . . . have you found her?"

"No, Gerard, not yet. But we will."

Leighton opaqued the walls and stood, as if alone, in the darkness.

Antea burned throughout the night.

Her own time to die was close, and Leighton imagined her as pale fire. She was hot to the touch. Her skin seemed translucent. "Do you feel ill?" he asked her.

"No," she said. "I feel grief, but not for me. For you." Although that was true, it was also, in a sense, a lie; for she felt so distant from him and the world. Yet a vague sense of regret remained, a nostalgic remembrance of someone she had once loved but was now almost forgotten. Later, in her sleep, she murmured, "Laura." Leighton clung to her and said, "Don't fret, my darling.

We'll find her. You'll see her soon, I promise." The bedsheets smelled of Antea. Leighton tried to memorize her every feature, for soon he would lose her, too. Perhaps he would follow. But not yet.

He still had a daughter, but where was she? He prayed she was alive, prayed for another chance. He would care for her, she was Antea's legacy.

Eventually, he fell into cold-sweat sleep.

And dreamed harrowing dreams.

He dreamed of Laura . . . and the dream-riot. But everything was wrong. He was in the manufacturing district of Nottingham, England, during the scourge of the Depression of 1815. The crowd's roaring assaulted and deafened him. He was helpless, sweating with panic.

Leighton could hardly move. The crowd carried him along as if he were caught in the churning movement of a wild river. It carried him toward Fiammetta and David and Antea. He rushed toward them, only to find—

But then he awoke, as if he had fallen from a height. He shivered; and only then did he realize that Antea, who was lying close beside him, was cold as stone.

To be concluded





If you like what you've seen in this issue of AMAZING[®] Stories, there's more where it came from. We have a small selection of back issues dating from the 1970s, plus every magazine from May 1990 through March 1993, available for purchase by mail order. The list on this page and the facing page mentions every magazine that's for sale, and gives a few of the stories you'll find in each one.

The list also includes six paperback anthologies that were produced by TSR, Inc., in 1985 through 1987, reprinting many classic stories from older issues—a great way to pick up a representative collection of what was being printed in the good old days. Also available is another anthology, *Cinemonsters*, which is described in detail on the following page.

All of the anthologies and most of the magazines are in mint condition. Among the copies of any single back issue, the magazines in mint condition are sold first. Every publication has a money-back guarantee—if you aren't satisfied with what you get, send back the merchandise you don't want and we'll reimburse you for the price of the item(s) plus the return postage.

Prices of the digest-sized magazines vary according to age, with the older issues costing less than the newer ones (because the cover price of the older magazines was lower).

After you've totaled the prices for the old magazines you want, add on a postage charge of \$1.00 for the first issue and 50¢ for each additional issue through the tenth one. If you order more than ten digest-sized magazines, you don't pay any additional postage charge.

The new-format, full-sized issues, beginning with May 1991, are priced at a flat rate of \$5.00 each, which includes postage. (Prices for the anthologies also have postage costs built in.) To make an order, write out clearly and legibly the magazines you want, calculate the total cost, and enclose a check or money order for that amount. Send your order to the magazine's business office (P. O. Box 111, Lake Geneva WI 53147). All orders will be shipped via thirdclass mail or UPS within two days of receipt.

If we can't fill your order because of soldout issues, we'll reserve for you the issues we can sell you; then we'll send back your check or money order and ask you to send us exact payment for the items we can provide for you.

As an option, you can ask to receive one or more of the anthologies as a replacement for back issues that might be sold out. If you like this idea, just tell us the anthologies you'd like to have, in order of preference, and we'll make sure that you get your money's worth.

DIGEST-SIZED MAGAZINES — \$1.25 each —

September 1972 16 copies

Fat City by Ross Rocklynne; *Deflation 2001* by Bob Shaw; *Proof* by F. M. Busby; *Jupiter Project* (first of two parts) by Gregory Benford

January 1973 30 copies

The Ascending Aye by Gordon Eklund; *Night Shift* by George R. R. Martin; *On Ice* by Barry N. Malzberg; *Close Your Eyes and Stare at Your Memories* by A. G. Moran

August 1973 43 copies

To Walk With Thunder by Dean McLaughlin; The Once and Always War by Gerard F. Conway; Up Against the Wall by Robert Thurston; They Roar by Clark Cox

— \$1.50 each —

November 1978 11 copies

While the North Wind Blows by Christopher Anvil; Green Thumb by Marion Zimmer Bradley; Last Rocket from Newark by Jack C. Haldeman II

— \$1.75 each —

May 1990

Giant, Giant Steps by Robert Frazier; *Computer Portrait* by Jayge Carr; *Fatal Disk Error* by George Alec Effinger

July 1990

Harvest by Kristine Kathryn Rusch; *The Secret of Life* by David Brin; *Sequoia Dreams* by Sheila Finch

September 1990

Harlem Nova by Paul Di Filippo; At Vega's Taqueria by Richard A. Lupoff; Whoso List to Hunt by Susan Shwartz

November 1990

When the Ship Comes In by R. Garcia y Robertson; Command Performance by Kathe Koja; Behind the Eyes of Dreamers by Pamela Sargent

January 1991

Stranger Suns (Part One) by George Zebrowski; A Painting Lesson by Nina Kiriki Hoffman; Life in a Drop of Pond Water by Bruce Bethke

March 1991

Dog's Life by Martha Soukup; The Dragon of Aller by John Brunner; Stranger Suns (Conclusion) by George Zebrowski

FULL-SIZED MAGAZINES — \$5.00 each (includes postage) —

May 1991

A Tip on a Turtle by Robert Silverberg; *Change of Face* by Kristine Kathryn Rusch and Kevin J. Anderson; *Klepsit* by John Brunner

June 1991

Victoria by Paul Di Filippo; Hitmen—See Murderers by Timothy Zahn; the button, and what you know by W. Gregory Stewart

July 1991

Except My Life, Except My Life, Except My Life by John Morressy; Arms and the Woman by James Morrow; The Perfect Hero by Elizabeth Moon

August 1991

Fantasies by Michael Swanwick and Tim Sullivan; The Number of the Sand by George Zebrowski; The Face of the Waters by Robert Silverberg

September 1991

Death Link by Gene DeWeese and L. A. Taylor; *The Storming Bone* by Ian McDowell; *Thomas and the Wise Men* by Kristine Kathryn Rusch

October 1991

Skin Deep by Brian Stableford; The Drifter by Lawrence Watt-Evans; Line Item on a Dead Grant by Jack C. Haldeman II

November 1991 LIMITED SUPPLY

The Implanted Man by F. M. Busby; The Year of the Guns-Part Two by Rick Shelley; The Character Assassin by Paul Cook

December 1991

Word Salad by Phillip C. Jennings; Touches by Gregory Benford; The Long Fall by Ben Bova; The Devil His Due by Maya Kaathryn Bohnhoff

January 1992

The Round-Eyed Barbarians by L. Sprague de Camp; Natural Selection by Lawrence Watt-Evans; The Sleeping Serpent by Pamela Sargent

February 1992

Complications by Brian Stableford; *In Brass Valley* by Avram Davidson; *If There Be Cause* by Sheila Finch; *The Final Page* by Phillip C. Jennings

March 1992

Let Time Shape by George Zebrowski; The Call by John Morressy; Hiatus by Alexis Glynn Latner; Reawakening by Mark J. McGarry

April 1992

Missing Person by William F. Wu; Life in the Air by Barry N. Malzberg and Jack Dann; Isabella of Castile Answers Her Mail by James Morrow

May 1992

Blades of the Diram Ring by Barry B. Longyear; Messages Left on a Two-Way Mirror by Nina Kiriki Hoffman

June 1992

The Last Reunion by Harry Turtledove; *Little Brother's Turn to Watch* by Kevin O'Donnell, Jr.; *The Red World and the Blue* by Ben Bova

July 1992

The Vortex by Phillip C. Jennings; Lennon Spex by Paul Di Filippo; In and Out With Me by John Morressy; My Father's Face by Ian McDowell

August 1992

Come Back to the Killing Ground, Alice, My Love by Roger Zelazny; The Logic of Location by Alexander Jablokov; Last Wish by Martha Soukup

Back Issues

September 1992 LIMITED SUPPLY

The Rock That Changed Things by Ursula K. Le Guin; *Deconstruction Gang* by Harry Turtledove; *The Green* by Barry B. Longyear

October 1992

A Troll of Surewould Forest (Part One) by Thomas M. Disch; Kent State Descending the Gravity Well by James Alan Gardner; Broken Highway by J. R. Dunn

November 1992

Relics by Gail Regier; I Walked With Fidel by George Zebrowski; A Troll of Surewould Forest (Part Two) by Thomas M. Disch

December 1992 SOLD OUT

Chimaera by Barry B. Longyear; *The Coming of the Spear* by Don Webb; *A Troll of Surewould Forest* (Part Three) by Thomas M. Disch

January 1993

Windance by Doug Beason; Mama Told Me Not to Come by Paul Di Filippo; Goldilocks and the Virtual Bears by W. Gregory Stewart

February 1993

The Dark Backward by Gregory Benford; Nothing Up Her Sleeve by Tanya Huff; In the Kingdom of Teeth by Ian McDowell

March 1993

The Knot by Elisabeth Vonarburg; Old Soldiers Never Die by Barry B. Longyear; Men of Good Will by J. R. Dunn

-ANTHOLOGIES-

(prices include postage)

AMAZING® Stories: 60 Years of the Best Science Fiction \$8.00

Stories by David H. Keller, Miles J. Breuer, Nelson Bond, Eando Binder, Robert Bloch, Robert Sheckley, Walter M. Miller, Jr., Isaac Asimov, Edmond Hamilton, Mark Clifton, Cordwainer Smith, Philip K. Dick, Ursula K. Le Guin, Ron Goulart, John Jakes, Philip José Farmer, James Tiptree, Jr., John Varley, and Pat Murphy. 255 pgs, trade paperback.

AMAZING® Stories: Visions of Other Worlds \$8.00

Stories by Harlan Ellison, Paul W. Fairman, Henry Kuttner and C. L. Moore, Jack Vance, Poul Anderson, Edmond Hamilton, Robert Bloch, Kris Neville, Arthur C. Clarke, Piers Anthony, James Blish, Cordwainer Smith, Robert Silverberg, Horace L. Gold, and Gregory Benford. 253 pgs, trade paperback.

The Wonder Years: 1926-1935 \$4.00

Stories by Jack Williamson, Neil R. Jones, Edmond Hamilton, Francis Flagg, Julian Huxley, Lloyd Arthur Eshbach, G. Peyton Wertenbaker, Clare Winger Harris, Miles J. Breuer, Amelia Reynolds Long, Clark Ashton Smith, John W. Campbell, Jr., and H. P. Lovecraft. 320 pgs, paperback.

The War Years: 1936-1945 \$4.00

Stories by Isaac Asimov, Edmond Hamilton, William F. Temple, Don Wilcox, Eando Binder, Ralph Milne Farley, John Wyndham, W. K. Sonnemann, Stanley G. Weinbaum, and Ray Bradbury. 334 pgs, paperback.

The Wild Years: 1946-1955 \$4.00

Stories by Robert Bloch, Philip K. Dick, H. Beam Piper, Isaac Asimov, Robert Sheckley, Ward Moore, Walter M. Miller, Jr., Jerome Bixby, Theodore Sturgeon, Cliford D. Simak, Ross Rocklynne, and Ray Bradbury. 320 pgs, paperback.

FANTASTIC[™] Stories: Tales of the Weird & Wondrous \$8.00

Stories by Robert Bloch, Robert F. Young, J. G. Ballard, George R. R. Martin, Judith Merril, Reginald Bretnor, Poul Anderson, Ursula K. Le Guin, Lester del Rey, David R. Bunch, Philip K. Dick, Isaac Asimov, John Brunner, Roger Zelazny, Ron Goulart, and James E. Gunn. 253 pgs, trade paperback.

CINEMONSTERS \$8.00

Twelve classic stories that were turned into "monster movies," plus an introduction by Charles G. Waugh and an appendix giving more information about the films. Fiction by John W. Campbell, Jr., Edgar Allan Poe, M. R. James, Ray Bradbury, Robert Bloch, Richard Matheson, H. G. Wells, H. P. Lovecraft, Theodore Sturgeon, O. Henry, Bram Stoker, and James Blish. 319 pgs, trade paperback.

Coming in May

Falconer by Mark S. Geston

It was the most complete flyer ever made, capable of snatching spirits out of the sky without limit. This is not necessarily a good thing. . . .

Fifteen-Love on the Dead Man's Chest

by Charles Sheffield

Probably the only story ever written about an immortality serum, a funeral, and a tennis tournament on the moon. You saw it here first.

plus . . .

Going Up by John E. Stith

New Time by Phillip C. Jennings

My Amazing Stories by Julius Schwartz

SF the British Way by James Gunn

and even more fiction, facts, and features!



Before the Mask

Upon the wings of dragons, Verminaard clawed his way to power . . .

Verminaard. Mere mention of his name sends tremors of fear racing through the inhabitants of Ansalon. Verminaard . . . despicable man, ruthless ruler, minion of the Queen of Darkness.

Born amid hard words, ill will, and an ominous prophecy, Verminaard grows up to trade friends and family for a sinister romance ... until his plummet from power.

Before the Mask, by Michael and Teri Williams. is Book One of the new

Villains Series that traces the origins of the corrupted overlords of Ansalon. Available in April at book and hobby stores everywhere.

ISBN 1-56076-583-6 \$4.95/CAN \$5.95/U.K. £3.99







DRAGONLANCE is a registered trademark owned by TSR, Inc. The TSR logo is a trademark owned by TSR, Inc. ©1993 TSR, Inc. All Rights Reserved.

Crypt of the Shadowking

ANTASY ADVENTURE

The Harpers return in a new fantasy thriller . . .

Seven years ago, Caledan Caldorien left the Harpers, the secret society dedicated to

> Good in the Realms, under a dark cloud. Now a mysterious woman convinces him to undertake one final, reckless

mission....

A beautiful messenger . . .

A desperate mission . . .

A terrifying secret!

The Harp

CRYPT OF THE SHADOWKING

Mark Anthony

Iriaebor of a Thousand Spires, the richest of the caravan cities, has fallen prey to the plottings of the evil Zhentarim. Caledan and Harper agent Mari Al'Marin begin their quest to save the city ... only to unleash a monstrous secret!

Crypt of the Shadowking, by Mark Anthony, the sixth in the Harpers series of FORGOTTEN REALMS[®] novels, is available in April at book and hobby stores everywhere.

ISBN 1-56076-594-1 Sug. Retail \$4.95/CAN \$5.95/ £3.99 U.K.

Don't miss these Harpers series novels!



The Parched Sea Troy Denning ISBN 1-56076-067-2



Elfshadow Elaine Cunningham ISBN 1-56076-117-2



Red Magic Jean Rabe ISBN 1-56076-118-0



The Night Parade Scott Ciencin ISBN 1-56076-323-X



The Ring of Winter James Lowder ISBN 1-56076-330-2

Available Now - Each \$4.95/CAN \$5.95/U.K. £3.99

FORGOTTEN REALMS is a registered trademark owned by TSR, Inc. The TSR logo is a trademark owned by TSR, Inc. ©1993 TSR, Inc. All Rights Reserved.

NEW FROM TSR!