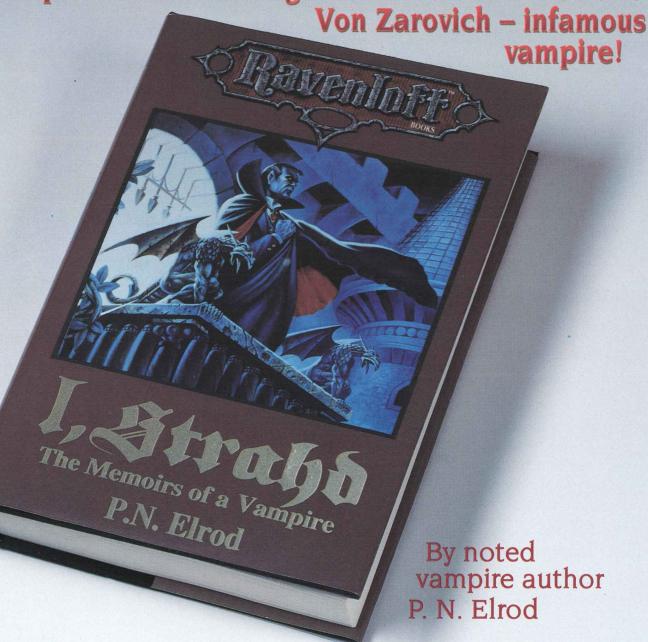


I, STRAHD . . .
The first RAVENLOFT™ novel in hardcover opens to the chilling memoirs of Count Strahd



Coming Soon From TSR



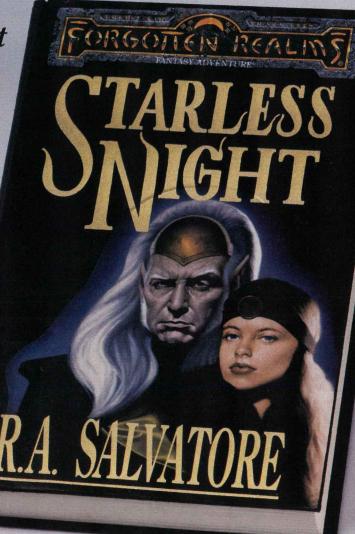
This August brings two blockbuster novels from *The New York Times* best-selling author

R.A. Salvatore

Starless Night

In first novel in R. A. Salvatore's new fantasy trilogy featuring Drizzt Do'Urden of *The Legacy*

ISBN 1-56076-653-0 \$16.95/CAN \$20.50/\subseteq 10.50 U.K.



Look for Drizzt Do'Urden's return to Menzoberranzan



The Legacy
The New York Times
best-seller now in
paperback

Contains a brand-new chapter not included in the hardcover edition!

ISBN 1-56076-640-9 \$5.95/CAN \$6.95/\$3.99 U.K.

Coming Soon From TSR!



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.





Contents



DINO MIGHT

4 Kim Mohan

REFLECTIONS

Robert Silverberg



FICTION

- The Vidim by Mark Rich
- A Time to Every Purpose by David B. Silva
- Tourist Attraction by Juleen Brantingham
- **SUITs** by Paul Di Filippo
- Empire Builders by Ben Bova
- **Sometimes, in a Meadow** by Christine Beckert
- Other Heads by Arlan Andrews, Sr.







NONFICTION

56 GMCs and Planet Building by Stephen L. Gillett

51

- **About the Authors** 59
- Tomorrow's Books compiled by Susan C. Stone and Bill Fawcett 67
- 94 **Back Issues and Anthologies**

LOOKING FORWARD

- 61 Crashcourse by Wilhelmina Baird
- 65 Troll-Taken by Rose Estes



Cartoons by Mark Heath (page 16) Scott Arthur Masear (page 93)





8160-08

Volume 68, Number 5 (Whole Number 585) August 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 standard 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: The principal distributor of AMAZING Stories in the United States and Canada is Eastern News Distributors, Inc. The magazine is 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, DRAGONLANCE, and SPELLJAMMER are registered trademarks owned by TSR, Inc. The TSR logo and DARK SUN are trademarks owned by TSR,

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.

Dino Might

Kim Mohan

"Jurassic Park" is a very good movie. *T. rex* and his buddies probably will, and certainly should, gobble up every special effects award the cinema industry has to offer. I don't know anyone who saw the film and came away with anything short of awe for what the technicians at Industrial Light & Magic were able to do.

Having said that, here comes the other shoe. If the screenplay had been converted into a long novella and submitted to this magazine for publication in advance of the release of the movie, I would have turned it down.

If you're one of the few dozen people in the world who hasn't seen the film by the time you read this, you might want to stop reading now so you can form your own opinion when you do see it. Otherwise, follow along as I touch on some of the ways in which this brilliant endeavor is an absolute flop as a *story*.

At the heart of the plot is the intriguing, if not exactly revolutionary, idea that dinosaurs can be grown from DNA that's salvaged from the time when the dinos were alive. It could happen; it's a credible premise. I was ready to believe it immediately, the first time I found out that Michael Crichton had written a book based on that idea.

I started the book several weeks ago, and I gave up after 130 pages or so when I got tired of all the explanation and justification that was being pushed on me. I didn't need to be convinced that dinosaurs

could be cloned, and I was bored and a little offended that the book spent so much time spelling out the procedure. I wanted to read about people getting chomped, and the chomping didn't start soon enough to keep me interested.

I wasn't quite that impatient with the opening of the movie, even though it also seemed to go overboard on the whys and wherefores. I was a captive audience, after all—not about to walk out until I'd gotten everything I paid my three and a half bucks for. So I had some more popcorn and refrained from making snoring noises.

When the real action started, it was easy to stay interested—and impossible not to be skeptical about why events unfolded the way they did. For example:

Why were the people on the tour able to get out of their vehicles in the first place? I remember somebody back at HQ grumbling about how they should have locked the people in. Sorry; not good enough.

Why were all the employees except for the principal human characters forced to leave the island before the storm hit?

What ever happened to the sick triceratops? That whole scene seems to exist for no reason other than to give Laura Dern an excuse to leave the tour group (so she can come back later to help rescue the obnoxious mathematician).

If the geneticists knew enough to splice frog DNA into the gaps be-

tween the dino DNA, why didn't they also know (as Our Hero does) that some species of frogs have the ability to change sex? And anyway, what difference does it make in the outcome of the screenplay that the dinosaurs have started to breed?

The June 14 issue of Newsweek has a long article on the film and on dino/DNA research in general. In one place, a text block reads, "Science fiction must have a core of plausibility. The movie does." On the next page is the parenthetical remark that "The red blood cells of reptiles and mammals lack DNA, but 'Jurassic Park' assumes that dino blood cells contain this genetic material." The biggest plot glitch of all, utterly contradicting what the previous page said—and the article puts it in parentheses, as if to say, "We're aware of this booboo, but we don't care all that much about it, and neither should you."

I'm idealistic enough to wish that every story, in every medium, would not be published or produced unless it was a seamless creation. I'm realistic and cynical enough to realize that this has never been true and never will be, but that doesn't stop me from occasionally complaining about that state of affairs.

The dinosaurs are marvelous, and the movie is worth seeing only for them if nothing else. They might be the best special effects you've ever seen—and things being what they are in the cinema industry, this might be the best movie of the summer. •

Reflections

Robert Silverberg

If I've started sounding like the Old Man of the Mountain lately, in some of these pieces, it's because I've started feeling that way a lot of the time. There's nothing wrong with my health, so far as I know; but even so, concepts like durability, longevity, and—yes—mortality have been on my mind recently.

The reason is easy enough to figure out. A couple of months from now I'll be celebrating the fortieth anniversary of the first time a professional publication paid me real money for something I had written; and, although I was very young when I began my career and still am a very long way from being the oldest of writer in the business, it's hard for me to go on thinking of myself as a kid when I realize that I've been writing this stuff for forty years.

That first professional sale, back in the summer of 1953, was actually an article, not a story. I was an active member of the odd little cult known as science-fiction fandom, then: I published a mimeographed amateur magazine four times a year, wrote scholarly-sounding articles for other amateur magazines, corresponded with my fellow fans, attended local conventions, etc., etc., all the while feverishly submitting stories to the professional magazines of the day and inevitably getting them back. Harry Harrison, a young writer then at the beginning of his own career, had just become editor of a minor of magazine called Science Fiction Adventures, and he called on

me to write a 3000-word piece for him explaining fandom to the general sf readership.

I was eighteen, about to begin my sophomore year at college. Being asked to write an article for a magazine didn't quite have the same thrill for me as selling a story to one, but it was a start all the same. I did my piece post haste. "The weird and wonderful world of science-fiction fandom is a development unique in the history of fiction," it began. "Science fiction fandom is an outgrowth of that announcement in the December 1926 issue of Amazing Stories which proclaimed the institution of a 'Discussions' column to begin the following issue and to provide a place where readers of Amazing (a lusty ten-month-old infant of a magazine at the time) could 'discuss scientifiction and their impression of this new literature. . . . '" Harry accepted it just as promptly, and at the World Science Fiction Convention in Philadelphia that September he handed me my payment in person—\$30 in cash. (I didn't find out for two more years that he had advanced the money to me out of his own pocket, bless him, and had had to wait until 1955 to collect his reimbursement from the sleazy guy who was publishing the magazine.)

A few months later I sold an actual story, too—to the Scottish magazine, *Nebula*, for the awesome sum of \$12.60, and a novel, *Revolt on Alpha C*, and by the time I got my college degree in 1956 I was sup-

porting myself nicely as a free-lance writer, as I have done ever since. And here I am now looking back at a writing career that spans forty years. What an incredibly long time that is to keep on making up stories about alien worlds and imaginary people and getting paid for it! Forty years! *Forty!*

At the time I made my first sales, back there in 1953, no one had been writing science fiction professionally for forty years, because the year that is forty years back from 1953 is 1913, and there were no science-fiction magazines in existence then. As I pointed out in that piece for Harry Harrison long ago, Amazing Stories, the very first one, came into being in 1926. It was only 27 years old when I began selling stories. So, although I'm still a couple of years short of sixty, I've been on the scene for some 60% of the entire history of magazine science fiction in this country. It's a sobering thought.

Yet whenever I start feeling like Methuselah, I remind myself bluntly that I'm still just a babe compared with the *real* senior members of my profession. Jack Williamson, born in 1908, sold his first story seven years before I was born, and is still working at top form two-thirds of a century later: he had a fine one in *Omni* just a couple of months ago. L. Sprague de Camp is six months older than Williamson; he's been a free-lance writer since 1937 and new novels of his are still appearing regularly. Another of our grand old men is Lloyd

Arthur Eshbach, who was selling stories to the pioneering sf editor Hugo Gernsback in the early 1930s, and who now-at age 83-is working on a new trilogy of novels. No longer active as a writer, but senior to them all, is Frank Belknap Long, who is so far as I know doing well back in New York at the age of ninety. He published his first fantasy story in Weird Tales in 1924, and continued producing them for fifty years or so thereafter. When the Methuselah blues start to hit me around birthday time, I think of Jack and Lloyd and Sprague and Frank, whose writing careers spanned periods longer than my entire life to date and in all but one case are still going strong, and it helps put things in perspective for me

Another heroic record of continued accomplishment is that of 81vear-old Andre Norton: her first science-fiction story was published in 1947, but she had been writing professionally in other fields for at least fifteen years at that time. And there are plenty of other sterling examples of durability in our field in the suboctogenarian class. Frederik Pohl, who, like me, got a precocious start (he made his first story sales in his teens and was editing a professional sf magazine by the time he was twenty), will be 74 years old this year, can look back on a brilliant 55-yearlong career, and still gets a splendid new novel into print every year or two. Damon Knight, a friend of Fred Pohl's back in the days when they were mere fans, is still writing too, fifty-some years after selling the first one. Hal Clement, though his contributions are less frequent now, can also look back on more than half a century of magnificent science fiction.

Coming up on the fifty-year mark are some of our grandest writers. Poul Anderson, a mere 67, has sustained an unbroken record of sciencefictional excellence since his marvelous debut story, "Tomorrow's Children," which he sold in 1946. Jack Vance—he's 77, I think—is another with close to fifty years of wonderful work behind him, starting with 1945's "The World-Thinker" and continuing on to his current and memorable Cadwal Chronicles series. Arthur C. Clarke, whose debut as a writer (delayed five years by his service in World War II) occurred in 1946, is also still turning out the books, nearly five decades later, despite repeated mutterings about retirement, and his hand seems to have lost none of its skill.

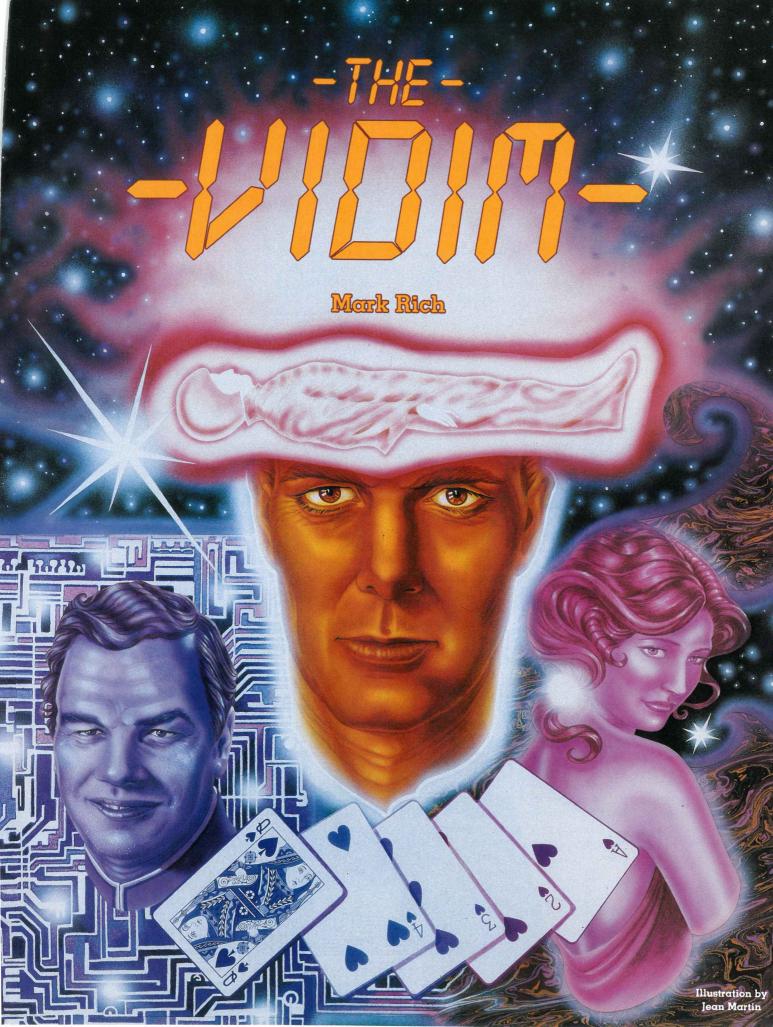
The roster of those who have sustained active careers over forty years is pretty impressive, too. Anne McCaffrey, who surely can't be as young as she seems, sold ber first story in the same year I did, 1953, and still clings with her full Gaelic vigor to her annual slot on the bestseller lists. Robert Sheckley, Philip Jose Farmer, Marion Zimmer Bradley, James E. Gunn, Gordon R. Dickson, Algis Budrys, John Brunner, and, yes, Harry Harrison, are all older than I am, some by a few months, some by a decade or two, and all began their careers around the same time in the early 1950's. Harlan Ellison, Brian W. Aldiss, J. G. Ballard, and Kate Wilhelm arrived a couple of years later. All of them are still around and performing nobly.

Of course there are sadder tales to tell. Clifford D. Simak is no longer with us, after nearly sixty years as a writer. (He won a Hugo for Best Short Story when he was 77—now

there's a mark to shoot for!) Such great figures of the first Golden Age of Science Fiction, the celebrated John Campbell era of 1939-43, as Isaac Asimov, Robert A. Heinlein, Fritz Leiber, Alfred Bester, and Theodore Sturgeon have left us in recent years, most of them having continued to write virtually right up to the end of their lives. And now Lester del Rey and Avram Davidson have joined them also. Among those who started writing science fiction about the same time I did and went on to demonstrate not only talent but the ability to sustain it over many years, Frank Herbert, Alan Nourse, and Philip D. Dick are dead, much too young. Those grand old veterans Edmond Hamilton and Leigh Brackett are gone too.

Well, nobody lasts forever. What's astonishing, though, is how many of us hang in there for decade after decade. Science-fiction writers may not be quite as durable as symphonic conductors, but we seem to be pretty good insurance risks, in general. And as I chug along now into the fifth decade of my career, still a mere beginner as things go in our field, I look onward to the sterling examples of Jack Williamson, Sprague de Camp, and Andre Norton, who have been doing wonderful work since about the time I was born (or even farther back, in Jack's case) and whose fingers are probably flying over the keyboards of their computers at this very minute, bringing forth next year's entry in their vast and ever-growing bibliographies. Thinking of them, still at it after all this time, is the best cure for premature intimations of decreptitude that I can imagine. •

8 Reflections



Merchen Brandung hardly looked up from his desk. "So, any luck? Is it getting any better?" he said, in a tone that indicated no expectation of progress.

Rod Teller shook his head, looking away, his eyes absently taking in the picture hanging on the supervisor's wall. The picture showed a winter scene with mountains—the Alps, he realized. The unexpected, slow dawning of memory startled and pleased him. He remembered so little from before his freeze-down.

"A pity," Brandung said. "You know that whenever you want my help, all you have to do—"

"Is ask you for headchips? No!" Rod turned his eyes finally to meet Brandung's. "I tell you, it'll all come back. I don't want you fiddling in my head. The reason I'm any good at this job is because of what I *am*. I am *not* a chiphead!"

"Of course not," Brandung said with a conciliatory smile. "But you have to realize that when you say you're good—well, that remains to be seen. You were good. The ratings indicate that, since the pilots awarded you an average of nearly ten approval points out of ten. But that was before you came out to space." The smile faded, faintly. "And you must admit your recent performances—"

Teller didn't need to hear the rest. "Listen, Merchen," he said. "How many chances have I had to prove myself since I've gotten here? Two! Two chances! And both were right after emerging from interstellar freeze! The effects of the freeze-down still bothered me, and you know it. I'm better now. A lot better."

"I'll grant what you say," Brandung said. "It is a valid excuse, in a way, to say that you haven't had a chance to prove yourself recently. But that, too, is understandable, in its own way. The captains and pilots stopping here check your record as an Ent at this station, and can't be blamed if they opt instead to be entertained by Tiko Jay, or Hergert, or Sims, who have better ratings. They don't care about your old rating. That was Earth, Rod. You're in the big time now."

"I'm not blaming the pilots. I know I failed those two times. I deserved zero points, which is what I got. I'd barely emerged, and I had no idea how much the freeze-down had taken out of me." Rod stopped, feeling again the frustration of his two failures. He wished the recent memories were as reluctant to surface as the older ones. The recollections of Earth, of his life, of his training, from his years as an entertainer on *Puerto Sol-Gamma-Cinco*—they all seemed to have vanished.

"All right, now listen," Teller said to Brandung. "We both know that memories are the stock in trade for an Ent. Without them, an Ent's nothing. And that's why all your other Ents have headchips, to store memories. *All* the Ents in space have headchips. Except me, Merchen. I was practically unique in Earth orbit. Out here, I *am* unique. What other Ent can offer the pilots purely personal experience?"

"Yeah," said Brandung. "But you can't even offer that. You said it yourself. It's gone."

"I know it's still up here," he said, tapping his forehead and standing tall. He remained proud of his ap-

pearance: hair that verged on yellow, with a hint of grey; a tall, thin, yet strong body; and a face beginning to show lines, hollowed beneath the cheek bones. His features reflected the person he truly was. Other entertainers could hardly say as much. Merchen Brandung, a former Ent and now Ent supervisor, still had the look of a spoiled country-club singer, without any character lines. Though libraries of information, literature, and music might be stored in his headchips, they did nothing to improve his character. "All that information I stored through the years is coming back to me," Teller continued. "It's emerging. I can feel it. Memories come back to me every day."

"The question is, will they come back soon enough? And will they come back well enough that you can do your job?" Merchen tapped his fingers on the desk. "That's what I want to know."

"I'm convinced of it."

"I'm not." Brandung reached for a slot and pulled out a flimsy. He threw it onto the table for Teller. "Read it. This is official notice. I'm ordering a memory scan, and the installation of a full rank of headchips to store whatever's retrieved. I can't afford to have you wasting resources any more, being of no service to *Port Pers-nu-504*. Once we have your old data retrieved and installed on headchips, you'll be back on your feet and in your old form in no time."

Teller glared, even as he felt a pit of blackness form at his midriff. He knew Brandung had the power to do this. It was in the contract. Teller had thought it unimportant when he'd signed on, and hadn't protested its presence. He'd never figured to lose this much memory. Signing the contract had seemed a small price to pay to get out to the stars. "You can't do that. I'm Rod *Teller*. I'm the leading entertainer in all—"

"You were Mr. Great Ent once, yes! Once upon a time! Damn it, Rod, I'm doing this for you! Get this job done on your memories, and then get back to work! We're done talking about this!"

Teller picked up the flimsy, and glanced over it. He frowned. This meant his efforts were wasted. He'd used his status as an Ent to reach the stars, yes. But not because he wanted to be just another Ent out here. He wanted to travel—he wanted to see everything he could, and he wanted to see it through pure, unpolluted senses—through his unfiltered *human* senses. If Merchen Brandung forced these headchips on him, his whole reason for being here was shot. He'd wasted what he'd had—all his success as an artist of the spoken word, and his head full of honest, human memories—and for nothing.

"Listen, Merchen," Teller said. "A moment ago you said I had a valid point in saying I haven't had enough chances to prove myself." He tried to keep the anger out of his voice. "Would you—please—allow me a new chance? I don't think it's asking too much."

Brandung pushed back in his chair, and folded his hands over his chest. "Another chance?" he said, almost coyly.

"Another chance, yes, Merchen. If I can't prove myself this time, I'll consent to the operation." "Consent? I don't need your consent!"

"If you want me to work, yes, you do," Teller said steadily. "You're under contract to feed me and give me quarters whether or not I perform for pilots. I *can* deny the operation. I've got a human right to my own body and mind!"

Brandung smiled. "I doubt your assertion would stand up in court," he said. "Sincerely I doubt that. Still, I might be willing to give you the chance you ask for. Just maybe. But it might be a risk for us, you understand. What if you bomb again, Teller? What if another pilot goes away from here dissatisfied? It'll reflect on the rating of the entire port facility. And that would be out of our hands—because the pilots control those ratings! So . . . would you be willing to offer me something, personally, in recognition of the fact that I'd be sticking my neck out to let you try once more?"

Teller felt the black mass of disgust he felt for this man well up in his gut. "What are you thinking of?"

Brandung absently rubbed the fingers of one hand together. "I'll be frank, Teller. There is something you could do for me. I have an interest in our other new entertainer, Tiko Jay. She came in with you, on your ship." He pursed his lips and glanced absently at the far wall. "I fancy her extremely. She, however, seems to take an interest in you. You've noticed? So you might have some small influence over her? If you could steer her in my direction, to see me on personal business—"

He wants Tiko Jay. The ball of disgust in Teller's gut expanded and threatened to burst. He couldn't think of anything adequate to express it, and tasted bile.

"—then I'd be appreciative. You wouldn't have to do much. Maybe just mention my interest in her? That I might help her in her career here? In her advancement? It's a small favor, Teller. A small thing to do for your supervisor. And then, of course, I'd be *happy* to assist you in trying to improve your ratings, by giving you this chance you want."

"Fuck the ratings," Teller managed to say.

"Teller!" Merchen roared, instantly to his feet. "You of all people know that you *are* your ratings! Bad ratings means a bad name, and then you aren't worth the air you breathe to me or anybody, least of all yourself!" He hit his fist on the table, which seemed to vent some of the sudden fury. He straightened, and smiled with forced geniality. "The pilots create the ratings, and they go by them, and we have no choice in the matter. We can't even regulate those ratings. So we accept them. All of us, Rod. Including you. But we were speaking of a deal. I don't think I'm asking much of you. So, do we have a deal? Remember that it's your neck, Teller. Either it's this deal, or I force the headchips now. And I can do it, Teller. I *will* do it. Unless . . . ?"

He cocked one eyebrow, smiling at the glaring Ent.

Petra hovered in her gel medium aboard the Benares Interstel.

She never did other than hover.

Her body remained much as it was in her previous "life," when gravity had meant more to her, and physical

mobility meant something purely personal. Now she hung suspended, incapable of freeing herself from her medium or the mechanisms to which she was attached. In her new life, she was more than her old body. Function boosters, metabolic monitors, and tonus mechanisms hooked into her every part, maintaining and supporting the flesh she had once called her own. Now, it belonged to the *Benares Interstel*. The two could never now be separated, without irreparable harm to one part or the other.

But the *Benares Interstel* she also regarded as hers. For it *was* her.

Far more than any other part of her body, her head interlocked with the machinery of the cargo ship, connected by biological and abiotic components. She retained her senses, and vet benefited from the extraordinary data collectors available throughout the immense hull. If at one moment she might choose to pull down an image of the surrounding star systems, to revel in their unique positions from this part of the galaxy, she might at the next choose to superimpose a graphic chart indicating the location of Pivot Stars, Guide Stars, and the lineaments of the ancient Constellations, distorted by distance and sometimes completely invisible; or she might view at will the contorted pathways of wormtracks—at least the apparent pathways of those tortuous, black hole-generated routes, by which the Benares moved from system to system. Even though her lungs no longer pumped air from any outside source, she could "smell" distant atmospheres spectroscopically, and could "taste" probable surface minerals of larger bodies and the composition of random interstellar dust motes and macroscopic particles, while she traveled slowly in three-space. as she often preferred. Oxygen brought a glow of interest to her mind. Heavy elements stimulated her idling curiosity. Interstellar space within the wormtracks appeared as a multicolored, multiflavored concourse of gravity trails and the myriad Homeric hazards she must navigate, veritable Scylla and Charybdis cliffs and sinkholes that threatened to either rend the Benares into a million shrieking slivers or engulf it whole. In contrast, three-space, the normal, everyday space visible to the senses, absorbed her as pastoral music of no beginning, no end, its movements punctuated only by starports and way stations, blips of massed humanity in the vast fabric of tonal ambience.

Yet if she valued any part of her connection, it was the aspect of disconnection. She could, and did, disconnect at will. She didn't need to be at the helm at all times. While many pilots apparently logged endless hours in the datastream, she luxuriated in it for set periods, then cut herself adrift to exist in mental isolation from her electronic environment, allowing only inputs from certain external sensors and occasionally from the library. Individual identity: she could think of nothing more worth valuing. She maintained it, alternately coddling and sharpening her interior being. She suffered none of the mental losses of many pilots, whose senses of self threatened to spread out into the intricate electronic pathways of their starship bodies, becoming lost

forever in the imponderable hugeness of the universe they traversed.

For them, "shore leave" from their ships became necessary. Star pilots must not go insane. They must remain human. At all cost.

For them the regulations had been put into place: if they didn't simulate separation from their semibiological, semimechanical ships, they would lose touch permanently with the experience of the human.

For them it was necessary.

Not for ber.

Which is why Petra railed when the message arrived. She fired back a reply: she didn't *need* diversion. She felt fully adjusted. She maintained an individual, fully human identity. Her *being* did not need help being shored up. She was who she was. She was Petra. She was a pilot. She confused herself with the *Benares* no more than any river pilots of an earlier century confused themselves with their paddleboats. She was human: more importantly, she was one *particular* human, named Petra, fiercely her own individuality.

The return message insisted. It compelled. She had skipped the last two port-call diversions. If she missed one more, her license could be revoked. She would become an anachronism: a starship without permit to perform the function she existed for.

Very well, she replied. But if I don't need to appear at this upcoming port in flesh-sim, and if I could simply appear as vidim, I'd prefer that.

We would prefer flesh-sim, but will allow three-dimensional video imagery, came the reply. Come then as vidim.

Internally, she sighed. It benefited her not at all to go through the motions of this therapy. The exercise had become automatic on both sides of the equation—both among the pilots, and among the port officials. The contacts with other "humans" had degenerated into cheap entertainment. She would be paired with some artificially enhanced chiphead who would ply her with bland stories of Earth, information about meaningless styles and fads, and unfelt "personal" interaction. The arrogant bastards! *They* were the ones who needed help bolstering their humanity! Most of them needed a good kick in the pants!

Those pale, tape-recorded reruns of human nature could hardly help *her* hold to the True Path of the human being.

What an infernal drag.

But if she *had* to go through it—

And if she *had* to suffer all that unpleasantness—

Then why not make it just as unpleasant for the Ent? Why not? She knew how.

In fact, she knew how to make an Ent *squirm*. Maybe she could even shock the Ent back into real humanity. She doubted it. But it was worth a try.

Open cluster NGC 957-

A vast mosaic, limited by no boundary but empty space beyond the radius of a dozen light years— Nineteen white blisters of light visible from above Port Pers-nu-504, and half as many again below the irregular disk of the station where it hung between the gravitational centers of three coal-black masses of matter that might have passed for planets had they circled any single star—

A chandelier with hydrogen and helium for the wick and wax of enormous candles, so bright as to shame into insignificance the band of the Milky Way and even the neighboring clusters lying on the galactic plane—

A spacious, wall-free ballroom of slow dancers lit from within and twirling each other in a dance in which each downbeat lasted centuries and each four-beat measure, entire ages—

A spattering of paint, white on black, with a wash of illuminated dust that swept from upper left to lower right, irregular and brighter here than elsewhere, and more red there, and more blue to one edge—

"I never get over it," Tiko said, gazing up, standing in the viewdome she had appropriated for her studio. She put down her paintbrush. "It's so amazing that I finally made it here—and that my first place, my first working place, should be like this. It's so beautiful."

"This is what's beautiful," Rod Teller said, still gazing at the canvas in front of him.

It still surprised him that she would deal with such simple materials: cloth, paint, and brushes. It surprised him further she would do away with the precision of computer-enhanced eye, and rely on the weak biological organ she was born with, in observing and reproducing astronomical imagery. It surprised and gratified him.

The painting in front of him showed a portion of the open star cluster, distorted so that attention fell on the odd duo at the edge. The two stars, one larger and pure white, the other smaller and tinged blue, circled one another and occasionally spat out gouts of incandescent star-stuff at each other, engulfing each other in fleeting vortices of flame. Tiko Jay had caught one such moment, having meticulously detailed the tongues of the two stars stretching for each another, their shapes distorted by gravity. A portion of NGC 957's dust-veil muted the brightness, and imparted a feeling of grandeur to the painting.

"It hardly compares with the original," she said.

"It's a different thing altogether from the original," Rod said. "You've recreated the interior impression of this view. A photograph could never do this. This is more like what it's like to *be* here."

She smiled. "I'm glad you sense that. So few people do. Or I shouldn't say that—people like my paintings—but they always wonder first *why* I bother doing this. As if painting should be dead as an art form, now that we're spread around the stars! I think it's ridiculous! Here we are, presented by a view more transcendent than any landscape seen by painters of any previous century—and people wonder why I want to do this?"

"You do this without your headchips," Rod said with wonder. "That's what gets me."

"You of all people shouldn't be amazed at that," she said, looking down from the vista.

"I am, though. I'm amazed to encounter someone with headchips who doesn't willingly use them all the

10 Mark Rich

time. I don't have them, so I don't know, really—but it seems like so many people lock into their chips a hundred percent of the time, until that's what they become—masses of headchips, and not *people*."

"Hey," she said, "it came with the job. I wanted to see the stars—I wanted to *paint* the stars—and the only way I could do it was as an Ent. So I got the chips. I don't use them if I don't have to." She shrugged, then smiled at him. "I didn't know anyone could do it your way. Without any chips at all. I'm jealous of you, don't you know?"

Rod Teller shook his head ruefully. "I wish I hadn't been so bull-headed about it, myself. I'd be in a lot less trouble."

"Hush," she said, putting a finger on his lips. "None of that. You're a rarity. Cherish it."

"Cherish *what*?" he said, kissing her finger. He took her hand and held it a moment. "It's all gone—"

"Hush," she said again. "It's what I love about you. You're our only original human in space. Don't worry about what you forgot." She squeezed his hand and reached for the brush again.

"I have to worry, now. What are we going to do about Brandung's demand?"

"I'll take care of it."

"You don't have to. Above all, I don't want you to—"
"I won't. But I can talk to him. I'll figure something
out."

"He's a greasy eel."

She smiled at him. "You *can* pick the words, can't you? You say those words and I see him clearly in my mind. That's him exactly! A greasy eel!"

Tiko Jay looked in through the door for a moment, watching him. Merchen Brandung didn't look *here*. His eyes stared vacantly at one wall of the office. He was plainly reviewing things inside his brain pan, or purging files, or sorting information, or something. But he looked *too* into it. He was gone, all the way. He didn't even notice she was here.

What a fishbrain, Tiko Jay thought.

"Hey, boss," she said to Merchen, turning on the chip-persona that turned *him* on, before turning herself off. She didn't submerge all the way. Just most of the way. Far enough that she could play cards inside and avoid the nastiness of the situation outside. She didn't want to be here with Merchen; therefore, she wasn't. Inside her head, she turned her back on her external senses and let her flesh-face do the talking to this other flesh-face. She was being her own flesh-sim, putting herself on automatic. *Go to it, baby,* she said to her flesh-sim-self. *Make that fishbrain's gills hyperoxygenate.*

Using a chip-persona and distancing herself from reality was the only way she could handle this.

Chips had their uses. She sat inside another chip in her head, set up a table with three other players, and dealt out cards. She played hearts. She loved playing hearts. It was always a test, since she put herself against the toughest players in the program, who always seemed to slip her the queen of spades when she least expected it.

It was hard winning when you had to swallow a queen of spades now and then.

Hearing her at the door, Brandung's face changed instantly from vacuity to easy charm. He smiled, leaned back in his chair, and motioned her into the room and to a chair with one hand. The sight of her seemed to lubricate him, as if he were a mechanical doll that sweated more oil than usual when she put her blonde, imperfectly shaped, grey-eyed face in sight of his.

This chip-persona made her into the flesh-doll of his faded-plastic, disk-perfect dreams. She wouldn't use it otherwise. It made *her* feel greasy.

"Tiko Jay," he said, caressing the name.

"Hey, how are you?" she said, moving not too quickly, not too slowly to the chair. "How's things?"

"Great," Merchen said as if he meant it, truly meant it. "I'm glad you came by. I was hoping you would. I have a favor to ask. Just a small one, I'm sure, from your perspective as an Ent. Just a small one." His eyes reflected the wall-light a little too sharply. "So it's handy you dropped by."

"Uh-huh," she said.

He rubbed his fingers, then pressed them on his desk resolutely. "I've noticed how you seem . . . well . . . interested in Rod Teller," he said quietly. "It's perfectly normal. You're both new here at the port. You want to cling together, because you feel insecure in this new location, and you share those insecurities with each other. Puppy love."

"Hey, yeah, I know what you mean," Tiko Jay's chippersona said, looking back at Brandung. "Rod, he's an okay kid. Little lost now, you know? Kinda crazy from the trip here. Lost some of his goods. Sure, we hang out together. I like to help out a lost kid."

Merchen smiled. "I'm glad to hear that. That is, that you've been looking after him." A look of concern flitted across his face, then returned to stay for a spell. "I'm worried about Rod Teller myself. I'm sure you know why. He's causing us some trouble. His rating's nonexistent, and that affects our overall rating as a port of call. But you know that, don't you, Teek? You're the perfect Ent. You don't mind if I call you Teek, do you?"

"Of course not."

The look of concern went its way. Merchen's smile returned, with a cozening aspect. "Well, I'd like to do something for Rod. Something to help him. I'd like to give him headchips. It'd be for his own good. I'm sure you'd agree. You have headchips yourself. It's what makes you so good at your job. Now, Rod has consented to have headchips installed, if I give him a last chance to prove himself without the chips. I don't have to give him that last chance—but maybe I will. I will, that is, if you'll do me a favor."

"Sure, boss, anything you say."

His smile hardened slightly. "I'd like you to distance yourself a little from him, for a while." The voice tightened. "And I'd like some time with you myself, Teek. I'd like to . . . talk with you some more. I'd really like to. I've had an eye on you. Since the very beginning. And I think you've had your eye on me, too. I can tell. We'd

The Vidim 11

be magic together, Teek. Magic. The real stuff. You catch my drift? I know you do."

"Hey, boss, you read my mind." She let some of her own fake smiles slide across her face. "I guess we could . . . talk . . . about it."

"Well, well." He looked genuinely nonplussed for a moment. "I have certain—ah, *needs*, that may need to be met. Could we, perhaps, meet later? Someplace private? At my quarters? Later? Say, right after dinner hour?"

"Sure, boss," she said. "So you're going to set up this thing with Rod, huh? That's nice of you. Real kind. That kid does need a little help. But it's good to let him try things on his own first. He needs a chance."

"Call me Merch, won't you? You don't have to call me 'boss.' We're beyond that, Teek." The ends of his mouth turned upward.

"Sure, Merch. Anyway, I'm glad you're giving Rod a chance. Like I say, he's a lost kid, needs a little help."

"You're right that Rod needs a chance. Of course he does. But he has to get a good rating this time," Brandung said, his smile finally widening. "A *real* good rating, to make up for his bad ones. And I have the perfect pilot he can work with. She's coming in as a vidim. She doesn't want to have anything to do with an Ent, but has to, because of regulations." He paused. He looked as if he were going to divulge a treasure. "This pilot's never given any Ent a rating higher than two points. She *hates* Ents." The words made his smile break into a laugh.

"Hey, that's great, Merch," she said, the smile hardening on her face. "So he really has to buckle under then, for his own good, huh? He's going to get a bad rating no matter how great he performs—and then he *has* to let you install headchips. That's damn good thinking. He'll get his way, and get his chance to prove himself, and then you get *your* way. That's a boost for him, Merch. Glad you thought of that. Brilliant, in its way."

From his expression, she knew he agreed.

"You won't forget about our meeting together later? Say after dinner hour?" he said.

She stood up to go. "Hey, Merch, I don't forget anything."

"Of course not." He leaned forward. "But . . . Teek, how about something in parting? A sign of affection?"

She blew him a kiss. "That'll have to hold you, Merch. I don't rush."

"Of course not."

She turned away with a neutral glance, a glance that could be read as shy uncertainty, and then moved toward the door neither too quickly nor too slowly.

She said no goodbye. He said no goodbye.

Inside her head, still in her game of hearts, Tiko Jay moved a mental finger across her interior space and let it hover for a second over a button that she called up out of the nothingness of the headchip. She'd designed this button, writing all the internal programming herself.

She made it large, glowing, prominent. Written across its surface was one word: *Erase*. With a quick stab she could wipe out everything her chip-persona had gone through in the last ten minutes. The button should have read: *Strictly illegal*.

As an Ent she had no right to erase anything. She *was* her memory. It would be Ent suicide to be caught erasing something. She could have her entire personality wiped, just to get at the errant part that would even *think* of erasing. And Brandung would be the kind of fishbrain to wipe her one hundred percent clean, just because he *could*.

Her finger hovering, she laughed at her fellow card players around the table, one of whom she'd given the perfect black hair of Merchen Brandung, and his despicably smooth smile. It would be so *easy* to erase the last ten minutes.

The player who looked like Brandung suddenly played the queen of spades, setting it face up on the table.

And this round, she knew, she was going to have to swallow all the cards on the table, with all their points. Including the queen of spades. And other players had already taken some of the hearts.

It suddenly looked like she might lose this game. Her hand wavered.

Rod Teller sat on the bench, watching the vidim from the *Benares* drift along the path toward him. He knew her name: Petra. And he knew she was a *person*. Still, he could only think of her as an image, no more than an insubstantial manipulation of light: a vidim.

She wasn't even trying to affect normal action. Some people appearing as vidims mimicked a walking motion, to make both themselves and others more comfortable. Even if little more than a formality, the practice had become so common that Rod took it nearly for granted. She didn't, obviously.

In the old days, in his fine, accomplished years on the *Puerto Sol-Gamma-Cinco*, he'd felt equally at home with flesh-sims or vidims. He'd had a simple trick that put him in the right frame of mind, that helped him feel at home even with a vidim, by which he convinced himself that he was in the presence of flesh and blood, and not just a broadcast image.

He couldn't remember that trick, though. It was gone—or, at least, it had yet to reappear within the penumbra of his erratic mind.

Unfortunately, this Petra appeared to be in no mood to help put him at ease, gliding ghostlike over the path, the only part of her in motion being her head and eyes. She looked with some interest at the park where they met

When she glanced at him, however, her eyes held undisguised disinterest.

It hit him with dull finality that he had engaged in a fool's errand, trying to prove himself. He sallied forth, the shining knight set on jousting when he's forgotten where he left armor and lance. He should have a clever thing to say to Petra right now, something that would set the tone, lighten the mood, create pleasant anticipation of further conversation—

But nothing.

"Greetings," he said. "I'm glad you seem to enjoy the garden."

"I wish that was all I needed to do," she said. Her

mouth didn't move as she spoke. She apparently had linked her visual perception with the eyes of this vidim, so that they moved as her attention moved; but she had failed to coordinate the mouth to her speech. On most vidims the connection happened automatically. Petra seemed to be taking extra measures to impede communication. She didn't *want* to make this easy for him.

I might as well be talking to a stone doll, he thought to himself, gazing at her. She was thin, almost waif-thin, with the wrinkled, wizened features of one who has aged not just with poise but with obstinate dignity. The vidim was clothed in a shimmering, draping gown of white, which added to her ghostliness.

The face itself attracted him, since it indicated strong character on her part. The vidim, however, kept its features cold and motionless, detached from whatever facial expressions and inner feelings the pilot herself might experience. It hung above the shimmering dress as a mask, equipped only with moving neck and roving eyes.

"I suppose if we must talk," she said, "we might as well talk about this park. I once had some interest in plants, in my old days. Haven't always been a pilot, after all. Do you know these?" She pointed at the tree that rose next to the path, with a rough trunk and spiky, uninviting leaves that resembled weaponry far more than foliage.

For a moment a wisp of memory edged into reach, taunting him with an image of a coast, a place where the sun shined down brightly and he had met . . . who had it been? It had been a happy time, hadn't it? And he had seen trees such as these. . . .

The wisp of memory evaporated.

"I'm sorry," he said. "I should have boned up on this place. I'm new here, and haven't had the chance—"

"Didn't learn the plants, eh?"

"I once knew-"

She laughed. Rod found it eerie to listen to the laughter emerging from the closed, unmoving mouth. "Undoubtedly," she said, "and then I suppose you mislaid the information? How unlike an Ent!" She moved closer on the path. Although her face remained unchanged, her eyes pinned Rod to the bench. "I suppose that's how you earned your excellent reputation, with *all* its stars."

Although he'd prepared himself for the possibility she might check into his ratings, the sarcasm stung.

"And," she continued, "I suppose it's only natural you're here at this remote port at a remote corner of the Perseus system, having been forced to leave behind a failed career on Earth."

"Not true!" he said, provoked against his will. "Not true at all! I was among the best! No one had a better rating than I did! I came to space to—" Why had it been? Why? "—to prove myself again, among the stars themselves," he finished weakly. He had almost risen from the bench in his anger, and now let himself back down onto the surface. Why should she care about his reasons?

A small laugh emerged again from behind her closed lips. "Likely story. Well told. Bravo." She allowed the sarcasm to hover in the air before continuing. "And what made you such a great Ent in Earth orbit?"

"Because I'm a natural. You may find it hard to believe, but I can—I *could*—transform conversation into an art." Rod Teller found his pulse rising even at the memory. "I didn't steal memories from libraries and fabricate empty palaces in the air to entertain in. I *lived* my own life. I didn't become an Ent till I'd gone through several other careers, several of them successful enough that I could become an Ent on my own grounds, my own way."

"Undoubtedly," she said. "But you're a pitiful Ent now. Where's that magical ability now? Tell me a story, Ent. Make me believe you."

Before, his words had always flowed out instantaneously, full of the rhythms of comfortable speech and familiar telling, as if they arose directly from some deepseated source and bypassed consciousness altogether. He felt a brief welling now, the first hint of that feeling since he'd arrived. The faint taste of hope tantalized him. He pulled on the strand, which gave him a rush of comfort and foreshadowing of a narrative, an off-thecuff remembrance of something real, something inimitable, something uniquely him and uniquely human. He leaned back in the bench, feeling at ease for the first time since Petra had appeared in the garden, as a forbidding ghost. Suddenly in his mind she stood transformed before him: no longer a ghost, no longer even a pilot, she was simply company, a person, an audience of one, a companion for a telling of a thing from his life, from his experience.

"I've been thinking, oddly enough, of something from my childhood." He felt a surge of joy as the words appeared. True words. Honest words. No pretense. Nothing fabricated about them. He smiled at her. "You must have favorite things that appear to you, suddenly, without expectation. You're engaged in some trivial task—or even an important one. I don't know—and suddenly all you can think of is something from far, far behind you in time, something that somehow manages to dredge itself out of the morass of the past. I've just had a quiet moment erupt in all its minor splendor—it's a memory of being at home, in the comfort of a family dwellingyou remember that, I can tell you do-and I was reading a book. My god, a book, printed on paper, a silly little number about an elephant. I even remember the damn animal's name—Sooki. Sooki, the elephant, whose dilemma was that even if he knew his name, he didn't know what he was-

He heard himself and stopped. He heard the absurdity of what he was saying. A children's book: the memory of reading a children's book. An elephant with an identity problem? An elephant that can't *remember*? How old must this memory be? And how stupid it must sound—sitting here in the park, in front of this vidim from the *Benares*, spouting off about the glories of a children's book!

Maybe it wasn't too late: he never admitted defeat till it kicked him in the face. If he took the strand of memory and guided it somewhere else, to something more reasonable . . .

But the strand of memory broke and snapped back

into the depths of his mind. His ease broke with it. He became aware of the edge of the bench biting into his legs.

The vidim said nothing, hovering over the walkway in front of him, spearing him with her eyes.

Defeat finally kicked him in the face.

"Listen," he said, all energy draining from him. "I've just lost a deal. I used to be a good Ent, a wonderful Ent. A *real* Ent because I did it out of loving it, out of loving to pass on experiences, out of the joy of bringing them back and making a new experience out of simple conversation so that I wasn't just entertaining, I was actually making each meeting with each person an *event*. And the reason I could do that is that I kept it all natural." He tapped his forehead, and wondered why his hands insisted on keeping up the old gesture. It would mean nothing soon, when the headchips were installed. "It's just my brain up here. Nothing else. No automatic storage, no automatic retrieval, none of that damn *perfection*, just a normal, human brain full of a life well lived.

"But it's gone. Wiped out by freeze-down. That's how we shipped out here. Frozen and almost lifeless." A small memory rushed at him then. It seemed to rise up at him, unbidden, more and more. He wished it would die away with the others, since it tasted only bitter to him now. "I'll tell you the true reason I came to space, since you asked. It was to extend that purely human experience of mine. I wanted to see the stars, as a *person*, as an Ent perhaps by profession but as a person first. I wanted to *really* experience it, first-hand, without any of the filters or cameras of automated perception. Do you realize no one is doing this—*no one* is truly seeing the stars—because everyone is so altered by the equipment they carry in their heads! But that was what I wanted—the pure sight of the stars in space! Oh, god!"

The memory tore at him: a dream, so near, and now impossibly far away—

He jerked himself up and away from the vidim's gaze, and pumped his legs to walk as quickly as possible away from the bench, the situation, and his failure.

His head felt as if the headchips were already being slammed home. He could hear Brandung's laugh ringing in the air.

He punched open the door to exit the garden and half expected it to open directly onto the void outside the station hull, where it waited ready to suck him out into the vast gulf between the stars.

He lay on the couch in his room, staring at the information wall. Across it, fields of lights passed as if an eye hung in space and slowly turned loops to take in all the visible universe.

Before the wall, on a bench, sat the small pile of cloth books that were his lifetime treasures, and the electric readers full of his various libraries. Scanning his eyes across pages and screens of print had begun the process of retrieving the material that had disappeared during the long trans-stellar voyage.

A poor beginning, however. The effort hadn't been enough. He'd failed.

Completely failed.

He wondered if he should call Tiko Jay, and tell her the bad news. She seemed to value his individualism as much as he did himself. Tiko was an odd bird among Ents. She never let her headchips take over her off-work hours. She'd never once called her chips up for reference in a conversation with him. She was as close as he'd found among Ents to a normal human being. She worked so hard at it she was practically *more* than a normal human.

He smiled at the thought, before remembering his own predicament. He'd once thought the exploration of space would provide the ultimate experiences for an Earthborn man.

Instead, it had simply forced him into the thing he hated most. He'd become a diluted human. A less than human. A mental fetch-dog with a brain crutch. A chiphead.

He imagined Tiko standing in front of him, berating him: Hey, Rod, look at me. I'm human. I've got chips, but that doesn't have to change anything. Buck up, love. You'll do okay.

Okay? For him, it meant defeat.

The door signaled.

He hoped it was her, and gestured it open.

He saw someone else.

Short, thin, old-

Wrinkled skin. White hair. Withered features that were proud of being that way: weathered, beaten, and honed by time and the elements.

Petra, of the Benares.

But this Petra was not the one floating above the walkway, clothed in dazzling cloth, with the ice face and the sharp gaze.

Because that had been vidim.

This was *flesh-sim*. She'd abandoned her earlier mode and come to him in more congenial guise.

The eyes retained their sharpness and sparkle. But the stillness of the lips was gone.

"Rod Teller," she said. "I offer my deepest apologies." "What?" he said.

"I gave you no points for your rating," she said, her voice razor-thin but not unpleasant. "I'm afraid I sent it in *before* our meeting. It's already part of the pilot rating system. I'm sincerely sorry. Please believe me. Nothing that happened at our session had anything to do with that rating. I regret that extremely. I thought I was doing the right thing. I had no way to *know*."

Even though he'd expected a low rating from her, to hear it confirmed still struck like a blow. "But why *apologize*?" he said. "I don't understand."

Rod sat up on the couch, and indicated another chair where she could sit. He doubted she'd accept the offer. He offered her an Ent chair in an Ent room, after all.

"I didn't know," she said. "How could I have known?" Despite her appearance of age and frailty she walked confidently to the chair and sat herself down firmly.

"How could you have known what?"

"That you aren't just another Ent." She nearly spat the

14 Mark Rich

word. "I *despise* the mechanical idiots they pass off as human company, on the pretext of giving us 'human' contact between long stretches of computer space and three-space and interstellar space. I didn't *know*, Teller. I didn't know that you're entirely *human*. Teller, I haven't encountered a genuine human in"—a look of amazement crossed her face—"it can't be so, but it must be twenty, twenty-five of my subjective years." She sighed. "I didn't think such as you still existed. I stood there, transfixed, almost in shock, when you told me! My most profound apologies."

Rod didn't know how to respond. "I thank you. But I'm afraid that for me the rating means—"

"I have an inkling what it means," she said. "It's too late for me to change it. However, may I suggest something?"

He indicated with his hands that she could feel free to do as she pleased. Her statement as to his rating confirmed his fate: he would become as other Ents, a chipbrain.

When she made her suggestion, however, he had to shake his head to make sure he'd heard right. She had to repeat it twice before he believed it.

"Teek!" Brandung said to her, wheeling in his chair toward the door as she appeared.

She waited for a moment in the door frame, and then took a step inward. She regarded his face. If she were to paint his mug, she thought to herself, how would she color his features? One daub of authority, another of ineffectual sternness, and a splash of lust—like a slash of blood across his pale cheek.

"Hey, boss," she said.

"I was getting concerned," he said. An expression of reprimand dominated his face, then softened. "I was almost afraid you'd forgotten, laughable as that sounds."

"Forgotten what?"

"About this." He smiled sharply. "Our meeting. Our tryst. Our bargain. We're helping your friend Teller, don't you recall? I *know* you remember. Would you like some wine?" He gestured to the table, where a bottle sat already open, with glasses beside it. The apartment, finely furnished, looked freshly cleaned.

"Meeting?" she said. "Sorry, boss, I don't know anything about meeting you here tonight. I just came to your apartment with this because was important." She held up the flimsies in her hand.

Brandung's face turned to stone. It appeared whiter than before. "Tiko! What do you mean? You don't know anything about meeting here? This afternoon?"

"Oh, sorry. This afternoon? I guess I don't have that memory. Listen, boss, you need to look at these right away. These are about the *Benares Interstel*—this is requisition stuff, and you need to sign them."

Brandung glared at her. He took the flimsies and glanced over the words. "What? *Teller*—and *you*? There is *no* releasing of either of you, Tiko. Get it out of your mind!" He flung the grey sheets back at her.

As they fluttered in the air, she reached out and caught them. "I should tell you, boss," she said, her

mouth pursed. "There is something about that meeting this afternoon."

"You wiped it, didn't you, you bitch! Strictly illegal! I'll wipe your entire personality for that!"

"Whoa there, boss. I didn't erase a thing. Hey, *I'm* no dumb kitten. I just wasn't really *present* at that meeting. I was busy. My concentration was elsewhere. But I got down whatever we said, all recorded on neurodisk, so I have the whole thing saved. I didn't bother reviewing it, I'm afraid. I just slotted it out in the mail."

Brandung's eyes widened. "And where did you mail that?"

"Just to the personnel office, boss. I thought that it must be an important meeting that you and I had, and that they might want to take a look at it if some kind of difficulty sprang up, between you and me, I mean, such as you turning down a pilot's reasonable request."

Brandung looked at the grey flimsies in her hand again.

"Besides, boss," she said, keeping her voice calm and reasonable. "That pilot's offering a good amount, considering. I mean, what's that Teller worth to you? Nothing! He's gotten his third straight zero rating! You couldn't jack his average back up if you had a gold lever! He's worthless! And me, I'm good, but hell, I'm new and don't have much of a record built up, and what the *Benares* is offering in cool credits to cancel the rest of my contract—it's a lot more than I'm worth. But I suppose I could officially request that Personnel look at that neurodisk."

"Give me those," he said, reaching for the requisitions.

She had never seen him look more angry. Or more pale.

Or more helpless. She liked it.

Neither the port facilities nor the *Benares Interstel* appeared to move. Yet one, or both, did move: for slowly, nearly imperceptibly, they separated and drifted apart. More and more of the star field became visible between them as the moments slipped away. At a certain distance, the *Benares* fired small rockets, which removed it yet farther from the station. By the time the larger rockets fired, the port had already dwindled to the size of a pea.

Inside, two people engaged in busy preparations to protect themselves not only against the elements of trans-space but also, more importantly, the *sub*-elements. Such was necessary for all those who planned to leap along a wormtrack, cutting through the fabric of three-space.

Necessary for all but a few, that is. Some lived in a state of perpetual preparation.

Petra, floating in her gel medium, permanently encased by shields sufficient to protect her from whatever the universe might throw at her, let her senses flow out through the hull of her ship and contemplated the vastness of the ocean of stars and worlds and the attenuated black seas of dust, until the proper moment should arrive and she could release the streams of data that would

The Vidim

flee instantaneously along a million conduits to their proper destinations, to launch the ship, the *Benares Interstel*, with its new human cargo, into the abyss between the stars.

As to ports of call—*she* would never need them again, except for pure business reasons, and to reprovision. Her tickets to independence were securing themselves at this moment. A born talker and a talented painter, the one wholly, forgetfully human, the other struggling to hold onto her humanity through art. With two Ents on board, she could never again be accused of avoiding beneficial human contact. Never.

They had few wants, easily filled: beyond trifling physical comforts, which the *Benares* could provide, they wanted to see the stars. *The stars!* Such a little desire!

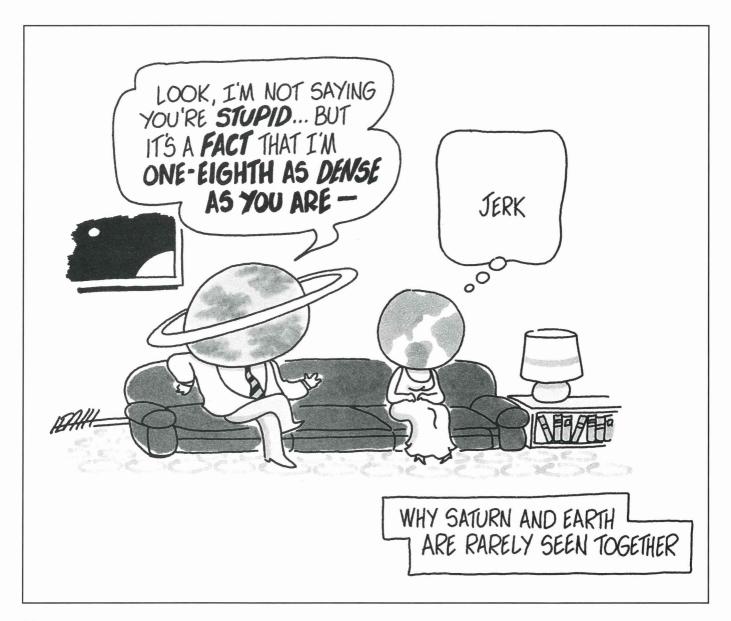
"The tired, warm flesh I once thought Was *me*—it froze and shattered in vacuum! Now I'm consumed by this thought: To *know* space—who could presume?"

The words ran through her head. She'd penned them herself, in her early years aboard the *Benares*, when the dichotomy between her old and new lives had seemed so great. She still thought about that desire, to *know* space. It was the most human desire of all, to reach out and try to grasp the impossibly, inconceivably huge thing that the universe was.

It was a presumption.

But a strictly *human* presumption.

And it was good to know she wasn't the only one to so presume. •



A Time to Every Purpose

David B. Silva

After the summer we had both graduated from junior high and he had moved away with his mother, I had never expected to hear from Jeremy Taft again. We had been friends of a sort that summer. Not so much because I liked him or he liked me, but because we shared the kind of secret that binds two people together, whether they like it or not.

That was the summer Andy Bale reportedly fell off the edge of Dead Man's Lookout and landed, nearly unrecognizable, at the bottom of the cliffs.

It was the summer Melissa Jenkins disappeared for four days and came back with a hollow, faraway gaze behind her eyes.

And toward the end, during the bristling hot days of August, it became the summer Jeremy Taft and his mother finally

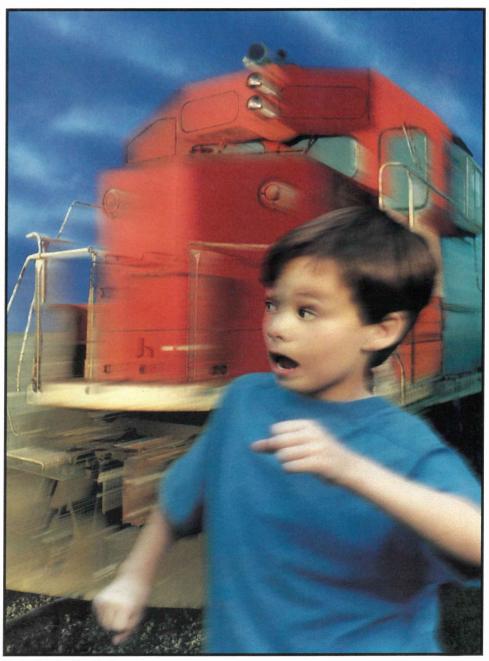


Illustration by Rick Lieder

moved back to the midwest somewhere, much to my delight.

I suppose over the years I had fooled myself into thinking that I had put that summer behind me. Twenty-some-odd years had passed since then. I was married now, with two kids, one eight, the other six. My hair was beginning to thin. There was an extra fifteen pounds around my midsection. And though I had recently given up my Pall Malls, the last time I had gone hiking with Ellen and the kids, I had been the one bringing up the rear

That other summer, just after junior high, belonged to a different person, from a different time. Some things, though, no matter how far toward the back of the file they're buried, have a way of working themselves to the front again.

The call from Jeremy came in a little after nine. "I need to see the place this afternoon, Dave. Sometime before three. That a problem?" If he hadn't introduced himself first, I'm not sure I would have recognized his voice. In school, Jeremy had been the invisible boy, sitting at the back of the class, silent except for those few times when Mrs. Crawford had specifically called on him. That was not something that happened often. I think after a time, teachers learn instinctively which kids are worth their while and which are best not to tangle with.

"You're back," I said, trying not to sound as uneasy with the idea as I felt.

"Just for a few hours," he said. "I've got some business at the house, then I'll be on my way again."

"The house" was an old Victorian two-story off Tule Elk Road on the other side of the river. Before they had moved, his mother had made arrangements with Banner Realty to handle the rental and upkeep. It had only been a year or so since Fred Endore had retired and I had been asked to take over the property. And it had been less than six months since Jeremy's mother had written and asked us to give notice to the current renters. She wanted to make certain the house was vacant this summer.

"It's empty, isn't it?" Jeremy asked.

"As of three weeks ago."

"What time can you be there?"

I had a walk-through at eleven-thirty; a young couple from out of town had expressed interest in seeing the duplex off Sutter Street. And after that . . . "How about one o'clock?"

There was a short silence on the other end, as he gave it some consideration. "Can you make it a little closer to two?"

"Sure, that's no problem."

"I appreciate this, Dave."

"No trouble."

"Meet you there, then?"

"Two o'clock," I said. I hung up and sat at my desk for a while, staring numbly out the window at the traffic going by. Not much had changed since Jeremy had left. The town was a little larger now, but not much. They had built a new middle school next to Leighland Park in the early eighties, and the Southern Pacific came through only once a day now, usually late at night when the

town was sleeping soundly. Most of the kids I had grown up with had moved away long ago. A few of them were still around, though, trying to raise their own kids the way they had been raised. I suppose you could argue that time had stood still here.

Outside, a delivery truck rolled by. Across the street, eleven-year-old Brian Aickman was trading shoulder-slugs with one of his friends. They were laughing, so it all must have been in good fun. Then Brian motioned that he had to get going, and without even a glance over his shoulder he darted out into the street. A white Ford van skidded to miss him, leaving a couple of black streaks in the pavement and a cloudy exhaust of burnt rubber in the air. For a moment, it brought it all back again. . . .

And I felt a shudder tear through me, because it had been so close to what had happened to . . .

To Andy Bale, I thought coldly. I had spent the past twenty-odd years trying to forget, and for the most part, I guess I had done a fairly decent job. No matter how deep you bury a corpse, though, eventually the smell finds its way back to the surface.

Andy Bale.

He was twelve years old the day he died.

It had happened on an overcast afternoon, less than a week after school had let out for the summer. Mom was visiting her sister in Tucson that day. I remember because she brought back a poster of a skull of a cow leaning up against a wagon wheel. Underneath it said: *Rest Stop*. She thought it was the funniest thing she had ever seen, and for several years I kept it pinned to the wall over my bed.

Dad was working at the lumber mill in Kingston Mills that summer. He came home late most of the time, usually well after I had gone to bed. And he was usually gone in the mornings by the time I came down for breakfast. But sometimes I could smell the damp, pulpy odor of sawdust still lingering in the kitchen, and it was almost as if he were still somewhere in the house.

That morning, the morning of the day that Andy Bale died, the faint odor of my father had still been in the air when I came down for breakfast. Though I had nearly forgotten about it by the time I accidentally met up with Jeremy at the rail yards.

He stepped out between two box cars in front of me, his thoughts faraway, a look of surprise crossing his face when he looked up to notice me. We had never spoken in class, but for some reason I guess I'll never understand, he called out my name as if we were the best of friends. "What're you doing down here?"

I shrugged uneasily and looked past him, both of us feeling a little uncomfortable by the surprise encounter. "Nothing much."

"Yeah, me neither," he said. "Been looking for railroad spikes. Not much luck, though."

I remember thinking he didn't seem like such a bad guy after all. His hair was kinda long, especially in the back, and he was wearing an old khaki shirt that looked like it had come from the Army Surplus shop next to the Chevron on Placer Street. Still he seemed friendly enough,

18 David B. Silva

and somehow we ended up sitting on the edge of a flatbed, talking about how boring summer could be and how he hoped he'd get to see his father before school started again and how we both thought Melissa Jenkins was the best looking girl in class.

For a while, I suppose I thought we might actually become friends, me and Jeremy.

But then Andy Bale showed up and everything changed.

I don't know what he was doing down at the rail yards, either. Probably just kicking around like we were, killing time on a boring summer afternoon. It was Jeremy who saw him first. He tapped me on the shoulder and pointed across the tracks at Andy, who seemed lost in his own world, playing hopscotch or some other damnable thing on the railroad ties.

"Wanna have a little fun?" Jeremy asked.

I took a good look at Andy, and suddenly thought how small he looked. He was one grade behind us. His father worked over at the mill in Kingston Mills like most of the fathers in town, and we had played together on occasion, mostly at backyard picnics and such. He was an okay kid.

"Come on," Jeremy said, sliding down off the flatbed. I followed him down the tracks. We crossed behind a boxcar and circled around, maybe thirty yards behind the kid. The sun had finally burned its way through the overcast, and shimmering waves of heat were rising off the ties. Somewhere behind us, I could hear the faint rumble of the five o'clock freight train to Oregon.

"What are you going to do?" I asked.

Jeremy looked at me, that coldness I had always seen in class suddenly back. "Just scare him a little, that's all." "Let's just leave him alone, all right?"

"I won't hurt him." He picked up a rock from next to the tracks.

Andy was still lost somewhere in his own world of thoughts, unaware, as far as I could tell, that we were even there. And I guess that took some of the fun out of it for Jeremy. I think he wanted to be able to look into the kid's eyes and see the fear there. I think that was the real thrill for him.

"Hey, Bale!" Jeremy called.

The kid turned around, unconcerned at first, and then a slow recognition crossed his face, and that expression of fear that Jeremy had been looking for was suddenly shining brightly from behind the kid's eyes. He had picked up what looked like an old rivet, but his fingers went slack and it slipped out of his hand and fell to the ground, kicking up a small cloud of dust. For maybe another five or six seconds, everyone stood motionless, and then, without a word, Andy Bale took off running.

Jeremy laughed and took off after him. "Come on!" There's something about being left behind, even when

There's something about being left behind, even when you never wanted to go along in the first place. Somewhere behind me, I heard the rumble of the freight train again, like a nudge back to reality. But I watched Jeremy running after the kid, and all I remember was that I didn't want to get left behind. I didn't want to be left standing alone on the tracks.

Jeremy laughed again and tossed a rock that skipped off a tie, struck the tracks, and dug into the dirt. He was running a good thirty yards in front of me now.

I thought if I cut across the tracks I might be able to catch them before they entered the woods. But that was only assuming the kid remained headed in that direction. He might just as easily cut off toward the station and try to lose us in the confusion of people and buildings.

From behind me, I heard the rumble of the train again. The sound had grown into a near roar by now, and, only distantly at first, I realized it was right on my heels. I glanced back, startled to find myself in the growing shadow of the huge black mass.

A whistle blew.

Jeremy screamed something at the kid, something I couldn't hear, then tossed another rock.

Andy Bale looked over his shoulder, his eyes red and shining back a terror like I'd never seen before, and in that instant, like some sort of clairvoyance, I knew exactly what he was going to do. He was going to cut across the tracks in front of the train. I suppose I would have done the same thing if our roles had been reversed and I had been the one in front, running for his life. It was a decent bet, by the looks of it. The train didn't stop here. It went right on through to Kingston Mills, hauling seventy or eighty cars behind it. If he made it, Andy Bale would have himself a good five-minute head start before we ever even got a glimpse of the caboose.

Jeremy screamed again: "What's the rush, Bale?" To this day, I'm not sure if he knew the train was coming or not

Andy knew it, though. He glanced back at Jeremy, then made a break across the tracks.

I heard the train's whistle blow, and the screech of brakes, and though I couldn't be certain, I thought I also heard the sound of impact. There was the commotion of black shadows beneath the belly of the engine, and the long, almost endless slide of the train down the tracks, its wheels locked and screaming. My mind, I suppose, filled in most of the rest.

After the train came to a stop, I looked to Jeremy, who was standing motionless not far from where he had let go of that last rock. His face was pale, his lips trembling. He stared, dark-eyed, at the place in the tracks where Andy Bale had tried to outrun the train. Then Jeremy fell to his knees, his hands curled into a fist, his eyes closed tightly, his mouth open wide with one, long, defiant sound: "Noooooooo!"

For a moment, I felt caught between hating him and feeling sorry for him. Then he raised his head, and I could see the darkness behind his eyes, and all I could feel was a cold shiver rattle through me.

It might have been an accident.

Or it might have been on purpose.

I guess I'll never know for sure.

But I know this: even though Andy Bale died that day, they didn't find his body for another week. And when they *did* find it, it wasn't packed under the belly of a freight train. It was lying at the bottom of the cliff at Dead Man's Lookout.

No one ever knew the difference, I suppose. No one except me and Jeremy. The engineer got out and hunted around for nearly half an hour before deciding he hadn't hit the kid after all.

But I knew.

Jeremy Taft had sent Andy Bale on a little excursion through space and time. And by the time Andy arrived at his final destination, it was some six or seven days later and a good twelve miles up the line.

I knew.

And so did Jeremy Taft.

I put away my thoughts of Andy as I turned into the gravel driveway of the old Victorian. Jeremy Taft, now an adult, was sitting on the steps of the front porch, his back against the handrail. He had changed over the years, as I guess we all had. But I would have recognized him anywhere. It was the eyes that gave him away. Those dark, impassive eyes. His hair had thinned a bit, though not much, and he was wearing glasses now—thick wire rims. He looked as if he had grown into his perfect weight, just under six feet tall and maybe a hundred and seventy pounds. He waved, without a smile.

"Hope I'm not late," I said as I climbed out of the car. It was hot out, close to ninety-five by the feel of it, though it was blessedly dry and not too humid.

Jeremy checked his watch. "Nope. Looks like you're on the early side."

"Good. I hate waiting for people, and I hate making people wait for me."

"Me, too," he said. "Sometimes, though, we don't have much choice, do we? Whether we like it or not."

We shook hands, the grip firm, like two young kids, each trying to hold his own in a test of nerves. In a way, I guess that's exactly what we were doing. Each trying to hold his own.

"It's been a while," he said, with a smile that was empty.

"Yeah, I guess it has."

"You're looking good."

"A little weight here, a little balding there, but I feel good." I looked up at the house, wanting to escape his gaze as much as anything. "You wanna have a look at her?"

Jeremy checked his watch again. "Sure. Why not?" Even with the succession of renters, the house had been well kept. I had only been inside once, shortly after the most recent couple had vacated. The original furnishings had stayed with the house after Jeremy and his mother had moved away, though the realty company had had to replace the curtains upstairs, as well as the mattress in the guest room. Everything else had held up rather well, I thought.

Jeremy stood in the entryway and glanced toward the living room, an unreadable expression cut into his face. "It looks . . . smaller," he said, rather quietly.

"Does it?"

"Yes." He ran his fingers across the top of a pine chest that stood against the foyer wall, leaving a thin line in the dust that he hardly seemed to notice. "I always loved the feel of this house. It was the only place that ever really felt like home."

I followed him across a patterned throw rug, past the fireplace, and around a corner that led into the kitchen. The house was furnished modestly in a style that you might call country or farmhouse. The kitchen, which opened to a family dining area, looked cluttered and chaotic at first glance. But if you looked closer, gradually you realized that everything had a place and it was all fairly well organized. There was an open-faced china cabinet in one corner, empty now, though the family living here most recently had lined it with a set of Danish stoneware, as well as a beautiful collection of ceramic goblets.

Jeremy paused next to the tile-lined sink and stared out the window into the back yard. "You never came by to visit when we were kids, did you?" he asked absently.

"No, I don't think I ever did."

"You remember Melissa Jenkins?"

"Sure."

"She came by once," he said. He seemed melancholy all of a sudden, and *that* seemed completely out of character with the Jeremy Taft I remembered from my childhood. "Is she still around?"

I tried to recall the last time I had seen her. It had been years ago now, not long after I had graduated from high school. She had been coming out of Morgan's Five & Dime with her mother, and I had nearly knocked her over in my hurry to get to my summer job at the Rexall soda fountain. I apologized. She looked away, a hint of fear crossing her face. And I remember thinking what an odd duck she had become. She had never fully recovered from that summer, I imagined, when she had disappeared for those four days.

"I think she moved upstate somewhere," I said to Jeremy. "Sometime around '85."

"Oh." He sounded disappointed.

We followed the layout of the house, through the kitchen and a small utility area where there was a washing machine and a dryer. There was a small family room on the other side, and beyond that the entryway at the bottom of the staircase where we had started the tour.

Jeremy stopped and glanced at his watch again. It was about twenty minutes after two now. He sat down on the bottom step, buried his head in his hands a moment, then sighed and looked up at me. It was the first time we had made direct eye contact, and I turned away almost immediately.

"Still scared of me?" he asked.

Maybe not scared, I thought. Maybe just uneasy. Fear has a way of inflating itself if you don't keep a check on it, and I suppose I had spent the last twenty-odd years trying to pretend it didn't really exist. But a trace of it was back now, like Jeremy Taft himself, and I felt like a little boy again. I hated myself for it, but I felt like a frightened little boy.

"I'm not the same person," he said. "I know what I was like back then, but things change. We all grow up, Dave. We all have regrets."

"Is that why you're back? Regrets?"

He checked his watch again. "In a way, I suppose. Partly that, and partly to fix things that should have been fixed a long time ago."

"Things like what?" For the first time, I began to feel the stuffiness inside the house. It had been closed up all summer, and the air was thick and hot. I wiped a bead of sweat from my forehead, hating the idea of being middle-aged, especially when it showed itself so easily.

"Just . . . things," he said with a thoughtful pause. Then he looked up at me, his eyes not quite as dark, but still serious, still very serious. "You ever think about that kid . . . Andy? The one at the rail yards that summer?"

"Yeah. Sometimes."

"Me, too. I don't think I've ever been as scared in my life as I was that day," he said. "I never meant to hurt him. Not really."

"Yes, you did."

Jeremy looked up at me, as surprised as I was by what I had said. "Not seriously. Not like that. I just wanted to scare him, that's all."

"Well, you did that."

"Yeah, I guess I did," he said regretfully.

"Is that why you came back? To make peace with Andy Bale?"

He shook his head. "No, not with Andy. With Melissa." "Melissa?"

"I told you she came by once, didn't I?"

"Yeah, but . . ." But it had seemed like a casual, almost unimportant comment at the time. Now, though, I realized there had been nothing casual about it. It had been a comment designed to solicit information.

Jeremy looked away again, staring out the big picture window in the living room, staring out beyond the front yard somewhere. "Christ," he said, fighting somewhere inside himself. "I don't know where to start, Dave. I've been looking for an explanation all my life. Why it was me. Why not you or that Andy kid or the kid down the block. What was it that made *me* so different from everyone else? For a long time I wanted to blame it on my mother. She was all caught up in the drug scene in the sixties, and I guess I thought, well, maybe . . ."

He caught himself and fell silent, and I had the feeling he had gone round and round with it a thousand times before. Then he checked his watch again. "Getting close to two-thirty," he said.

"What's supposed to happen at two-thirty, Jeremy?"

"A trip down memory lane, I'm afraid." He stood up, brushed some dust away from his jeans, and started up the stairs. "Coming?"

I had come this far, hadn't I? It wasn't because I had wanted to, at least not initially. But now that I was here, I found myself wondering about the past again. What was it about the past that had always kept me looking back? And wasn't it getting time to start looking forward again? I had come this far. I had stared into the great black gullet of my memories of Jeremy Taft, and what I had found was a man not that much different from myself, a man uneasy with who he was, uncertain with who he is.

I followed.

"The first time it happened," he said at the top of the stairs, "it scared the holy hell out of me. I had just turned thirteen, and I was playing in the backyard with our neighbor's cat. Roughhousing, I guess you would have called it. Anyway, I got a little rough, and I was holding the cat tight with both hands around its neck when it panicked and scratched me across the face. I didn't drop it, like you might expect. Instead, I closed my eyes and I thought the cat away. I wanted it somewhere else, in some other time, and I couldn't stop my hands from squeezing down against its throat."

"You wanted to kill it?"

"I suppose, in that moment, that's exactly what I wanted."

"Because it had scratched you and now you were angry?"

Jeremy stopped and looked at me, a trace of shame in his expression. "I was always angry back then. Always. It felt like I was standing on one side of the fence and everyone else was on the other side. Me against the world."

"Did you kill it?"

"I think so. I think I did to that cat what I did to Andy Bale. Because when I opened my eyes again, the cat was gone. For a couple of days, I thought my rage must have been so intense that I had somehow made the cat disappear. All I could remember was the instant anger that had exploded out of me, and the image of the cat lying in the bottom of the garbage can with its neck broken." Jeremy looked away again, the memory apparently as fresh as ever in his mind. "Then my mom asked me to empty the trash one night . . ."

He didn't need to finish the sentence, because we both knew where it was going. He had found the neighbor's cat, dead, in the bottom of the trash can, its neck twisted and badly misshapen.

"You'd think I would have felt like the most powerful person in the world, and I guess I'd be lying if I told you any different. But that wasn't the all of it, because it had scared me something awful. Not only scared me, but made me realize that I wasn't like everyone else. I was like that guy who killed all those nurses that one night."

"Richard Speck?"

Jeremy nodded. "Like him and like Manson and the Zodiac."

There was an open landing at the top of the stairs. Across the opening, the bedroom door was slightly ajar and I could see the leaves and branches of a dogwood tree through the window at the far end of the room.

"I don't think I'll ever know for sure if I killed Andy Bale or if the train killed him," Jeremy said quietly. He followed my glance toward the master bedroom, then turned his attention down the short hallway to our right. "This way."

I followed him down the hallway to the far end, where there was a foldaway stepladder built into the ceiling. A rope dangled freely from an eyehook screwed into the base of the facing material. Above us was the attic.

"Melissa Jenkins came by one afternoon when my mom was away at work," Jeremy said. He gave the rope a pull, the ceiling opened up and the stepladder descended. He checked his watch again, then started up.

I hesitated at the bottom, looking up into the attic where it seemed the afternoon sun had rarely come to visit. I had come this far, and somehow the journey had become *our* journey, a little of Jeremy's, a little of mine. I still didn't fully understand what it was all about. But I thought it had something to do with putting the past to rest, and that was something we *both* needed to do. "What are you looking for, Jeremy?"

"The same thing we're all looking for," he said. "A little peace of mind, that's all."

The attic was three or four inches short of headroom. It had been used mostly for storage over the years, and though it was empty now, I could see faint outlines in the dust where old boxes full of clothing and used toys had once sat. Off to one side, there was a stack of two-by-fours, some R-19 fiberglass insulation, and half a panel of sheetrock.

Jeremy, resting at the top of the ladder on bent knees, took a long look around the room. "It looks smaller than I remember."

"Things from childhood usually do," I said.

"No, not like that. It looks . . ." He paused, appearing mildly confused.

"They added a wall," I said.

"What?"

"The last renters. They built an insulating wall across the north side. To save on the heating bills."

"Oh, Christ." Jeremy glanced at his watch, then took a quick look around the room, this time nearly in a panic. "We've got to break through that wall," he said.

"I don't understand."

"She's going to end up behind the wall."

"Who?"

"Melissa."

He made his way across the dust-covered floor, to the stack of two-by-fours, and found one near the top that was maybe three feet in length. "Grab yourself something you can use to knock out a hole," he said.

I didn't move for a moment. "Jesus, Jeremy, what's going on?"

And then I heard it.

We both heard it

A scream from the other side of the north wall.

"Oh. mv God."

"It's Melissa," Jeremy said. He was at the wall now, his ear pressed up against the sheetrock. The scream had suddenly cut off, and now you could hear the faint sound of someone crying on the other side. "Shhh, we'll get you out of there. Just hold on."

"Hurry," she said. "Please hurry."

Jeremy's face was still pale as he raised the stick of lumber and brought it down against the panel of sheet-rock. I had never seen panic on his face before. Even at the moment that Andy Bale had darted across the tracks in front of the train. Jeremy had appeared upset then, the way a little boy who's caught doing something wrong might get upset. But this was different. This was genuine anguish, I thought.

Another scream exploded from behind the wall.

Jeremy had made a small indentation in the sheetrock, offset to one side. He raised the two-by-four again, brought it down again, and the indentation grew into a small hole.

I had watched this, captivated, unable to move, not completely understanding what was going on. And then suddenly I was next to him, in concert, beating a stick of pine against the wall like an old lineman pounding a spike into the dry, brittle earth. Whatever it was that was happening would have to be sorted out later.

The screaming had melted into sobbing now.

"I'm sorry," Jeremy said through a ragged breath. "I thought I had it worked out."

We had broken a hole into the sheetrock big enough to get our hands through now. Jeremy dropped his two-by-four and began to tug at the panel, trying to pull it away from the studs. It didn't come away as easily as I would have expected, but gradually it did come away. And there on the other side, pinned between the insulating wall and a window frame, was Melissa Jenkins.

Thirteen-year-old Melissa Jenkins.

She was still alive. Still sobbing, but still alive.

Jeremy helped her out of the tight space. She appeared dazed, and somewhat disoriented. For a moment, all she could do was glance back and forth between us, as if she were trying to put names to our faces but couldn't quite make the right connections. Then she stared down at the front of her dress, where a strap had been badly torn.

"I'm sorry," Jeremy said again, this time to Melissa. He tied the two ends of the strap together, as gentle and as loving as I had ever seen a man. Then he closed his eyes, and in an instant, Melissa Jenkins was gone.

I suppose I already had a fairly decent idea of what had just happened. It had happened to Andy Bale some twenty-odd years ago. And it had happened to a neighbor's cat sometime before that. Still, I asked the question anyway. "What did you do?"

"I sent her back," Jeremy said.

"Four days later?"

He nodded.

I stared, somewhat numbly, at the hole in the sheet-rock, wondering what we had just done. "You know she'll never be the same."

"I know." He brushed back his hair, wiped the white dust off the front of his pants, and looked at me with all the darkness gone out of his eyes. "If I could have gone back and fixed things myself, I would have. It just doesn't work that way."

"You nearly raped her, didn't you? Then you panicked, and that's why she ended up here, back in the attic of the old house, some twenty years later. This was where it happened, isn't it?"

"She was beautiful," he said quietly. "And when it got out of hand, she started screaming, and . . ."

Jeremy didn't need to finish. We both knew what had happened next. In that way of his, that way of moving someone from here to there, from this time to some other time, he had willed her from that day to this. And today he had returned for the purpose of willing her back.

"That was the last time, though," he added, almost as an appeal. "At least until today."

Maybe the oddest thing of all was that I believed him.

Downstairs, I locked the front door and dropped the key back into my pocket. Jeremy stood at the edge of the porch, looking out across the yard, somewhere faraway in his thoughts.

"You don't have to be scared of me any more, you know," he said.

I knew that was only partially true. He was trying; that much was obvious. But I didn't think the struggle was ever going to end for Jeremy, and how long it might be before the rage slipped through again was anyone's guess. "I wish I could believe that," I said.

"I came back, didn't I?"

"Yes."

"I didn't have to."

"No, I don't suppose you did."

"I just wanted to make things right," he said, turning to me as if he were hoping I would give him my approval.

I shrugged. "Why? I mean . . . why now?" "I don't know. I guess because I had to."

He gazed off into the distance again, without saying anything for a time, and when he looked back, I could see the toll that time had taken on this man. It was different from the toll that time had taken on me, though it wasn't so different that I didn't recognize it. Something happens as the years begin to slip away. I'm not sure I fully understand it, but I think it's a bit like one of the bad dreams we all have as children. As much as it scares us, we're always a bit saddened when it's over, because part of us wants to go back and see if we can make it turn out differently. I think a part of Jeremy wanted to go back, too. To see if he could make things turn out differently. Only it was too late for that now.

"There was a turning point," he said quietly. "Not long after what had happened with Melissa. I had gotten into an argument with my mother. I don't even remember what it was about now. Probably something stupid. But it was enough to stir things up inside me. I remember looking at her, and thinking how much I wanted to see her dead. I mean, kids think that kind of stuff all the

time. You know that. They may not want to admit it, but it's there just the same.

"Anyway, I remember looking at her, wishing this terrible thing, and seeing a godawful look come into her eyes. It was the same thing I had seen in Melissa's eyes just before I had sent her away, and it stopped me right there, cold, realizing how close I was coming to doing it again."

Jeremy was looking through me now, the toll still showing on his face. "That was the first time, Dave, that I was able to stop it. And I haven't let it overtake me since then."

"I'm sorry," I whispered. The fear that had come with me this afternoon was gone now, replaced by something far more sympathetic. Jeremy Taft, of that long-ago, childhood summer, was a changed man. It had been a struggle for him, as I guess it was a struggle for all of us trying to make our way through adolescence and into adulthood. But his was a struggle that would always be with him. Silently, I wished him luck.

We didn't say much else after that. I stood on the porch and watched him drive away—headed where, I didn't know, because I didn't ask—and I felt a strange heaviness raise off my shoulders. I don't know if it was the fear I had been carrying all those years. Or if maybe it was the guilt about what had happened to Andy Bale that summer. But it lifted, and I felt ready to get on with my life.

Much later, I tracked down Melissa in a small town set back in the mountains near the Oregon border. I kept remembering that time I had bumped into her outside Morgan's Five & Dime. She had been afraid of me that day. She had recognized me and she had been afraid. I wish I had known it at the time.

She was living in a small group home, along with three other adults who were apparently having trouble adapting to the outside world. I gave it a good deal of thought before deciding to leave her to her own life. If she had seen me again, if I had frightened her, I'm not sure I could have lived with myself. So I left her alone, knowing that like Jeremy, she would be struggling with those long-ago demons for the rest of her life.

And maybe the hardest part for me that day was knowing that in her eyes, I was one of those demons. •

Tourist Attraction

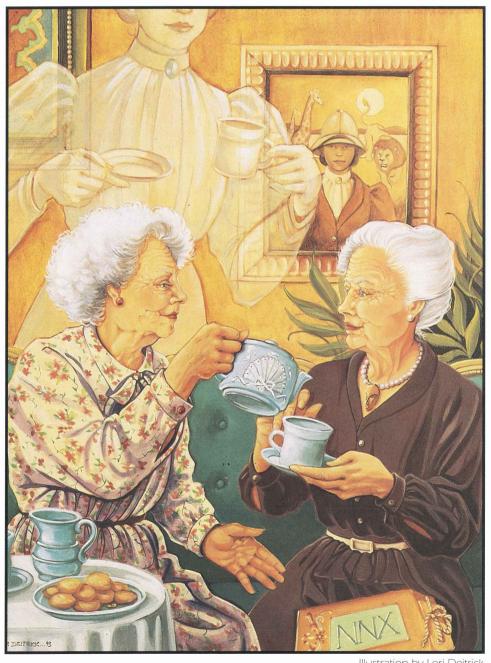


Illustration by Lori Deitrick

Juleen Brantingham

It didn't start with the sketchbook, but the day I presented that item to Cecile was the day things started to work out so nicely. Or go to hell in a handbasket, if you believe my sister.

It was late afternoon, shortly before teatime, a meal we'd begun to take in place of dinner when the price of meat became so outrageous. We were enjoying the breezes on the front gallery overlooking the flower garden and counting up all the tourists trooping in to see Sister Daisy-not a Nettleton, you understand; Sister Daisy is her stage name, so to speak—at her fortune-telling establishment down the street. Truth to tell, we were feeling a touch envious of Daisy. Our lives were boring compared to hers, the way she was always meeting new people and having herself a fine time, like a party every day of the week.

The sight of the flowers bobbing in the garden reminded me of something and I clucked my tongue and reached into the needlework bag beside me. "Now what is the matter with me? I'm so forgetful. Here I am wishing for a car crash or a hailstorm to break the monotony and all the time I've got—"

I pulled out the book with crackleboard covers and handed it to Cecile, smiling with anticipation.

Cecile held it out at arm's length, scowling as if it were a snake that might turn and bite her. "This is Grandmother's sketchbook that she took to Africa with her that time Grandfather had to go and hunt down that missing heir. Refresh my memory. Why did she never draw anything but plants and flowers? She had a continent full of lions and giraffes and what-have-you. Why plants, for pity's sake? She could have stayed at home like a proper Nettleton if she only wanted to draw pictures of plants."

"Now, sister, you know Grandmother couldn't get close enough to giraffes and elephants to draw them. You remember Mama telling us how nearsighted she was. You've heard that story at least a hundred times."

We exchanged a sour look. From our earliest years we could remember hanging on the arm of Mama's chair and listening to her talk about Cousin William's wedding, Aunt Aimee's night at the opera, Great-grandmother's trouble with the bees. At the ages of seven and three, we'd found those stories fascinating. At ages seventy-seven and seventy-three, having repeated each story to anyone who would sit still for it, we couldn't avoid admitting that respectable families lead boring lives. Our grandparents' trip to Africa was one of the rare, adventurous exceptions.

But we'd found a solution to our problem. "Anyway, it's not Grandmother's sketchbook. It belonged to Beatrix, Great-grandfather's daughter by his first wife." Greatgrandfather, had he been eavesdropping on our chat from his place among the angels, as Cecile suggested the day I invented our game, would have been shocked to learn he'd been married more than once. Cecile worries about that kind of thing. It had been difficult to persuade her that we were no more guilty of lying than we had been when playing "Let's Pretend" as children.

"Oh, Pauline, this is too easy. You should have given me something like that ivory fan from China. Now that was tricky, inventing a story about it when we decided not to allow Beatrix a trip to China."

We had rules for our story-objects, very strict rules. "It is *not* too easy. How did Beatrix find time to draw when she was always traipsing around talking to kings and mapping rivers and climbing mountains and shooting everything that walked on four feet?" Sometimes Cecile annoys the dickens out of me; she's better at making up stories than I am, though I'd never tell her that to save my soul.

"She did it after she broke her leg, of course."

This was more like it. "Do tell," I said. Cecile proceeded to tell me a story about the time Beatrix shot at a charging lion, and though she didn't miss—she was a better shot than most men at a time when a gentleman prided himself on his ability to shoot straight—this lion was tougher than the average king of beasts, and as he was dying he sprang on Great-aunt Beatrix and knocked her to the ground. She wasn't clawed—well, not badly—but her leg was broken.

"Luckily a doctor—and his wife, of course"—Cecile couldn't allow even a fictitious Nettleton lady to engage

in anything scandalous—"had accompanied her on this safari. He set her leg, but the next day she developed a fever and he decided it wasn't safe to move her."

"Oh, now, this isn't fair. If Beatrix was too sick to be moved, she certainly wasn't well enough to sit up and draw pictures."

"I'm not finished," Cecile said frostily. "It was a week before she recovered from her fever, and by then the rainy season was upon them."

"Do they have a rainy season in Africa? I thought that was only in India."

"They do in the part of Africa where this story takes place. Now, as I was saying before I was so rudely interrupted, the rainy season was upon them and the rivers they'd forded so easily on their way to lion country were now raging torrents so they had to wait for the waters to go down. Beatrix couldn't hunt with her broken leg and she was such an active woman she couldn't bear to sit and do nothing all day, so she taught herself to draw and she did these beautiful pictures, planning to write a book about the plant kingdom of Africa. And look!" She flipped the book open. "Some of the pages are water-spotted because it was still raining now and then." She didn't trouble to hide her smug look.

"Well, all right," I said. "But she didn't teach herself to draw while she was in Africa. There was that time she was at the university, you remember, and she had to make drawings of specimens in her science classes." That had been my own story, occasioned by Cecile's discovery of some glassware we thought might be test tubes.

Then I sprang my trap. "Look at the bottom of the page. How do you explain that?"

Grandmother Nettleton had signed her initials to each sketch: X for Xylia, N for Norris—her maiden name, and N for Nettleton.

Cecile wasn't stumped for more than a minute. "Well, you know Great-aunt Beatrix was more than a little eccentric. Where other people would sign their initials, she signed her terminals, the last letters of her name. X for Beatrix, and the last N for Nettleton, of course, and—" She tapped a fingernail against her teeth. She's always doing that and I'm convinced it's a kind of bragging because she still has her own and I don't. "Her middle name was Franklin. She was named after an uncle on her mother's side."

"Oh, poo."

"And my prize . . ." She dragged it out, delighting in the suspense, though I already knew what she was going to say, and I was making a face at the thought of the scratches that nasty antler-table would give me. "It's my turn to dust Beatrix—Beatrix Franklin's bedroom tomorrow. As my prize, you have to take an extra turn."

"Sister, that room is getting dreadfully cluttered, don't you think?"

Until recently the bedroom in question had been Cecile's. It was my idea to put the guns, maps, carved wooden mask, cannibal spears (well, the salesman *told* Aunt Aimee they'd belonged to cannibals), and the nasty table made out of antlers in there after we'd made up stories about them, as if Great-aunt Beatrix might return any day

from her exploration of the far-flung corners of the world and expect to find her bedroom just the way she'd left it.

Cecile had moved her things into my room, which was a comfort to both of us when the old house creaked and groaned in the night, making us think burglars were trying to get in, though Cecile takes up more than her fair share of wardrobe space and she's always saying I snore, which I don't.

"Maybe we should take a few of the bulkier items back upstairs," I suggested without much hope.

"Poo to you. You say that when it's your turn to dust, but when it's my turn you claim you enjoy looking at everything and remembering the stories."

We squabbled about it pleasurably for several minutes, breaking off only when Tammy, the girl from next door, stopped to visit. We had few visitors at that time, our hospitality being constrained by our budget, and we'd gotten out of the habit of inviting people. We'd even lost touch with the family, though we're related to half the people in the county. But Tammy, friendly little soul, from the time she was old enough to toddle around by herself, knew how to make herself welcome.

As usual she was bubbling over with excitement, her red curls bouncing and her smile lighting up her face. Tammy talks a mile a minute, and sometimes rather than trying to follow every word, I just let them flow over me like a river.

The strait-laced Nettletons couldn't hold a candle to young people of today, I've often thought, cautioning myself against envy. Tammy was about to leave for an art school up north and she had to tell us about all the things she was going to see and do, pausing to mourn now and then because she would be leaving this boy she'd just met, Tim his name was; I didn't catch his last name, and it's possible Tammy didn't know it because she tends to ignore details she regards as unimportant.

Of course we told her we would miss her dreadfully and Tim, if he had any sense, would miss her as well. She expressed doubts about that, mentioning some person of low character named Suzette who seemed all too willing to console Tim should he grow melancholy in Tammy's absence.

While Cecile was cautioning her against the dangers of sinful New York—in ways she's just like Papa—I was saying a silent prayer that Tammy wouldn't let this new boyfriend or anything else stop her from having what might be the greatest adventure of her life.

As she was leaving she happened to mention she needed practice in lettering and if we wanted any signs painted, she'd be happy to do it for us. She must have been teasing because why on earth would two elderly maiden ladies need a sign? It wasn't as though we were about to take in laundry or sell fried chicken and my cream biscuits from the back door, though we had briefly considered the latter when we found the roof was leaking and we couldn't scrape up the money to have it fixed.

Cecile, who couldn't bear to be teased or laughed at, said, "Why, Tammy, how thoughtful. You know, I was saying to Pauline just the other day we should have a sign to hang by the front door." She indicated the size with her

hands, a little larger than a sheet of notebook paper. "A small one, nothing flashy. Your most conservative style of lettering. It should say 'The Birthplace of Beatrix Franklin Nettleton.' And maybe you should put in that she was America's first woman explorer."

I had to put up my hand to hide a smile. Here I'd always claimed Cecile had no sense of fun.

Tammy promised we'd have the sign before she left for school and she never raised an eyebrow at "America's first woman explorer."

It puzzled me for a moment but, as I said, Tammy tends to ignore details she regards as unimportant.

Two days after Tammy delivered the sign and we nailed it up by the front door, I was working in the flower garden when a party of tourists walking down the street from Sister Daisy's noticed the white plaque with its neat black lettering and asked if the house were open for tours. I never could resist a bit of mischief, a character flaw I'm proud to say I haven't overcome in all my seventy-seven years.

"Why, of course it is, my dears. If you'll come this way, please." Taking off my gloves and floppy hat I led them inside and proceeded to spend nearly an hour telling stories about "our great-aunt, the famous explorer you all read about in your history books, I'm sure." I showed them Beatrix's bedroom and the mementoes of her "travels" and had myself a fine time. The tourists must have enjoyed it, too, because when they left, one of the men pressed a ten-dollar bill into my hand.

It caused no end of trouble with Cecile. "Pauline Jeanette Nettleton, you ought to be ashamed of yourself!"

"I don't see why."

"It's fraud, sister. There never was any such person as Beatrix Franklin Nettleton. When those people find out the truth they'll have you put in jail."

Cecile was born when I was four years old and after a short pause she began to tell me how to behave. She's never stopped.

"Oh, poo. What judge in the county would put two old ladies in jail? Nettleton ladies at that. Our family still has a name in this town, I'll have you know, what with Papa's picture hanging on the courthouse wall right next to that local man who was a Supreme Court justice. Besides, it's ten whole dollars! Just think what we can do with it."

Perhaps circumstances conspired for me to take an unfair advantage. Cecile had just returned from the market where she said she'd had to ask herself how long it would be before we were reduced to eating cat food. In any case, she allowed herself to be persuaded.

"Papa must be turning in his grave!" she said. But my head was filled with thoughts of sugar, butter, and cream, and I paid her no mind.

The Drews were "not our sort of people" according to Papa, who'd been inclined to lay down some pretty unreasonable rules of behavior. But Papa was long gone to his reward and when you're seventy-seven and seventy-three years old, your "sort" becomes anyone who's left of your generation, even if she does drink beer, and from the can at that.

Feeling the same financial pinch as we were, Daisy Drew had set herself up as a fortune teller, with a crystal ball and tarot cards and beaded curtains and all the other trappings that people who believe in that sort of thing seem to expect. But she chose her clientele so scrupulously even Papa might have approved.

"Sweetheart, my family has lived in these parts since God invented dirt," she would say to any of the local people foolish enough to consult her. "Now tell the truth, have you ever heard of one of the Drews having second sight?"

Tourists flocked in droves to see "Sister Daisy," dressed up in her flowing, colorful skirts and ropes of beads and the brightly colored kerchief she wore like a turban. She was shameless, the things she bragged of telling them, ocean voyages and tall dark strangers and the like.

One day shortly after my visit from the tourists we had Daisy in to tea—tea for Cecile and me, beer for Sister Daisy, and she was considerate enough to bring her own—and Cecile was still fussing about the money and I was still insisting I'd done nothing wrong.

"She's right, Miss Cecile," Sister Daisy said, her turbaned head bobbing like a tulip. "Tourists don't care if you tell them lies, long as they're interesting lies. You take my fortune-telling, for instance. I put on a good show, but I never ask for money. Might be fraud if I did that. What I do is, I set out a cigar box with a little sign on it, says 'donations.' If the people who come to see me want to drop their spare change in that box, that's not *my* fault, is it?"

"Besides, it's fun," I said, my nose stuck in my tea cup so I could pretend I hadn't said anything if Cecile got riled up about it.

But it wasn't spare *change* the tourists were leaving in that box, which we might have guessed from the fact that Sister Daisy had had her house painted this past spring. No one whose sole source of income is what Sister Daisy calls "the Social and Security" can afford to have their house painted and matching rose bushes planted by the walk. Not to call my sister a snoop, the whole business preyed on her mind, and one day she stopped at Sister Daisy's on her way to market and peeked into that box and came home all agog because there were ten- and twenty-dollar bills in there.

And there was still the worrisome matter of the roof, the condition of which we hadn't noticed until rain had ruined half the books in Papa's study.

The first group of tourists must have mentioned to others about having visited the birthplace of a famous explorer because not long after, more of them showed up at the door. Cecile told me about it after they left, but I'd already heard her talking in Beatrix Franklin's bedroom and had taken the appropriate action.

"I decided that if you were about to go to jail I might as well get arrested myself so I could look after you. Since you don't have the sense God gave a gnat, you'll probably forget to wear your slippers against the cold of those concrete floors."

My sister is not long on tact. "You were right about one thing. It was fun," she added, but she said it as if she were ashamed.

It wasn't until then she noticed the punchbowl I'd hurried to place by the door when I heard her talking in the other room. Taped to it was a sign that said 'donations.' Luckily the tourists had seen it on their way out.

"You might have chosen something less valuable than Mama's crystal punchbowl," she fussed. "Suppose someone breaks it? Or steals it?"

I was to point out later that by assuming we would do this again she had agreed to continue the deception. Cecile insisted she hadn't meant that at all but by then it was too late.

"That bowl has a crack in the bottom, and it's of no earthly use. Remember, we offered it to Miss Reba at the antique shop last fall so we could have someone come in and look at the furnace. She wouldn't take it and we had to sell my silver Explorer spoons instead." I'd hated to part with those spoons, but Miss Reba gave us a good price for them.

I paused, guessing at the dimensions of the central hall and mentally rearranging furniture. "You know what we could do? We could put the library table against that wall and get us a book for a guest register. Then one of us could sit at the table and tend the book, keeping an eye on the donations, while the other one takes the tourists around and tells the stories."

It made Cecile nervous the way things fell into place after that, as if we'd planned the whole thing from the beginning. Tourists were delighted by the stories of "America's first woman explorer," and their donations kept adding up, and it began to look as if we'd be able to have the roof fixed after all.

"It's as if someone *up there* wants us to do this so we can save our home," Cecile said one day, pointing to the ceiling and looking up with a worshipful attitude.

Now, heaven is one of the few things I do believe in, but I also believe the souls who go there are much too busy singing hymns and enjoying themselves to pay any mind to the world of troubles they've left behind. I'm afraid I was a little short with Cecile.

"Up there? Did you take in a boarder while I was at the market?"

"You know what I mean," she said, pulling a hand-kerchief from her sleeve and dabbing at her eyes. She wouldn't say another word for the rest of the afternoon. I finally made a batch of my cream biscuits as a peace offering and we had them for tea, which we served in the north parlor beneath a moth-eaten lion's head. We told the tourists it was a trophy of one of Beatrix Franklin's safaris, but actually it was the prize of Aunt Aimee's mad shopping expeditions. According to Papa, his sister had been inclined to lay out good money for any damnfool thing that caught her eye and it was a mercy she'd died young before she'd had time to put us all in the poorhouse.

Though we didn't advertise—at this Cecile drew the line—tourists kept knocking at our door. When Cecile's conscience flared up, I simply reminded her that even if the life of Beatrix Franklin Nettleton was made up out of whole cloth, everything else we said was the truth and educational besides.

Tourist Attraction 27

"The design of the house is in the transitional style between French Colonial and Anglo-American, chiefly noted for its symmetry. It's been in our family for several generations. You noticed, I am sure, the Doric columns and the door graced with sidelights. It was Beatrix Franklin who had the plain glass of the transom replaced with stained glass depicting a scene from her travels."

As children, we'd been told the figure was an angel bearing the sword of justice to free the downtrodden, but we told the tourists it was a savage threatening a group of missionaries and Beatrix Franklin had saved their lives by passing herself off as a powerful witch doctor.

But it wasn't the architectural details that were my favorite part, it was the children. Just to see their eyes growing wide and their mouths making little oh's when I told stories about stalking lions and exploring mountains and meeting kings dressed in leopardskins put a smile on my face for the rest of the day. I liked to think that after visiting our house these children might grow up with a taste for adventure themselves. It meant more to me than all the money their parents poured into the donations bowl.

We never took the tourists upstairs, partly because of Cecile's arthritic knees and partly because generations of thrifty Nettletons had filled the upper rooms with clothing and furniture that was too worn to be decent but too good to throw away. In taking items about which to make up stories we hadn't emptied a space big enough to park a good-sized elephant.

The first floor is more than adequate for our needs. There are two parlors, one to either side of the hall, so on those evenings when we couldn't bear the lion's glassy stare, we retreated to the south parlor, filled with Mama's bric-a-brac. Behind each parlor is a bedroom; "Beatrix Franklin's" had the brass-bound trunks, maps, and the table made out of antlers—ugly old piece and my personal cross to bear—and "gifts from maharajahs and kings," which were actually the trophies of Aunt Aimee's kind of safari. There was the sleigh bed Cecile used to sleep in, covered with a patchwork quilt Miss Reba said was too shabby and commonplace to sell; that had been the winter before we invented Beatrix and didn't know where our next skimpy tea was coming from.

At the end of the hall is the kitchen. At the rear are two side galleries; Papa had had one glassed in the year he was elected to the bench, and that's where Cecile grows her spider plants and philodendrons, though now they share space with a telescope, glassware, and implements that look vaguely scientific and we tell the tourists it was "Beatrix Franklin's laboratory."

We had the roof fixed in August, and tea—it was, we decided, too nice a habit to give up and what do two old ladies need with meat more than once or twice a week, it would only make us fat—began to feature an iced cake to accompany our dainty bread-and-butter sandwiches.

Though I was grateful to the tourists and blessed their gullible souls, sometimes I had to have a little time to myself. The second floor was my sanctuary, where I would retreat with a book and a glass of lemonade. Once it had provided sleeping space for several children and poor relations, with room left over for visiting cousins, but those

days were long gone. It was crowded with boxes and trunks, overstuffed chairs losing their stuffing, fire guards and rolled-up rugs, wobbly tables, boots and buttonhooks and books no one had perused in a hundred years. Now and then I'd catch the faint aroma of lavender or balsam. If I'd believed in ghosts as Cecile did, that was the place I'd have expected to find them.

By late afternoon, even in autumn, the place is as hot as an oven but my circulation is poor so I find it a comfort. I paused in the doorway of the first room on the left, my bedroom as a child, and allowed memories to envelop me. So many happy times in this house, this room: late-night cups of cocoa with Cecile and our cousins, plotting mischief, sharing dreams, sharing secrets.

Making my way to an armchair, I happened to brush against a bureau with peeling veneer. I shuddered as if an icy hand had brushed the back of my neck.

Not all my secrets were happy ones. I set down my book and my glass and opened the bureau's bottom drawer. Lifting the leatherbound writing case from the drawer, I clasped it to my chest and sighed. I didn't need to open it; I remembered each word of every letter. Regret made a painful knot where my heart used to be. I could have had a different kind of life, the kind I'd dreamed of, but I'd lost my courage at the last minute.

Because I was a Nettleton lady. Not that Nettleton ladies were cowards, but in my case I couldn't continue to be the one without becoming the other.

The pain passed after a moment and I put the case away. One of the benefits of old age, I have sometimes thought, is that one's memory gets so bad one can't clearly recall even the worst pain of one's life.

The drawer stuck when I tried to close it and I gave it a whack. The writing case slid to the back, and I heard a papery rustle. It took some groping, because now the drawer was stubbornly refusing to open all the way, but finally I was able to extract a rolled-up, yellowed paper. It was a sketch of a young, pretty woman—I don't think I'm vain in stating that I was once pretty—wearing a pith helmet and the sort of clothing one wears when traipsing through a jungle. In the background the artist, whose identity I've forgotten, had added a lion and a stumpy-looking giraffe.

It was chance reminders like this which made visits to the second floor so enjoyable. I'd almost forgotten that costume party, the last fete we'd held before Papa's health began to fail, forty years ago. I'd unearthed that costume from God knows where, probably another of Aunt Aimee's acquisitions, and all evening long I'd regaled our guests with tales of my "adventures in Africa."

For the first time it occurred to me that the seed of inspiration for our storytelling game might have been planted that night. I'd never enjoyed any fete as much as I had that one; my usual quiet self had disappeared, replaced by some bold, daring woman who told of doing things that would have shocked most women of my generation and social position.

Holding the sketch at arm's length, I examined it carefully. The subject looked like an adventuress, courgeous enough to climb mountains, ford raging rivers, and con-

28 Juleen Brantingham

front kings seven feet tall and wearing leopardskins and necklaces of teeth. Mounted in a suitably antique frame, who could say it wasn't over a hundred years old? Who could say that woman wasn't Beatrix Franklin Nettleton? There was little chance anyone would recognize the subject as the doddering crone I'd turned into.

Pleased with my discovery, I bore it off to show to my sister.

Tea was the high point of our day. We served it on a piecrust table in the north parlor. There's something cozy about that green-papered room beneath the lion's head, with candles burning on the mantle and wind sighing in the chimney. I almost feel like an adventurer myself, sharing a civilized meal by a campfire while beasts prowl the darkness.

The flow of visitors slackened with the coming of cooler weather, and Cecile and I had more time to chat, to do the marketing, and to prepare special dishes for teatime. On Saturday, a week after I found the sketch and put it up over the donations bowl, it was again my turn to serve. I'd spent the afternoon preparing petits fours, a treat we hadn't enjoyed since before Mama died. When I carried in the tea-tray. I found Cecile in a cheerful mood.

"Oh, Pauline, wait until you hear. It's perfectly delightful." She had a hand pressed to her bosom as if to quell an unladylike giggle.

"Let me guess. One of our visitors asked what movies Beatrix Franklin was in."

"Oh, my, no. That happens all the time." It saddens me sometimes, the fact that many of our visitors think a person couldn't have been noteworthy unless he or she was in the movies.

"A ghost," Cecile said. "One of the women today thought she saw Beatrix's ghost." Her giggle escaped, and if there had been any Nettleton ghosts hanging about they would have rattled their chains in stern rebuke.

A chill passed over me, just the briefest touch of cold. I got up and shut the window and thought no more about it.

After the woman's near-hysterical report, Cecile said, the others had rushed back to the room to see for themselves. Those who thought they'd seen something described it as a misty form crouched over Beatrix Franklin's writing desk.

It was amusing, but I've never believed in ghosts.

Christmas was more cheerful that year than for many years in the past. Cecile unearthed the Christmas card list with all the family addresses and, delighted that once again we could afford to indulge ourselves this way, we spent an entire evening addressing cards and adding a personal note to each one. We received few cards ourselves. As I told Cecile, our relatives probably thought we were dead, two old sticks like us.

Tammy came home for a visit and on Christmas Eve we had her and her family over for punch and cookies. Tammy couldn't stop talking about the work she was doing in art school, the sights she'd seen, the people she'd met. Now and then her spirits would droop when she remembered that Tim, who was holding out against Suzette's charms, had to attend a family dinner that evening and we'd missed another chance to meet him.

We saw her once more before she returned to New York. On her way to the airport she ran in to show us her engagement ring.

Through the dreary days of January and February we spent one day a week giving one of the unused rooms a good turning-out. Cecile's knees worsened in cold weather, and climbing the stairs was torment for her, but her sense of fairness wouldn't allow her to put the whole job on my shoulders. One evening we were in the parlor discussing which room to tackle next when Cecile, in the middle of a sentence, suddenly lurched to her feet and went running—actually, it was something between a stagger and a gallop—toward the back of the house. Alarmed, I hurried after her. She ran through the kitchen to the little room at the back, a servant's room in the days when the family was prosperous enough to afford live-in help.

"Sister, what on earth is the matter with you?" She beckoned me into the room, where she'd turned on the lamp and was peering into all the corners. I couldn't see anything alarming in that dusty little room so, I put my arm around her and forced her to come out to the kitchen and sit down. Her face was gray and clammy with perspiration.

"Didn't you see it?" she asked breathlessly.

"See what?"

She drew back. "Don't laugh at me, Pauline. Don't you dare laugh." She looked as if she were about to burst into tears; laughter was the furthest thing from my mind. "I thought I saw a ghost. It came out of Beatrix Franklin's bedroom and went down there." She pointed toward the little room. "When I turned on the lamp it was standing at the head of the bed, but then I blinked and it was gone."

Just to assure her that I was taking it seriously, I went in and examined the room again. There was nothing there, nothing that wasn't supposed to be. The clue to her "ghost," I was certain, was to be found in the fact that when she blinked, it disappeared. A spot of blurred vision, I concluded. Perhaps she'd had the same thought; when she came to the door a minute later she seemed to want to pretend the whole thing had never happened.

"We've been putting off cleaning this room for far too long. Just look at the mess," she said.

I suppose every house has some small room or corner where objects pause to rest before going on to the trash can or the Salvation Army. This one was ours. During our current fit of turning-out, we'd brought down items from the upper rooms and stacked them here until we could see if Miss Reba was willing to take them off our hands. Not that we needed money as badly as before, but thrift is a Nettleton trait. Aside from sagging cartons, a heap of clothing older than I was, and a couple of flatirons, the room held only a bed, a nightstand, and a lamp with a cracked shade; there was a single window, high on the wall. No ghosts, though there was enough dust to choke a horse.

Next morning we rolled up our sleeves and set to work, Cecile saying a prayer of thanks, I'm certain, that this time she wouldn't have to climb the stairs.

Tourist Attraction 29 No matter how thoroughly we'd cleaned, how carefully we checked the room before closing it up again, the windowsill was always littered with dead flies. Since Cecile has a horror of flies, I was the one who climbed on the bed to brush the papery bodies into the wastebasket.

"I always hated this room," Cecile commented.

"Don't worry about the flies, dear. I'll have them out in a jiffy."

"It's not the flies." I heard her pushing cartons to the side of the room. Panting slightly, she reminded me of the time we'd had the measles and Mama brought us down here every morning so the maid wouldn't have to run up and down stairs to take care of us. "You slept through every livelong day and I was bored to tears," she said. "The window is so high I couldn't even look out. I felt like I was in prison."

I carried the wastebasket to the door. "Only thing I remember is beating you at checkers about a hundred times."

Cecile sniffed. I thought she meant it as a comment about my winning those checkers games, but it turned out she didn't. "I swear to goodness it still smells like a sickroom," she said.

"It is musty, isn't it? I'll open the window. Maybe we should haul this mattress to the trash."

While Cecile began sweeping the other side of the room, I tugged at the mattress, humming a tune Mama used to play on the piano. The mattress was halfway off the bed when I saw something that turned me cold.

"Sister, what's wrong? You're not having chest pains, are you? I knew that mattress was too heavy."

I waved a hand to make her stop fussing. "Do you remember that ivory fan from China? The one Great-grandfather found in a curio shop in Savannah?"

"Of course I do. What about it?"

"Do you remember the Beatrix story you made up about it?"

"One of my best," she bragged; she repeated the story almost word for word as she'd told it over a year before.

By the rules of our game, she couldn't add a trip to China to Beatrix Franklin's history, and she couldn't say it had been bought in a shop. So she said Beatrix won it in a card game on board the ship that was bringing her back to America after one of her explorations. As lagniappe —Cecile never tells a story without adding a few little extras—she said that Beatrix gave the fan to a friend who'd come to visit her. Her friend had died in this very house, a victim of the yellow fever epidemic of 1892. Not that either one of us had the least idea if there had been a yellow fever epidemic in this county in 1892.

Cecile left out the part I'd been listening for. "What was the name you made up for Beatrix Franklin's friend?"

"Eulalie Hawes. I always liked that name, Eulalie."

"Oh, sister," I said. I pointed to the wall. Scratched in the plaster was the name Eulalie Hawes and the date 1892.

Cecile leaned over to peer at the wall; between her bad eyesight and the faintness of the marks she almost had to touch her nose to the plaster.

"I don't remember ever seeing those marks before," I said.

"Well, how do you think they got there, for pity's sake?" "Well, how *did* they?" I sounded a touch hysterical.

"Eulalie must have been a cook or a maid, working for Grandmother. You know how young girls are. She must have been lying here one night, couldn't sleep, and she just reached out and scratched her name in the wall for something to do, something to show she was here. You can bet Grandfather would have given her what-for if he ever saw it."

"Why didn't we ever see the marks before?"

"You just now pulled the mattress off the bed, didn't you? You can't see them unless you get real close, as Eulalie would have been, lying in bed."

"Then how do you account for the coincidence, that being the same name as the one you made up for your story?"

"Poo on your coincidence. All that time we were sick and I was lying there bored to tears, I must have read Eulalie's name and remembered it without knowing I remembered it, and when I wanted a name for my story, it came back to me."

"Strange you should suddenly remember it after all these years."

"Not strange at all. They say the human brain never forgets anything. You stimulate it in the right place, and something you hadn't thought of in years becomes as fresh as though it happened only five minutes ago."

Cecile had always taken an interest in matters scientific, having once planned to become a doctor. I was willing to take her word for it.

But I must confess it made me uneasy when Cecile suggested we take advantage of the name and date being scratched in the wall and set the place up as it would have looked as a sickroom late in the last century, with a couple of those antique dresses hanging on the wall and the ivory fan in a frame over the bed, adding this room to the tour and telling the story about Beatrix Franklin's friend dying of yellow fever.

That place on the opposite side of the bed from where the marks were, was the exact same place where Cecile's "ghost" had disappeared the night before, just where a person would have had to stand if they'd been trying to scratch something in the plaster. Cecile didn't bring it up and I wasn't about to remind her, nor to tell her that the thing that made me look at the wall in the first place was the crumbs of plaster that fell off the mattress as I was pulling it from the bed.

It was on a Tuesday after the tourist business started to pick up again in spring, and it had been raining. I shall always remember the way the red lights reflected on the wet road. A tourist, lingering in Beatrix Franklin's bedroom, reeled out to the hall clutching his chest and stammering that a ghost had tried to embrace him.

After calling the paramedics and seeing the man taken away, we closed the house and sat down to take tea and consider the situation.

"I've said all along that what we're doing is wrong. We're taking advantage of the ignorance of these poor tourists. It's fraud, and Papa would be ashamed. We'd best take this as a warning and stop before we get into serious trouble."

"Oh, poo," I told her. "That man was fat as a pig. It's a wonder he didn't have a heart attack long before this."

"But a *ghost*, for pity's sake. Why do people keep saying that? If there were a ghost in our house, wouldn't we be the first to see it?"

Her expression was wistful. She had never again referred to her own experience, but I knew she'd dearly love to see a ghost, even if it did scare her half to death.

"You know what gossip is like. That tourist last year probably told someone else and the fat man heard about it and he came here expecting to see something, so of course he did. I just hope our house doesn't get a reputation for being haunted, or we'll get all the wrong sort of people coming in."

"Those books you bring home from the library, such odd subjects and titles. You didn't read of some way to project an image that looks like a ghost and—"

"No!" Maybe I wasn't as fussy about petty rules and regulations as Cecile, but I resented the implication that I'd do something crooked.

Later on Cecile wheeled out the television, which we keep in a closet during the day, and we watched the evening news. There was a report about our stricken tourist; turned out he hadn't had a heart attack but a case of severe indigestion. But we almost missed the good news because of how the reporter prefaced his story: "... incident at the birthplace of Beatrix Franklin Nettleton, the woman who discovered the source of the Nile."

Cecile looked daggers at me. "You didn't."

My face must have been redder than a rose. "I may have mentioned it to a nice young man I met at the market. How many people remember who really discovered the source of the Nile?"

"Pauline Jeannette Nettleton! That reporter is a local man, and we swore on Papa's Bible we'd never tell our stories to local people. We're going to be arrested for sure! What would Papa think?"

"Papa wouldn't want his daughters to lose the family home for want of a few dollars, would he?" I asked. But I didn't think to say it until I was alone in the kitchen, doing penance by washing the dishes even though it wasn't my turn.

There had been something about speaking to that news reporter that I hadn't told Cecile, something about the way our neighbors acted when they commented on how many people were taking the tour of our house, something that was starting to bother me: not a one of them, seeing or hearing the name Beatrix Franklin Nettleton, ever said "Who?" or "I never heard of her." Tammy, too, I recalled, when Cecile asked her to paint the sign, acted as if she'd always known about our "great-aunt, the famous explorer." Maybe they were afraid of looking ignorant but, as I said, it was starting to bother me. Beatrix Franklin wasn't real, so how could people who lived in this town "remember" her and "remember" this as being the house where she'd been born?

Thanks to the television report, next day there were more tourists than ever, so many that while Cecile was taking one group around, there were people lined up for a second tour. I was at sixes and sevens, wondering what to do, when Tammy's mother, Miss Ellen, who must have noticed the long line of people waiting on the porch, came and offered to tend the guest register. We'd never been close to Miss Ellen, her being so busy with her work at the hospital, but not long before she'd come to us in tears to say that Tammy's boyfriend had gone to New York for a visit and without giving their families time to fly up and meet them, they'd decided to get married. Miss Ellen was very upset; she'd spent months planning a big wedding. We had a good cry together, and since then she'd been much more friendly. The day after the television report she tended the register all afternoon and offered to come back whenever we needed her.

With so much on our minds, we had little time to be concerned about ghosts, though occasional visitors continued to report seeing a misty gray form near the writing desk or, more often, hovering in the depths of the dimly reflective mirror hanging above the antler table. Donations doubled, then doubled again.

It was the second Wednesday in August—we closed the house on Wednesdays, needing one day a week to do the marketing and mending—and Sister Daisy had driven Cecile to Miss Reba's; I was alone when a woman came to the door, saying she was from the museum. I thought she wanted a donation and, pleased that unlike other years I wouldn't have to say no, I was trying to remember where I'd left my purse.

"Oh, no, you've already done so much for us. In fact, I'm embarrassed to tell you—you remember two years ago you loaned us some old photographs? After the exhibit closed we packed your photographs to be returned, but somehow the box was mislaid and we only just found it again. Please accept our apologies."

I assured her there was nothing to apologize for. I'd forgotten about Papa's collection, and if I'd ever thought of it, it would have been to thank my lucky stars I didn't have to move that clutter around while I was dusting.

I invited her in and fixed tea and went through the box while she checked items off a list. I was only being polite. What did I care if a few photographs turned up missing? They were dim and murky, some on paper and some on metal plates, pictures of unidentifiable people in old-fashioned clothing posed as stiffly as corpses; their expressions were corpselike too.

We worked our way through the box, each photograph protected with a layer of paper. When I came to the last one, I peered at the figure on the right with disbelief, then excitement tinged with disappointment because I would have to give it back.

"This one isn't—"

"It isn't damaged, is it?" she asked, alarmed.

"No, but I don't think it belongs . . ."

"Oh, I agree. A photograph of two famous explorers meeting near a forbidden city in Africa doesn't really belong with the others, their being so common. It deserves an exhibit of its own. This would have been when Burton stopped in Africa on his way back to India, wouldn't it? To think he met our own Beatrix Franklin Nettleton while

Tourist Attraction 31

revisiting the sacred city of Sekla. And the proof of it is right here!"

Once again I was troubled because this woman seemed to know who Beatrix Franklin Nettleton was—seemed to know her well, in fact. Bemused, I studied the picture again. That was Sir Richard Francis Burton on the right. I couldn't be mistaken about that; at an early age I'd memorized the accomplishments of explorers the way boys memorize the vital statistics of ball players. I used to collect books and newspaper clippings and other items, the prize of my collection being the set of commemorative silver spoons picturing twelve famous explorers, which Papa had given me on my eighteenth birthday.

On Burton's left was a slender figure, possibly female, wearing a pith helmet, her face lost in the murk. The two were posed against a featureless wall.

Cecile, efficient and practical as usual, had made out the list; I recognized her handwriting. I could picture her with her nose almost pressed to the paper, taking pains to get things right. But the last item . . .

"Sir Richard Francis Burton and Miss Beatrix Franklin Nettleton standing on the outskirts of the sacred city of Sekla in central Somaliland"—what a tongue twister, I thought, trying not to laugh—"on the occasion of Burton's return to the forbidden city."

That was Burton, no doubt, and he may have been standing before some place named Sekla in central Somaliland, but heaven only knows who the figure beside him was. Or where the photograph came from; it wasn't Papa's; if Papa had ever owned a photograph of Sir Richard Francis Burton, I would have known about it.

I showed the young woman to the door, polite but inwardly seething. Cecile loaned the museum that collection *two years ago*. Before the first tourists knocked at our door, before Tammy painted the sign, and long before I'd innocently mentioned to that news reporter that our Great-aunt Beatrix Franklin Nettleton was the explorer who'd discovered the source of the Nile. To think I'd had to do the dishes out of turn for my tiny little mistake when Cecile had hunted down a photograph of a real explorer and told a gigantic lie to the people at the museum.

When Cecile returned from Miss Reba's, the look on her face might have stopped a charging elephant. It didn't stop me.

"I want to speak to you about this," I said coldly, pointing to the photograph I'd placed on the pie-crust table.

"I have something more important to discuss than a scrap of paper. I want to speak to you about your dishonesty."

"Dishonesty! My dishonesty?" I sputtered.

"It's one thing to make up stories about a woman who never lived, but didn't you realize that using the name of a real person would guarantee that we would be exposed?"

"Who on earth are you talking about?"

"Don't be a fool. Beatrix Franklin Nettleton, of course."

"The person you claim is standing beside Sir Richard Burton in that photograph?" I asked, poisonously sweet.

She went on as if she hadn't heard me. "You might have told me she was real. Why didn't you change her

name when we started taking money from tourists? Didn't you realize that a real woman has a real birthplace and a real history and someone who knows the truth can come along and have us arrested? I tell you, when Miss Reba told me about her customers fighting over your Beatrix Franklin Nettleton spoon I nearly fainted dead away."

It took time to get the story from her, the way she kept going on about my dishonesty and the "trick" I'd played, not telling her Beatrix Franklin was real. What I finally managed to piece together was that Miss Reba had just about given up hope of ever selling my spoons; then two customers who happened to be in the shop at the same time fell on the set as if it were the Holy Grail, each wanting a memento of a famous woman explorer. They'd nearly come to blows over it.

I fell into my chair. "Sister, there were no women in that set. No Beatrix Franklin Nettleton. How could there be? We made her up. She was never, ever real."

"Are you calling Miss Reba a liar?"

"Of course not. I'm saying someone made a mistake." "Someone did, and we both know who it was. Beatrix Franklin was a real person and you knew it; don't try to tell me you didn't. You owned those spoons for fifty years. You used to take them out and polish them every time you got a letter from that beau of yours."

I blushed at the unexpected reminder. It wasn't a beau who had sent me the letters I kept in my writing case, though that's what I'd allowed everyone to think. When I sent my last letter, declining the position he offered me, I couldn't have been more heartbroken if he *had* been my beau.

"Now, how can you claim you 'forgot' Beatrix Frank-lin Nettleton?" she asked.

It was beyond my understanding, but operating on the theory that attack is better than defense, I picked up the photograph and stuck it under her nose.

"Before we go any further, maybe you'd like to explain this."

She pulled back as if I'd offered her a dead fly. "I suppose you think it's funny to mock me because of my bad eyes."

"I'm sorry, sister. That's not what I meant." Cecile had developed eye problems in school, couldn't read two sentences without getting a headache. The doctor said she needed glasses; Papa said she'd never get a husband if she wore spectacles, so there went her hopes of becoming a doctor. Cecile never could get around Papa the way I could and, distracted by my own problems, I hadn't championed her cause. She was just like Papa, even when it was to her own detriment, so she'd never gotten glasses, which is why she can't drive a car and why she has horrible squint lines that give her a fierce look and make many of the neighborhood children afraid of her.

I described the photograph and read the list that Cecile herself had prepared. "Sir Richard Francis Burton and Miss Beatrix Franklin Nettleton standing on the outskirts of the sacred city of Sekla in central Somaliland . . ." It must have been nerves; I was struggling against laughter, trying to keep in mind that Cecile was in the wrong. "Sister, I swear—"

The extra s's made me lose control and Cecile (more s's), who hated being laughed at, thought I was laughing at her and stormed off in a huff.

It was the worst argument we'd had in our seventy-plus years. I didn't get the chance to scold Cecile for her lie to the people at the museum nor to get to the bottom of Miss Reba's mistake. Beatrix Franklin was as fictitious as the Easter Bunny, so how could there have been a spoon with her picture on it? Cecile wouldn't believe I hadn't been laughing at her, and when I tried to make things right, talking till I was blue in the face, she clamped her hands over her ears and shut herself in the gallery to tell her troubles to the spider plants and philodendrons.

For a week the atmosphere in the house was frosty; we communicated by notes and took tea in separate parlors.

The Labor Day inundation of tourists caught us before we had completely made up. Meanwhile there was some making-up going on next door as well. Tammy and Tim came home, and Tammy stopped by to say her mother still hadn't forgiven her for ruining plans for a big wedding.

"What could I do, Miss Pauline? I was so *lonely* up there without any of my friends, my family. When Tim showed up at the door, I felt . . ." She blushed.

"I think I can imagine," I said dryly. "Your mother should be thankful you got married first. So many girls would have asked him to stay the night and not given it another thought."

"It's funny about that. You know Mother's not the kind of woman to get upset about people living together without being married, and I know *you* have very progressive ideas. (She was kind enough not to add "for a woman your age.") But just when I was about to drag Tim into the bedroom, I thought of Miss Cecile. She'd have been so *disappointed* in me. And she's such a dear, sweet thing she'd never have said a word about it, even if she found out. But I would never be able to put my arms around her the way I always have, knowing how she felt, so I told Tim either he had to marry me or he had to turn around and get back on that plane."

Cecile would regard that as a triumph for right and virtue. I couldn't make up my mind if I should tell her and have her crowing about it for months, how her own good character had "saved" Tammy from sin.

I patted Tammy's hand. "Well, don't worry about your mother. The prospect of a grandchild has been known to smooth over much worse difficulties." That brought the sparkle back to her eyes, and she had to tell me about the nursery she was designing for the apartment they'd rented.

Cecile was conducting a tour at the time and Tammy and I were standing in the yard, far from the door, so when Cecile later accused me of eavesdropping it was totally unfair.

The next day I was the one who conducted the last tour. When I brought my group back to the hall, I was struck by inspiration at the sight of the grandfather clock.

"This is the famous clock you've all heard of. Beatrix Franklin died on September second at five-oh-seven p.m.

Ever since then on the anniversary of her death, at the same exact moment, the clock chimes once for every year since her birth."

But I'd outsmarted myself.

In the group was a teen-age boy who'd spent most of the tour gazing at the ceiling or flipping up the quilt to look under the bed or checking his watch, which was one of those elaborate things that looks as if it should be able to fill out your income tax form. He glanced at the clock and his eyes widened and my heart sank.

"Hey, this is September second, and five-oh-seven is ten minutes from now. Can we stay and listen?"

Close to panic, I looked toward the table where Cecile was sitting, waiting for me to finish. She was gaping at me like a dead fish. I knew I wasn't going to get any help from her.

"I'm terribly sorry, but we have to close at five. The tourist commission is very strict about things like that." It was feeble, but it was the only thing I could think of.

There was some muttering from the group, but they filed obediently out the door. I fell against it, sighing with relief.

Cecile was still imitating a dead fish.

"That was a close one," I said. "Imagine me not remembering that today is September second and then saying that's the day Beatrix Franklin died."

"That story about the clock chiming once for every year since her birth . . ."

"A nice touch, don't you think? The whole thing popped into my mind the minute I laid eyes on the clock. I think it's the most fascinating story I've ever made up."

"You didn't make it up. I made it up. Yesterday. You must have been hiding behind a door, eavesdropping."

"Well, of all the nerve!" I would have argued with her, but before I could I found myself counting up all the odd things that had happened, the name scratched in the plaster, the photograph, Miss Reba's mistake about the commemorative spoon. Not to mention reports of ghosts and local people acting as if they'd always known about Beatrix Franklin Nettleton. Now, both of us thinking we'd made up the exact same story. Where *had* I gotten the idea? A dream? I could almost remember, as if someone had been whispering in my ear.

Cecile must have been having the same thoughts. "Do you remember when I said someone *up there* was helping us so we could save our home? What if it wasn't someone *up there*? What if it was someone *down there* instead?" She pointed; I didn't pretend to think she meant the basement. "Oh, sister, something is terribly wrong. We're being punished."

I wanted to ask how it could be punishment for telling lies by changing things, making things happen so the lies were more believable. I wanted to, but my throat was so dry I couldn't get the words out.

"Pauline, we have to stop. We have to stop now, today. We must take down that sign, turn away the tourists, try to act as if we never heard the name Beatrix Franklin Nettleton."

The hour must have chimed, but I hadn't paid any attention. Tears came into my eyes. It wasn't the money. It

Tourist Attraction 33

was a relief not to have to worry about the house falling to ruin, nice to have cake for tea, to be able to send out Christmas cards, to have friends over for punch and cookies; but that was icing on the cake, so to speak. It was the excitement I'd hate to lose, meeting new people, seeing the little ones' eyes grow round when I told the stories. Nettleton ladies of our generation couldn't go off and have adventures, much as we might have liked to. When I invented our little game, Cecile and I had the chance to dream of what we might have done if things had been different. To give it up now, the thought was almost more than I could bear. But it was too uncanny, the way things were turning out.

"Maybe we should," I said.

The minute hand clicked to five-oh-seven . . . and the clock began to chime.

I stared, aghast. The clock had measured each hour, half-hour, and quarter-hour of our lives, never giving a minute's trouble.

The chiming went on and on and on. I looked at Cecile, saw her flinch at each chime. Suddenly she grabbed my hand and led me racing out of the house toward Sister Daisy's. She was wailing like one of the damned, but I'm afraid my own voice nearly drowned her out.

"There's no such a thing as ghosts," I said, intending it to be my last word on the subject.

"Then how do you explain what happened?"

"The works are broken. We must find a repairman."

"Why today? Why at the exact time we said Beatrix Franklin died? Why right after we made up the story about the clock chiming at the hour of her death? And come to think of it, why did we both make up the same story?"

"Coincidence." I meant that as my last word, too. If only they would leave me alone, give me a chance to collect my thoughts—convince myself I hadn't heard what I'd heard.

Cecile and Sister Daisy exchanged a look. Then Cecile shook her head, as slowly and solemnly as a judge.

"There is a ghost in our house, Pauline, and it's Papa. I knew he'd never approve of what we've been doing. He's doing these things to torment and frighten us, telling us the only way he can that we must stop."

"Excuse me," Sister Daisy put in. "If that clock chimed when you said it would, the same number of times you said it would, then it seems to me the ghost is saying just the opposite. You ask me, this ghost likes what you're doing. It wants to help you."

"Nonsense! Ghosts indeed! It's broken, I tell you."

"It's Papa." Cecile was giving me one of her dark looks. I'd always been able to wrap Papa around my little finger, given long enough to work on him, but Cecile never had the talent. She'd been punished once or twice for things I'd talked her into doing. It must have seemed to her it was happening again. I'd invented our game and invited the first tourists into the house, but it was Cecile who'd been scared half to death. She was probably thinking Papa had reserved the hottest flames of hell for her.

But Papa couldn't have been responsible for that clock's chiming; not Papa nor any other ghost.

Cecile clutched at Sister Daisy's hand. "You must help us, Sister Daisy. You must hold a seance for us, bring back Papa's ghost, so we can promise we'll never tell those lies again."

"A seance! Miss Cecile, you know I don't—"

"A seance!" I echoed. "Over my dead body!"

Sister Daisy patted Cecile's hand. "Sweetheart, you know I don't have any such powers. I wouldn't have the least idea how to hold a seance."

"Sister, you've taken leave of your senses." I got to my feet and folded my arms; as the elder sister, sometimes it's my duty to assert myself. "Come, Cecile, it's time for us to go home. I don't want to hear another word about ghosts. Sister Daisy, thank you for your hospitality."

Cecile followed me outside where we bid Sister Daisy good-night. She began to mutter to herself on the way home, but I couldn't make out what she was saying. We were halfway up the steps before I noticed someone waving at us from the walk next door. It was Tammy, talking a mile a minute as soon as she laid eyes on us.

". . . found you weren't at home and the door was open, I was afraid one of you was sick and had to go to the hospital or something."

"Oh, no, we just had a sudden whim to go and visit Sister Daisy," I said. The young man beside her had to be Tim.

Cecile had her head cocked, listening. "At least the clock has stopped chiming."

For a few minutes communication was difficult because all of us were talking at once. Cecile was describing the strange behavior of the clock while Tammy was introducing Tim—a Nettleton, of all people, a son of one of those relatives with whom we'd lost touch—saying his father owned a motel and didn't I agree that Tim's eyes were the bluest I'd ever seen and wasn't it wonderful that her mother had finally forgiven her for the hasty wedding. I was nodding to Tim and trying to find out in the most subtle manner if he were the old-fashioned type who would expect Tammy to give up her artwork in order to care for the baby-to-be, and Tim was saying something about a gift his father had asked him to deliver, and somehow Cecile got it into her head this was a much-belated Christmas gift from their branch of the family, and both the young people were trying to correct her.

At that same moment, everyone realized no one was listening to anyone else, and we all paused for breath.

The sudden silence made Tammy laugh. "Here, Miss Pauline," she said, thrusting a paper-wrapped parcel into my hands. "A tourist who was here a couple months ago wanted to send this to you, but she didn't have your address, so she sent it to the motel. Tim's father asked us to bring it over. Isn't it strange that the guy I fell in love with turned out to be related to the two people I love most in the world, next to my mother and father, and that you didn't even know him?"

Amazing she could say all that without pausing for breath. Extra lung capacity was probably a good thing for the baby-to-be, if only we could get Tammy to stop talking long enough for the baby-to-be to get some use out of it. When I made no move to open the parcel, Cecile did it for me. "Why would some tourist send you a book, Miss Pauline?"

"I have no idea, dear. It's not as if we don't already have more old books than any two people could possibly use."

"My stars!" Cecile said. I was becoming very annoyed with her. "We don't have this book, Pauline," she said, holding it so I could read the title. Her hands were shaking; the book fell and its cover, held by a few frayed threads, snapped off. When Tammy picked it up, it was open to the frontispiece.

"Why, Miss Pauline, this is the picture you have hanging in the hall. I didn't know your great-aunt wrote a book. How nice. 'The Botanic Kingdom of Darkest Africa: A Safari with Hand-glass and Sketchbook' by Beatrix Franklin Nettleton," she read.

It was that sketch of me done the night of the fete when I'd pretended to be an explorer, the same in every detail, down to the stumpy giraffe in the corner. I riffled the pages. The drawings were equally impossible, pictures Grandmother had sketched on her trip to Africa.

The date on the title page was thirty years before I was born, ten years before Grandmother and Grandfather set out for the dark continent.

I felt faint. "Someone is playing a joke on us," I said.

I don't remember saying good-night to Tammy and Tim. I don't remember much of anything until we were inside and Cecile was going on and on about our house being haunted.

"I was wrong to think it's Papa, and of course Sister Daisy is right. The ghost is trying to help us so we can go on telling our stories. Maybe it's the ghost of the real Beatrix Franklin Nettleton."

"Sister, Beatrix Franklin wasn't real."

"What about that spoon we sold to Miss Reba?"

"Did you see the spoon you're talking about?"

"No, but Miss Reba isn't the kind of person to make a mistake. And what about that photograph you showed me? Wasn't that a picture of the real Beatrix Franklin?"

"You were the one who claimed it was Beatrix Franklin when you wrote the list you gave the museum."

"I never wrote that line."

"Well, it looked like your handwriting."

"Well, it wasn't."

I had to get away. If I stayed where I was, I was going to shake Cecile until her teeth rattled. I went into Beatrix Franklin's bedroom. Cecile was at my heels when I crossed the room to look in the mirror, to fix my hair. With all I'd been through this afternoon and evening, it must have been a perfect fright.

A perfect fright was what I got when I looked in the mirror, but it wasn't my hair that gave it to me.

"Cecile, look!" She leaned over to squint. Then she gasped and drew back.

If she'd seen the same thing, it wasn't my eyes playing tricks on me. Reflected dimly in the mirror, as if she were standing behind us, was a pleasant-looking woman with red hair; she looked about fifty years old, and there was

something vaguely familiar about her smile, something vaguely odd about her clothing.

"It's a smudge," Cecile said with conviction. She rubbed at the edges of the figure, and it slowly faded from view.

In a panic, I ran out of the room; I started for the stairs—had to get away, had to be alone, had to have time to collect my thoughts, or I would go stark, staring mad. This time, blessedly, Cecile didn't follow.

Before I reached the stairs, I saw something else that shocked me right down to my toes.

All my breath went out of me. I just managed to pull out the chair from behind the table and sit down before my legs gave out.

It was my writing case. On the library table. How had it gotten there?

My thoughts were whirling and I didn't know if I was coming or going, but I will insist to my dying day that even then I never, ever for one instant considered that a ghost might have fetched it from its hiding place. I considered Tammy and Tim, but Tammy wasn't a snoop and she wouldn't have put up with it if Tim had started prying into things he wasn't supposed to. I considered thieves, but what thief would hunt down a shabby old writing case when there was a TV set in the closet and money in the donations bowl? I even considered Cecile, but the writing case wasn't on that table when we left the house, and even if Cecile had, for some mad reason, decided to fetch down my most dear and private possession, I'd have heard her groaning when she climbed the stairs.

But not once did the thought of a ghost cross my mind. My writing case. All his letters, all my hopes and dreams, long dead but never forgotten. I hadn't always been a dried-up old maid, a collection of bones and crotchets. Fascinated by the idea of exploring, meeting strange peoples, observing their rites and customs, I'd once attended a lecture given by a famous anthropologist. Afterward I lingered to ask questions, and later on we'd corresponded. The most thrilling day of my life had been the day he offered me a job. I'd been prepared to defy Papa—a Nettleton lady, an *unmarried* lady, traipsing around the world with a man who wasn't her husband!—and have the kind of life of which I'd dreamed, but then Mama fell ill. I couldn't leave her; it wouldn't have been right. There were bonds I hadn't the courage to break.

No one in the world except my sister knew how much I valued that writing case. No one living. No one living—yet.

I laughed a little, to myself. I was mad. I was truly, truly mad, worse than Cecile with her talk of ghosts. Who might have taken my case from its hiding place? Who might know where that hiding place was? Who might put it on the table where I would see it when I came home?

Cecile had gone to the kitchen for the bottle of glass cleaner, and I could hear her in the bedroom, the trigger squeaking as she tried to remove the "smudge" that wasn't there. Practical Cecile. Except for this nonsense about ghosts, she *was* the practical one. She'd have been a good doctor. What a pity Papa held her back, thinking

Tourist Attraction 35

her most important concern should be whether or not she could land a husband.

We'd both had our chances and we'd both failed to take them for one reason or another.

Who could have had a silver spoon made and slipped it into Miss Reba's display case? Who could have had a book printed and made to look very old? Who could have popped into our house to put a few scratches in some plaster? Who might have dropped clues here and there so our friends and neighbors "remembered" Beatrix Franklin Nettleton?

How confusing the language will be, I thought. What tense should one use when someone in the future can pop back to the past and do a little helpful dabbling?

Mad thoughts. But I didn't care. Before I could get a grip on myself and banish those thoughts, I took out a sheet of paper and a pen, and scribbled a note. I scarcely knew what I wrote, but in the fullness of my heart I was certain she would understand. I put the note in the case, fastened the catch, and poured a dab of glue in the works.

In Beatrix Franklin's bedroom I found Cecile had gone from cleaning a perfectly clean mirror to dusting an already dust-free antler table. I wasn't the only one who didn't know whether she was coming or going. I took my sister's hand and led her into the parlor beneath the lion's head.

"There's something important I want you to do," I said. "I want to play the game. I want you to tell me a story about Beatrix Franklin Nettleton and her writing case."

She looked frightened again. "Are you sure, Pauline? What if it *is* Papa?"

"Damn Papa!"

"Pauline!"

"Oh, I don't mean that, of course. But I'm certain Papa is too busy telling the angels how to behave to be concerned about what we're doing down here. Please tell me a story. I have to admit, your stories have always been better than mine."

Flushing with pleasure, she took the case and started to open the catch. I put out a hand to stop her.

"There's a mystery about the case itself. I'll tell you about it later. First, tell me a story. If it's a good one, I promise to wash the dishes tomorrow, even though it isn't my turn, and I'll do all the dusting for the rest of the week."

Cecile is so inventive; after only a moment or two, she began to make up a story about Beatrix Franklin Nettleton and her beau. Great-grandfather Nettleton was pleased with the young man his daughter had fallen in love with, though he was twenty-two and Beatrix Franklin only seventeen. The young man came from a respectable, well-to-do family; he had ambition and talent and he wasn't afraid of hard work.

"You know Beatrix Franklin was more than a little eccentric. As far as she was concerned, money and respectability were flies in the ointment. They were the ordinary things a young woman of that time looked for in a beau, and she could never be content with what was ordinary."

Since it would be years before Beatrix Franklin turned twenty, when her father promised to give them his blessing, she told her beau that if he truly loved her he would go out and lose his fortune and create several kinds of scandal.

"'Have adventures,' she said. 'Fall in with bad companions. Visit disreputable places. Drink and gamble and do foolish things. And when you've lost everything but your love for me, come home and I will marry you and we will go off together to see the rest of the world.'"

She was taking a chance with the young man's love, because there was a charmer named Suzette who'd already tried to lure him away from her. But Beatrix Franklin had chosen well; the young man loved her, so he set out to do what she suggested. He worked his way out west; in San Francisco he boarded a freighter to sail for China; he was shipwrecked, his life saved by pirates; he rafted down a river in India, crossed a desert with Bedouins.

"... no matter where he was, no matter if he was sick or starving or had to send his letters out by yak-train, he never failed to write to his beloved Beatrix. She lived for his letters"

"Yes, she did," I whispered to myself. I was young Beatrix, in a way. Might have been—might one day be—who can imagine what might one day be?

"After he reached Africa his letters stopped, but Beatrix Franklin never gave up her dream. At last she defied her father and set out for Africa, determined to find her beloved and rescue him from whatever terrible danger he'd fallen into."

Cecile paused and I thought I knew what would come next; I was disappointed. Beatrix would learn that her beau had died in some inspiring fashion and for the rest of her life she would give him the credit for her boldness and daring. I'm not as good a storyteller as Cecile, but somehow I knew this was wrong.

But Cecile surprised me. "Beatrix Franklin found her beau in Nairobi. He was working in a bank, engaged to the banker's daughter, but he hadn't had the courage to write and tell her. When she saw how dull his life was, when she thought of the opportunities he was wasting, Beatrix Franklin laughed. She knew then it had never been love for him she felt but envy. She left him without regret and set out to have the kind of life she'd dreamed of."

I sighed. "It's the best story you've ever told."

"Then I'm going to hold you to your promises. Now tell me about the mystery."

I took the case from her, thinking of the message I'd hidden inside. What if one day the child we told our stories to wasn't a stranger but the daughter of a dear, young friend? What if, born into an unimaginably wonderful future, that little Nettleton girl grew up to find herself able to take advantage of an unusual opportunity, to look in on two old ladies she'd once been fond of and help them carry out a small, harmless deception?

"Since the day Beatrix Franklin died, no one has been able to open this case. The witch doctor of the tribe with which she'd been living told the missionary who came to bury her that the lock would never open. . . ."

No doubt Tammy's daughter would inherit her mother's red hair, her ambition, her loving nature. And no doubt she would bear proudly the name her mother gave her.

"... but to the hand of Beatrix Franklin Nettleton."

SUITs

Paul Di Filippo

I'll never forget the first time I saw a SUIT. The sight took five years off my life.

I was hunched over my CAD-CAM station, trying to finish up the specs for a new waste-burning facility (thankfully to be situated in a state far away from mine). The smokestack scrubbers were giving me a hell of a time. I couldn't come up with a configuration that would match both the money allotted and the cleansing capabilities needed. The simulations kept showing we'd either have to spend twice as much as we had in the budget, or end up spewing dioxin over half the Midwest. I could guess which option we'd choose. With EPA pollution credits available comparatively cheap, it would definitely be the latter.

As I agonized over my mouse and keyboard, trying to squeeze out the last possible ounce of utility from the scrubber models available in my price range, I could sense someone hovering behind me,

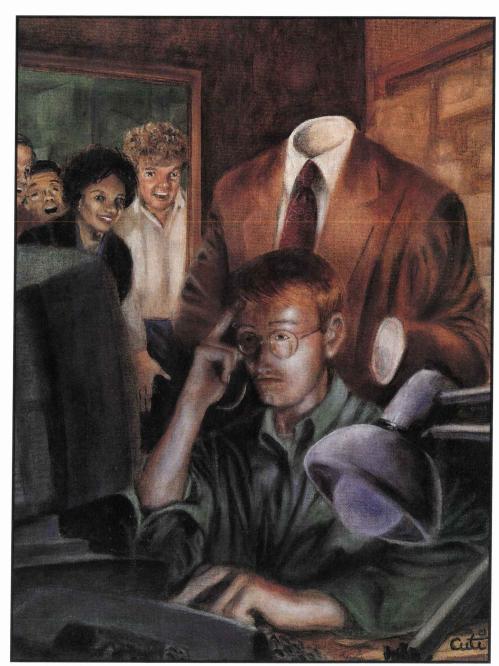


Illustration by Nicola Cuti

looking over my shoulder. At first, I figured it was just Carl, checking on my progress, and I didn't bother turning around. But as minutes passed and no caustic comment was forthcoming, I gradually realized that it couldn't be Carl. Anne would've laid a hand on my back. Jerry would've been slurping his omnipresent coffee. Marcie would've been popping gum. But behind me was only an eerie silence, and the subliminal sense of someone—or something—watching me.

I swiveled my chair around.

And that's when I saw the SUIT.

The empty cuffs of its perfect wool trousers floated several inches off the carpet. The legs of its pants were bulked out as if they contained living flesh, but I knew instantly and unerringly that they were empty. The suit jacket—one button buttoned, lapels neatly creased—showed the vacant cuffs of a white shirt out its sleeves, and a swath of the same shirt across the nonexistent but shapely chest. The hollow neck of the shirt was ringed with a red tie that hung down neatly.

It was like coming face to face with the Headless Horseman. Only this apparition lacked limbs or torso of any kind.

"Jesus Christ!" I yelled, and scrambled backward in my wheeled chair.

Laughter broke out from the doorway, and I looked. Carl led a pack consisting of the whole office staff. They had been waiting patiently for my reaction to this bizarre thing, and I had been gratifyingly dramatic.

Now Carl stepped into my office. "What's the matter, Mark? That's no way to greet your new coworker."

I got up and hastily put the desk between me and the floating clothing. Even with the first shock fading, I found the thing too uncanny. It simply gave me the creeps.

Now that the show I had put on was over, the others were dispersing back to their desks. Soon, I was left alone with Carl and the strange mechanism.

"What the hell is it?" I asked.

"It's a SUIT. Sensor Unit for Interior Telemonitoring. Not only does it keep track of the building's microclimate—dust levels, heat, drafts, things like that—but it also functions as mobile security."

I started to relax just a little, my engineer's fascination with clever gadgetry taking over.

I thought I knew, but I still asked, "How's it float like that?"

"Superconducting wires woven into the fabric. Just like the mag-lev train you hopped to work this morning. It rides the steel frame of the building on magnetic lift. The wires give it its shape, too. Combination of stiffness and interactive fields. And all its sensing circuits, cameras, probes, and chips are incorporated right in the material too. Oh, and its powerpack as well."

"Well, all right, why can't it look like a normal robot?"

"Why should it? It doesn't need a body because it doesn't have to lift or move anything. But it's got to be roughly humanoid so that it can efficiently monitor the same bodyspace that the average worker occupies. The building management might have decided to let loose another horde of MICE, but the building's crawling with

MICE already. So they went with this. And wrapping it in clothing makes it familiar. It's an elegant design. Whimsical, too."

"It's terrifying. It reminds me of a ghost."

Carl laughed. "C'mon, Mark, don't be superstitious! Here, poke it. Go ahead, it doesn't mind."

Suiting his actions to his words, Carl jabbed a finger into the thing. It bobbled backward on its magnetic fields, then righted itself.

I came up tentatively to the SUIT and tried the same thing.

My finger encountered the sensation of yielding flesh beneath the fabric. Although I knew it was just an electromagnetic simulation of skin and blood, it was almost indistinguishable from poking a living body, save for its lack of warmth.

I shivered, and stepped back. Had I seen the SUIT start to raise its arms, as if against me . . . ?

Shaking my head, I said, "No, I'm sorry, Carl, I really don't like it. . . . "

"You're just jealous because it's wearing—or made of —better clothing than you own."

This was true. The manufacturer had chosen a beautiful designer outfit to modify.

"How many of these things are there?"

"Oh, a dozen or so. There's even female ones." "No!"

"Sure. Skirt, frilly blouse, jacket. Equal employment opportunities for sensing devices too, you know."

Suddenly, the SUIT began to drift away. Its legs, of course didn't bend in walking movements—and thank God for that! It simply floated silently away like a specter, its empty arms slightly bent at the elbow.

"How did you get it in here?"

"I phoned Sys-Ops and told them to send it to your office, to check a funny smell with its chemosensors. It must've finished just now."

"Someone down in Sys-Ops is guiding these all the time?"

"Not at all. The SUITs run off the mainframe without human intervention most of the time. It's only if something turns up that the heuristics can't deal with that a live operator is called. Doesn't happen that often either. At least not yet."

I paused to consider everything Carl had told me. In the end, I supposed, the SUITs were just one more thing about my job I didn't like.

"Well, please don't ever send one of those things in again when I'm in the middle of concentrating. It's very disturbing."

Once again Carl laughed. "Oh, now that you know what they are, you'll get used to them."

But he was wrong.

The next few months were among the most hectic and enervating of my life. I was burdened and overburdened with work on a dozen projects, each one of them more reprehensible than the last.

Our firm wasn't the biggest contractor in our particular job arena, and it wasn't the smartest. There were competitors out there who could both outspend and out-

38 Paul Di Filippo

think us. Practically the only way we could get work was to underbid. And that resulted in cutting some pretty sharp corners.

In the weeks after I first saw the SUIT, I had to make the following compromises:

Switch to a lower grade of concrete for the foundations of a new airline terminal.

Cut back as far as I dared on the number of structural beams in a hotel walkway.

Substitute a thousand two-pane windows for the requested three-pane ones.

Use PVC piping in place of copper.

Find a source of used bricks when new ones had been promised.

Every such morally dubious action I was forced to take left me feeling more and more hollow. I lay awake nights, wondering how I had ended up in such a position. I wanted to quit, but somehow couldn't do it. The paycheck was too regular, my lifestyle too secure. I tried to tell myself that everyone made such compromises, no matter where they worked. That no one was getting hurt by receiving second-class goods where they had expected first-class. That the difference was minimal, undetectable, would never be noticed by the occupants of the shoddy structures.

But somehow, everytime I saw one of the SUITs, my whole facade of rationalizations came crumbling down like one of my crappy buildings under a wrecker's ball. They had an emotional effect on me out of all proportion to their reality.

And I swore there must've been more than the dozen that Carl had specified. They seemed to be everywhere. Indistinguishable from one another, they could've been an army whose members were uncountable due to their cookie-cutter identicalness.

Every time I decided to go to the john, it seemed, I'd encounter a SUIT in the corridors. There it would be, hovering mysteriously under a heating vent, perhaps sampling the output; or—far worse—pausing by a window as if looking out. (They were only registering drafts, I kept telling myself.)

I found myself instinctively hugging the wall farthest away from the mobile units, as if afraid that they would swing around at my approach and confront me with their faceless gaze, an array of sensors that would read my second-rate soul and report me to some heavenly OSHA.

When I went down to a corner of the lobby for a cigarette, a SUIT would always show up, most likely attracted by my illicit smoke. It would approach unnervingly close, though it never violated my interpersonal sphere of space, having, I assumed, been programmed to respect a person's boundaries. It would hover remonstrantly, like the ghost of smokers past, sending its accusatory telemetry back to the mother CPU in the subbasement. I would always hastily stub out my cigarette and flee, with a feeling of guilt such as I hadn't experienced since childhood.

And they even drifted into the cafeteria, spoiling any enjoyment I might have taken in my lunches. The SUITs had a habit of hanging around the trash cans, perhaps sampling airborne bacteria counts, and it became an exercise in nerves for me simply to deposit my empty paper cup under its headless scrutiny.

Once, one joined the serving line. Moving perfectly along with the flow of diners—none of whom seemed to share my unease, but instead pointed at the SUIT and laughed among themselves—it passed down the line of steam tables, sampling odors through its sleeves, filling its nonexistent belly with data for the Department of Health.

I soon came to fear and despise the female SUITs even more than the male ones. Their feminine clothing seemed a more elaborate mockery of their cybernetic hollowness than did that of the males. (The lack of any woman currently in my life, I realized, had something to do with this feeling.) The designers had even equipped each female SUIT with moderate, subtle curves of hip, waist and bust, a magnetic illusion of fertility, rendering further obscene their bodiless presence—at least in my eyes.

And because their empty skirts ended at knee height, their flying-carpet nature was even more apparent than with the male SUITs. They seemed to swoop down on me with more alacrity than the males, more predatory and harsh.

I'll never forget the time I was standing at the supply cabinet, trying to find an old-fashioned eraser under all the disks and printer ribbons. (I still liked to draft a few small plans by hand. It was about the only soothing activity connected with my job.) A female SUIT popped out *from behind the cabinet*, and I felt my heart jump like a rabbit inside my chest.

What it had been doing behind the supply locker, I couldn't guess. (The space between the cabinet and the wall, by the way, was only a few inches. Apparently, the SUITs could alter their shape at will, shrinking to occupy the same dimensions as a regular suit of clothes flat on a hanger.) All I knew was that it seemed at that instant to be hurling itself at me like a giant bat or raptor of some sort, and I scrabbled backward like a frightened mouse.

Luckily, no one was there to witness my humiliation. After a time, I tried explaining my feelings about the SUITs to Carl. But he only laughed, and shrugged it off.

"You've been working too hard," he said, clapping a falsely hearty palm on my shoulder. And that was when the hallucination happened.

I saw Carl as a SUIT. His head grew translucent, transparent, then dissappeared. His hands and feet in their shoes vanished too. Then there was nothing but an empty sack of clothing with its arm upraised to my shoulder.

Jerking back, I felt a shout beginning in my throat. But before it emerged, my vision returned to normal, and there was Carl again standing before me.

Now he looked genuinely concerned, if only for the smooth functioning of the workplace. "Mark—are you okav?"

I mumbled something. Carl seemed to come to a quick decision.

"Mark, you're kind of bringing the whole office down lately. Your attitude, you know. I think what I'd like to do is switch you to nights. It would free up your work

SUITs 39

station during the days too. We could pump out some extra specs that way. What do you say?"

What could I say? I could sense that it was either agree, or lose my job.

So I agreed.

The building that housed our firm was fifty stories tall, and held numerous other tenants.

But none of them seemed to work at night.

I was to be alone in the building with the SUITs and the janitor MICE.

The first night, I managed to make it up to our floor without encountering a single SUIT. I turned on every light in the office and locked the outer door.

When I at last dared to look up from my monitor, I saw a flock of shadows clustered outside the frosted glass of the hall door like an army of the undead.

The SUITs.

I slowly got up from my chair. I didn't know what I was doing, or where I was going.

Then I heard the solenoid of the electronic lock click open, under orders from the building's CPU.

I found myself in Carl's office without memory of having run there, leaning against the closed door. With trembling hands, I grabbed a chair and shoved it under the doorknob.

It was several hours before they gave up and left. I could tell by the cessation of the muted rustling of fabric, caused when they brushed against one another. It was another several hours before I dared to open the door.

Somehow, I made it out of the building unmolested. When I got home, I took several pills and went straight to bed.

Although I usually wore pajamas, that night I slept naked. Lying on a chair, my garments repelled me. Had I put them on, I was afraid of what the mirror would have shown.

When I woke from the the drugged sleep, it was dark again, almost as if day had never been.

I got dressed and left for work.

Why did I go?

At the time, I recall, I had lots of seemingly sensible reasons. The SUITs were ultimately under human control. They were simply innocent tools or devices, and hadn't meant to hurt me. A feedback loop of some sort had developed, triggered by my unusual presence alone at night. The artificially intelligent software had fixed itself—a task it was perfectly capable of—and would be fine. I had to show up, or be fired. I had to show up, or admit I had been broken by spooks and hallucinations.

Good logic. But none of these were the real reason, I now realize.

I wanted to see what the SUITs had to show me.

When I let myself into the building—there were no human security guards anymore, with the SUITs in place—they were waiting for me.

Just two, a male and a female.

But it was enough.

Flanking me, the SUITs conducted me to the elevator. When its door opened, without my summoning it, they boarded with me.

Their shoulders brushed mine in the narrow confines of the elevator, substantial yet meaningless.

The door whooshed open on my floor.

The whole level was full of SUITs.

Scores and scores of them.

They were engaged in a perfect simulation of a normal day.

SUITs stood around the watercooler in attitudes of relaxed conversation. SUITs sat at desks in postures of typing and writing. SUITs moved to and fro on errands. SUITs opened and closed file drawers with invisible magnetic appendages. SUITs stood eagerly by the fax machine. SUITs bent paperclips in meditation or boredom. SUITs stapled papers. SUITs held clipboards and pens.

Fascinated, I stepped away from my escorts, who left me to join their fellows in their solemn stolen enactment. In a daze, I moved through the office.

In the conference room, a dozen SUITs sat around the long wooden table in earnest confab. One passed the metal water pitcher to another.

In the men's john, SUITs stood at the urinals with their metal zippers down.

And in Carl's office, two SUITs were screwing.

A female SUIT lay on its back on the desk, with a male SUIT pumping its vacant crotch against the empty skirt.

Thus did they reproduce.

I picked up a phone and dialed Sys-Ops. A recording came on.

"The Faber Building is currently under heuristic monitoring. No human personnel are available. If you wish to page a human operator, please call this number . . ."

I dropped the handset, and the recording began to recycle tinnily.

Then I left the building.

The driver of the cab I hailed was a SUIT. Made of jeans, flannel shirt and leather jacket, not cut from the same elegant material as those in the Faber Building, he was a SUIT nonetheless.

I let him drive me to the airport, magnetic hands on the wheel, magnetic foot on the accelerator, and I tossed the fare in his magnetic lap.

The enormous concourse was filled with SUITs. SUITs behind the counters, SUITs dispensing coffee, SUITs manning the X-ray machine, SUITs wheeling suitcases!

A SUIT sold me a ticket on my credit card.

A ticket to far, far, far away.

I ended up on a small island in the tropics, where there are no SUITs.

Because there is no one there but me.

And I go naked all day. ♦

40 Paul Di Filippo

Empire Builders

From the author's forthcoming novel of the same name

Ben Bova

Synopsis

Billionaire space industrialist Dan Randolph has discovered that the Earth's climate is heading for a greenhouse cliff that will raise sea levels thirty feet or more, starting within ten years. And his old adversary, Vasily Malik, has maneuvered the Global Economic Council into seizing all Dan's holdings on Earth, in space, and on the Moon. His own lawyer, Kate Williams, set him up for the GEC takeover. Dan has fled a trap set for him by Malik and the one woman he truly loves, Jane Scanwell, former President of the United States, and fled to his headquarters at Alphonsus, on the Moon. But to escape the GEC enforcers, he has had to take Jane Scanwell with him, against her will.

When Dan entered his Astro Corp. office at Alphonsus, his one human secretary rushed to him, a stricken look on her fashion model's sculpted features

"Thank god you got here!" Tamara Duchamps gasped. "We have just received notice



Illustration by Barbara Albert

that a GEC legal team is on its way from Paris with a warrant for your arrest!"

Dan breezed past her and into his private office. She hurried behind him.

"What charge?" he asked as he went to the minibar. "Kidnapping!"

Dan huffed as, kneeling, he opened the minibar and pulled out a bottle of Jack Daniels green label. "Is that all? I thought they'd try to stick me with mass murder and kiddie rape, at the very least."

Tamara Duchamps did not crack a smile. "Dan, kidnapping falls under the World Court's terrorism acts. If they convict you, you could be executed!"

"Yeah," he said, pouring a healthy slug of the sour mash whiskey into a tumbler made of lunar crystal. "That would save us all a lot of trouble, wouldn't it?"

"Dan," she said in her exotically flavored British English, "this is not something that you can talk your way out of. I have checked with the legal department and they are totally off the wall. They do not know what to do!"

He plunked himself in his comfortable desk chair, took a sip of the whiskey, and leaned back far enough to put his feet on the desk.

"Tamara, honey, never *ask* a lawyer what you should do. They don't know. Their brains are so stuffed with crap that they can't find their way across the street without a court order. You *tell* a lawyer what you want him to do. Or her," he added, his face hardening.

"Kate Williams has betrayed you," Tamara said, looking angry at the thought.

"And I never laid a glove on her," Dan mused. "Maybe if I had been more persistent, she wouldn't have done this to me. Hell hath no fury, you know."

Tamara shook her head. "She would have cut your testicles off, one way or the other."

"Pleasant thought."

Suddenly exasperated, Tamara nearly shouted at him. "So what are you going to do? You cannot just sit there drinking! There is a squad of GEC people on its way here to put you in jail!"

With his free hand, Dan pointed past her shoulder. "Here comes my kidnapping victim."

Jane walked cautiously into the office, like a woman on a tightrope. The two security men hovered beyond the door, in the outer office.

Before Jane could say a word, Dan told his secretary, "Tamara, please arrange transportation for President Scanwell back to Paris—or wherever else she wants to go."

Jane looked the younger woman up and down as she made her way past Tamara and sank gratefully into one of the clear plastic, foam-cushioned chairs in front of Dan's desk. On Earth, the chair would have been too fragile to bear an adult's weight; on the Moon, it bent only slightly as Jane sat on it.

"Did I hear correctly?" Jane asked, her voice calm, subdued. "You're about to be arrested?"

Dan nodded. "For kidnapping you."

"That falls under the terrorism laws," Tamara added.

"This is very serious," said Jane.

Dan grinned crookedly. "Will you testify on my behalf at my trial? Assuming that Malik allows me to have a trial."

"Of course you'll have a trial!"

With a shrug, Dan said, "I could always have a fatal accident while I'm in custody."

"Nonsense."

"So, assuming I come to trial, will you testify on my behalf? Or against me?"

"You did take me here against my wishes," she said, with no hint of a smile.

"Yeah, I suppose I did."

Tamara looked from Dan to Jane and back to her boss again. "You cannot just sit here! You must do something!"

"What do you suggest?" Dan asked mildly.

"I don't know!"

"Well, I do," he said, getting up from his chair. "I'm going to my quarters and get some sleep."

"What?"

"When the GEC goon squad arrives at the spaceport, wake me up. Ten to one, Kate Williams will be with them."

"Is that all you are going to do?" Tamara seemed on the verge of tears.

Dan nodded. "And arrange transport for President Scanwell."

He came around the desk, bent over Jane and gave her a peck on the cheek, then waved to Tamara and left the two women in his office.

Once in his quarters, though, Dan did not immediately go to sleep. First he went to his bedside phone. The display screen glowed a cheery yellow and showed in bright blue letters:

HAPPY BIRTHDAY!

WELCOME TO THE BIG 50

Cripes, Dan said to himself. *Today's my birthday*. *Tamara must've remembered*. He shook his head ruefully. *It's going to be some party*.

He spent several hours speaking to his managers in their offices all over Earth and in several orbital facilities. In between calls, he chivvied Bert Peel about getting all the space industrialists together for a teleconference.

"I'm working on it, boss," Bert exclaimed, beads of perspiration on his upper lip. "I've got about half of 'em lined up, but every time I call another one, he or she wants a different time and I've got to recontact all the others."

"You tell them this is an emergency?"

"Yes! Sure."

"Okay, keep at it. I've only got a few hours, at most." Bert mumbled what might have been a profanity and cut the connection.

Dan actually managed to sleep for about twenty minutes. He dreamed he was struggling with someone, a faceless man, or maybe it was a woman. They were on the edge of the roof of some enormous skyscraper back on Earth. They fell off, and suddenly Dan was completely alone,

Ben Bova

plummeting toward the hard pavement of the street far below.

He sat bolt upright in his darkened bedroom, cold with sweat, still in the coveralls he had not bothered to take off when he had flopped on the bed.

Casting a quick glance at the digital time displayed on the bedside screen, he peeled off the coveralls as he made his way into the bathroom, showered, shaved, and put on a clean outfit: another set of forest green coveralls, but these were new enough so that their color was still vivid. And he left his sandals by the bed; lunar softboots were much more practical. Then he stalked back to his office and went in through his private entrance, avoiding Tamara and anyone else who might be in the outer office.

The dumb birthday greeting was on his desktop screen, too. Dan scowled at it as he slumped into his desk chair and flicked on the windowall. It was tuned to an outside camera view of the broad, crater-pitted floor of Alphonsus. Factories dotted the plain out to the horizon, with wide spreads of solar energy farms glittering in the sunlight. A few tractors were chugging across the dusty landscape.

He told the voice-activated phone to find Peel. Almost instantly, his aide's face appeared on Dan's desktop display screen.

"Got 'em all, boss," Peel said without preamble. "Except Yamagata. His people say he's out of contact, on a field trip somewhere."

Out of contact, my ass, Dan said to himself. Nobu doesn't want to talk to me.

"Guess we'll have to settle for number two, then," he told Peel.

"In that case, we can get started in about ten minutes." "Good."

Tamara opened the door from the outer office. "The GEC team will be landing in half an hour," she announced, looking angry and afraid at the same time. "And you were right: Kate Williams is in charge of the team."

"Has President Scanwell left?" he asked.

"Not yet. She decided to wait until the GEC people arrived, and then go back with them. She's waiting out here."

Dan smiled weakly. "She wants to be here for the kill, does she? Okay, ask her to come in. She might as well see the show."

Tamara ushered Jane into his office. She was still in the same beige slacks and tan jacket. Dan gestured her to a chair as he slid his computer keyboard from its niche in his desk. He spent the next few minutes huddled over his computer display screen while Jane sat silently watching him.

Then Peel called in to say that all six of the space industry corporate chiefs were on line for the emergency teleconference—except for Nobuhiko Yamagata. His chief legal counsel would participate in the conference in his place. The windowall broke up into six separate images: four men and two women, representing six of the seven major corporations that dominated space in-

dustries. Each of them was on Earth; of the Big Seven, only Dan was off-planet. Dan touched one more key, and two smaller images appeared in the lower right corner of the windowall: a view of the landing pad outside, and an empty corridor deep below the office levels of Alphonsus City.

Shooing Tamara out with one hand, Dan adjusted the phone camera on his desk so that it showed only a head-and-shoulders view of himself. *If Jane wants to join the conversation, I'll swivel it around,* he thought.

Then he grinned crookedly at the six electronic images. "I suppose you're all wondering why I asked you here today."

It took two and a half seconds for Dan's feeble little joke to reach them and their response to get back to the Moon. They all tried to talk at once. In the sudden torrent of angry, frightened, urgent voices, Dan made out the clear fact that all of them were under pressure from the GEC to turn over control of all space industrial operations to the Council.

"That means Malik," Dan said, loud enough to cut through their babble and silence them. "Malik wants to take over all our companies. He's always wanted to be the commissar of all space operations."

Jane stirred slightly in her chair but said nothing.

"I understand," said the Yamagata lawyer, a sallowfaced Japanese with narrow, suspicious eyes, "that your assets are being confiscated entirely, at this very moment."

"That's right," Dan said. Out of the corner of his eye he saw a spacecraft settling down on the landing pad outside. It bore the sky-blue markings of the Global Economic Council.

"What can we do to help?" asked the Argentinean president of *Astrofabrica Corporacion*.

"Not a hell of a lot, Jorge," Dan admitted. "But there's something even more important that you must be made aware of."

Six faces stared at him, silent, waiting. The spacecraft sat on the landing pad while an access tunnel snaked toward it. Jane watched him too, her face as close to expressionless as she could make it.

Dan began to explain to them about the greenhouse cliff. Only one of them had heard of it, the woman who headed Eurospace A.G. "The head of my research staff is working with your chief scientist, I believe, to determine whether this phenomenon is real or not," she said.

"It's real, Hilde," Dan replied. "Malik knows it. He's using it as an excuse to take over all space industries. In the next ten years we either convert the whole spinning Earth away from fossil fuels or we see the icecaps melt and sea levels go up ten meters of more."

He waited the two and a half seconds for their reaction. Then:

"In ten years?"

"That's not possible!"

"I've never heard of such a thing."

"No one informed me!"

"How can that be?"

"Your scientists can give you the details," Dan said, flicking the image in the corner of his windowall to show

Empire Builders 43

the corridor between the landing pad and the main plaza. Sure enough, Kate Williams was leading a dozen grim-faced men and women, all of them dressed in dark gray slacks and jackets bearing the GEC emblem.

Quickly, Dan reviewed his discussion—argument—with Malik at Tetiaroa, and emphasized Malik's decision to take over all the Big Seven space industrial corporations in the name of necessity, due to the impending global disaster.

"He can't force us-"

"Yes, he can, if he has the Council behind him."

"I never trusted those politicians."

"We'll lose everything!"

"What difference does that make if the world is drowned in ten years?"

Dan quieted them down, all the while watching Kate and her band of GEC enforcers making their way toward his office. And Jane sitting almost within his reach, silent, watching, waiting.

"Now, listen," Dan told the six of them. "Hilde is right. What difference does anything make if half the world's going to go underwater? We've all got to work together with the GEC to do whatever we can to avert this catastrophe."

Jane looked surprised. He grinned at her.

"Work with the GEC?"

"Let them take over our corporations?"

"Allow them to steal what we've earned over all these years?"

"No," Dan said firmly. "We can work with the GEC and hold onto our companies—at least, you can." Kate and her gang were at the door to his outer office. Tamara was getting up from her desk, ever so slowly, to manually open the door for them. Jane was looking from Dan to the picture in the windowall's corner and back to Dan again.

"We're facing a situation that's like a major war; the biggest double-damned war anybody's ever faced. We've got to stop thinking of our profits and start working with everything we've got to win. It's victory or death; there's no middle ground.

"What you've got to do," he said quickly, knowing that he was running out of time, "is to make a voluntary statement, announce it in the world's media, shout it as loud as you can, that your corporations will *voluntarily* place themselves at the command of the GEC for the length of this emergency period. You will follow GEC orders to do whatever is necessary to save the planet from the greenhouse cliff—but without relinquishing ownership or control of your companies. Got that? Voluntary cooperation. That's the only way to beat this greenhouse disaster. Cooperate voluntarily with the GEC, let the bastards take all your profits—but run your companies yourselves! You know how to do that better than any deskbound paper-shuffler."

The door to his office burst open and Kate Williams strode in, with half her team behind her.

"Daniel Hamilton Randolph, you are under arrest for kidnapping," she said.

The windowall went dark.

Dan grinned at Kate Williams from behind his desk.

"Welcome back, Scarlett. You're fired."

She almost grinned back at him. "You can't fire me. I resigned twelve hours ago."

"You never really did work for me anyway, did you?"
"We don't have time for chitchat," Kate snapped.
"You're under arrest. Get on your feet and come with

Dan put his hands flat on the desktop. "Now wait a minute. I'm being charged with kidnapping, right? Well, here's my 'victim.' Let's ask her if she was kidnapped or not."

Kate shook her head. "Nice try, Dan, but I've already spoken with President Scanwell, while we were on the way here. She'll testify that you brought her here against her will."

Dan swiveled his chair slightly to face Jane. "Is that true?"

Jane hesitated only a fraction of a heartbeat. "Yes. That will be my testimony. That's what you did, Dan, and we both know it."

He shrugged as if defeated. "Et tu, Janie?"

"On your feet, Randolph," snapped one of the young men standing beside Kate. He looked like a jock: broad shoulders, burr haircut, jacket straining across his chest. Dan realized that he was carrying a gun in a shoulder holster. Probably all of them are, except for Kate. Maybe her too; be just like her to have a loaded bra.

Slowly, so as not to alarm them, Dan slid open the top drawer of his desk. "Just give me a minute here," he muttered as he pushed away the papers that covered the slim matte-gray pistol he had put there.

"I really have no intention of going anywhere with you, Kate," he said, levelling the pistol at them with one hand and pulling out his computer keyboard with the other.

"This is nonsense," Kate began. "You can't—"

But the burrhead beside her started to reach into his jacket. Dan fired once, a sudden shocking explosion of noise and smoke. The kid slammed over backwards as if hit by a baseball bat and smashed into the couch along the far wall, then slumped to the floor.

Before any of the others could react, Dan said, "He's not hurt much. It's a tranquilizer dart. He'll be okay in a few hours."

No one else moved.

"I spent a lot of years in Venezuela," Dan said, tapping keys with his left hand. "The Indians out in the Orinoco River valley have developed some dandy drugs. They use them for hunting. Once in a while they hunt other people. Still a few cannibals out there, although nobody wants to admit it." He grinned wickedly.

"Dan, you're crazy," Jane said. "You can't expect to get away with this."

He pointed the gun at her. "You're a hostile witness, Madam President. The jury will disregard your remarks."

"He's gone insane," Kate said.

"Maybe." Dan swung the gun back toward her. "Is insanity a valid defense, in my case?"

44 Ben Bova

She clenched her fists and took a step toward him.

"Don't let your temper trip you up, Scarlett. I'll shoot you if you force me to. And I don't know how the stuff in these darts might affect you. The dose is big enough to knock out a horse like your snoozing pal. It might do more damage to somebody of your petite size."

"You're only making things tougher for yourself," Kate said. But she stood still.

"Tougher than a kidnapping charge? Terrorism is punishable by execution. What can be tougher than that?" Jane said, "Dan, please . . ."

He gave the keyboard one final touch, with a flourish of his left hand, then stood up. A hooting wail clamored out of the speaker set into the ceiling panels.

"EMERGENCY!" bellowed a computer-synthesized voice. "LIFE SUPPORT SYSTEM WILL FAIL IN ONE MINUTE! ONE MINUTE TO LIFE SUPPORT FAILURE!"

Dan hollered over the warning system's announcement. "In one minute this entire suite of offices will be opened to vacuum. I suggest you haul your asses out into the corridor and run like hell to the nearest emergency hatch. Those hatches are programmed to shut automatically when they sense a drop in air pressure. You don't want to be on the wrong side of a hatch when it slams shut."

"You're bluffing!" Kate snarled.

"FORTY-FIVE SECONDS TO LIFE SUPPORT FAILURE. FORTY-FIVE SECONDS."

Dan shrugged. "Sure I am. And rain makes applesauce." He backed away, still pointing the pistol at them, and felt for his private door behind him.

The urgent wail of the warning siren seemed to grow louder, more shrill. "FORTY SECONDS TO LIFE SUPPORT FAILURE."

Jane got to her feet. "I don't know about the rest of you," she said, and started for the door to the outer office.

"Hey!" Dan called after her. "Don't you want to come with me?"

Jane hesitated only an instant. Then she shook her head and kept on going.

"You always were a smart lady," Dan called after her. "See you!"

"THIRTY SECONDS TO LIFE SUPPORT FAILURE. THIRTY SECONDS."

Kate and the others suddenly bolted for the outer office and safety, leaving the unconscious burrhead sprawled on the floor. Laughing, Dan opened his private door and stepped into the back corridor. He could hear the automated warning voice calling out "TWENTY SECONDS" and then "TEN SECONDS" as he loped down the corridor toward the hatch that led to the ladderway.

Tucking his pistol into a thigh pocket and zippering it shut, Dan opened the hatch and started down the steel rungs of the ladder. He heard very faintly, "THIS HAS BEEN A TEST OF THE EMERGENCY WARNING SYSTEM. THANK YOU FOR YOUR COOPERATION. ALL PERSONNEL MAY RETURN TO THEIR NORMAL STATIONS. THIS TEST IS CONCLUDED."

Chuckling to himself at the picture of Kate Williams's

face when she heard that, Dan clambered down five levels, to the very bottom of the tubelike ladderway. There was no hatch down here; he merely stepped out into the dimly lit bottom level of Alphonsus City, a world of machinery where humans rarely bothered to go.

Most of the machinery was for life support: the air scrubbers and fans, electrical inverters and routing substations, water purification systems and recirculators. The very air hummed, throbbed like the giant mechanical heart of the city that it actually was. Dan knew that there were teams of teleoperators up above, sitting in their comfortable offices and keeping tabs electronically on the machines down here. They had video cameras, too, so they could keep the entire section under visual surveillance.

He knew also that, like inspectors anywhere, the men and women responsible for monitoring this equipment rarely paid attention to their work, except when a warning light flashed red or a synthesized voice warned of trouble that the computer's sensors had detected.

Until they're specifically told to search for me, Dan told himself, they won't be looking for anybody prowling around down here. I hope.

He made his way through the shadowy light toward the tunnel that he knew existed at the back end of this bottom level. He had helped to carve it out of the bedrock of Alphonsus's ringwall mountains, back in the days when he operated a plasma torch and alternately drank and fought with his Japanese coworkers.

One of the few mobile maintenance robots suddenly came from behind a ceiling-high electrical transformer. Dan almost bumped into it.

The robot was one of the newer models, almost six feet tall and gleaming in the far-spaced overhead lights. Its head bore two round camera lenses where eyes would be, and a speaker grill in place of a mouth. It had four arms, each ending in fully rotatable pincers with the strength to break bones.

"Unauthorized personnel are not allowed in this area," said the robot's tinny synthesized voice, in Japanese.

Crapola! If I exceed this double-damned tin can's programmed commands, it'll send a warning buzz to the operators upstairs.

Thinking swiftly, Dan replied in Japanese, "This is an unannounced routine inspection tour."

"Authorization code?" asked the robot.

Dan pecked at his wristwatch for the last authorization code he had programmed into it, months ago. His trembling fingers fumbled with the tiny keypad, and the phone's miniature screen lit up with: BIRTHDAY. Dan fumed and tried to find the information he needed. *If Bozo here detects the gun in my pocket* . . .

"Authorization code?" the robot repeated.

There it was! Hoping that the code had not been changed over the intervening months, Dan rattled off the numbers.

"Thank you," said the robot. It turned and trundled away. Dan was only slightly shaken when he saw that the machine had an identical face on the other side of its head.

"I've heard of two-faced women," he muttered to himself as he resumed his hurried pace toward the tunnel. "But robots? That's weird."

The tunnel had been started back in the days when Yamagata Industries had first decided to make a major manufacturing center at Alphonsus. Saito's father had decided to ram a tunnel through the ringwall mountains, connecting the floor of Alphonsus with the broad expanse of Mare Nubium. The lunar rock had turned out to be much tougher than expected; the costs of digging the tunnel, even with plasma torches, had risen too far. So the tunnel was never finished. Instead, a cable-car system had been built over the mountains. It was more expensive to operate than a tunnel would have been but far cheaper to construct. It was still in use.

But the tunnel was still there; incomplete, unused for nearly two decades, but still there. So were the access shafts that had been drilled upward to the face of the mountain. The first of those access shafts opened into an emergency shelter where there were pressure suits and spare oxygen bottles, in case the cable-car system overhead broke down.

That was Dan's objective. Alphonsus City, like any settlement built in the harsh airless environment of the Moon, was a tightly sealed, closely controlled community. No one got into a cable car or stepped through an airlock without being scrutinized. You could walk for miles inside the main plaza or along the city's corridors, but there were always video monitors watching. The monitors were there for safety, but they could easily be used to find a fugitive.

Dan mused as he made his way toward the tunnel that there had been amazingly few fugitives, to his knowledge. In a community as large as Alphonsus City had grown to be, there were bound to be some thieves or perverts or the occasional case of murderous violence. But living and working on the Moon apparently sorted out the unstable types very quickly. They killed themselves, and often killed those unfortunate enough to be near them when they screwed up.

He grinned to himself as he realized that most of the inhabitants of Alphonsus were Japanese. Sure, there might have been a few with larcenous souls among them, but by and large they worked hard, obeyed the regulations, and lived frugally. He remembered the rare thief that had been caught and brought to trial. Usually it was white-collar stuff: a bartender stiffing his employer, a logistics clerk jiggering the computer system so he could sell company equipment on the black market.

There is a black market here, he knew. But it's usually so small and harmless that it's not worth the trouble going after it.

As far back as he could remember, though, there had been no real fugitives from justice at Alphonsus City. Or any other lunar settlement. You can't go out and hide in the hills, he knew. Not on a world where the only air and water is manufactured in the cities.

There had been a few disappearances, of course. That was to be expected on a harshly unforgiving frontier world. But no fugitives. Not until now.

The tunnel entrance was closed, but the electronic lock on the metal hatch was easy enough to decipher. He had expected the hinges to squeal painfully, since the door probably had not been touched in years. But it opened smoothly, quietly. *Are the robots programmed to oil the hinges?* Dan wondered.

The air inside smelled dusty, stale. He coughed. But it was air. It was breathable, if you didn't mind the sensation of fine talcum powder choking your throat. There was no light. Dan had forgotten to bring a torch with him, and the dim light from the basement quickly petered out in the depths of the tunnel. He felt his way along the rough side of the tunnel, thankful that this was on the Moon and there'd be no unpleasant critters slithering around in the darkness.

Wrong! A pair of tiny burning red eyes stared balefully at him out of the shadows, shoulder high. Dan felt his heart clutch in his chest, then realized that it was the indicator lights of an emergency lamp, left there years ago by the construction gang, still powered by its radioisotope system.

His fingers found the lamp's square shape in the darkness and slid across gritty dust until they touched its activating switch. The sudden light made Dan squint, but his eyes quickly adjusted.

It was easier going with the lamp. In a few minutes Dan found the hatch to the access tunnel and started climbing up the ladder toward the emergency shelter up on the surface. As far as he knew, the access tunnel had never been used to rescue stranded cable-car passengers. Never had to be. The cable system had worked fine ever since it had been erected, except for a few minor glitches that stranded cars for an hour or less—well within the air supplies the cars themselves carried.

At the top of the access tunnel, the hatch leading into the shelter had no security lock; a simple spin of a welloiled wheel opened it easily. Dan felt some puzzlement as he pushed the metal hatch back and climbed up into the shelter. The robots from down below don't come up here for maintenance work. Would the Yamagata safety people who maintain the cable cars take care of this hatch, too?

The shelter reminded him of the old days, when construction crews lived in "tempos": temporary shelters made of expended spacecraft sections, thin aluminum cylinders that they buried under a few feet of rubble scooped up from the regolith. Life in the tempos had been spare and rugged, no place for a person of delicate sensibilities. Or a keen sense of smell, for that matter. Tempos. He had lived in them for nearly three years, and here he was back in one.

It was a curved-roof tempo, sure enough. Almost bare inside, Dan saw in the light of his hand lamp, except for tall green cylinders of oxygen, a phone console sitting on an otherwise empty desk, a couple of shelves of emergency medical kits and rations—and a quartet of space suits, standing stiffly in their racks like knightly armor of old, complete with helmets on shelves above the empty torsos.

The first suit he picked had only a quarter of its nor-

46 Ben Bova

mal supply of oxygen in its tanks. Annoyed, Dan went to the next suit. Its tanks were dry.

"They maintain the damn hatches," he muttered, "but not the suits. That's brilliant."

The other two suits were almost empty, as well. Fuming now, Dan went to the oxygen cylinders to start refilling one of the suits. They too were low; each was missing from half to three-quarters of its normal capacity.

This is crazy, he said to himself.

It was laborious work, even in the low gravity. It took more than an hour for Dan to fill the backpack tank of one of the pressure suits. Then he waited, worriedly, for two hours more, watching the suit's gauges to make certain that the tank did not leak.

No leaks, he decided with relief. But then, how did the tanks lose oxy? And the standby cylinders, too?

His wait had accomplished another purpose: the sun should have set by now. Checking his wristwatch computer, he found that it was indeed nighttime outside. It would be more difficult for them to spot him out in the open. Not impossible, by any means. But the cover of darkness gave him a bit more of an edge.

If I don't break my damn neck out there, he groused. Very carefully he stepped into the leggings of the suit he had selected and pulled on the thickly insulated boots. Then he wriggled into the hard-shell torso and wormed his arms through the sleeves. Stomping around the cramped shelter, he tested the suit's flexibility. Then he backed into the backpack, still hooked to its rack, and felt its latches click against his suit's fittings. It had been a long time since he'd carried a fully loaded backpack and pressure suit. Even in the Moon's gentle gravity it felt like a ton of dead weight on his shoulders and back. The damn pistol still in the pocket of his coveralls jabbed against his thigh annoyingly.

Dan pulled on the suit's gloves and sealed them to the wrist cuffs. He flexed his fingers, thinking, *They* haven't made much of an improvement on these things. Feels as stiff as rigor mortis, and the damn suit's not even pressurized yet.

Finally he slid the helmet over his head and sealed it to his collar ring. He pulled the visor down and locked it, then clumped over to the only oxygen cylinder that still had some gas in it. Fitting its extension hose to the port on his suit, he overpressurized his suit until it bulged out like a balloon, making it awkward to move his arms or legs.

Then he waited, glancing alternately at his watch and the pressure gauge on the instrument cluster on the suit's left wrist. With nobody here to check him out, this was the only way to test that the suit was properly sealed, and there were no pinhole leaks anywhere.

There are old astronauts and there are quick astronauts, Dan thought, remembering the old saying, but there are no old, quick astronauts. Haste is the enemy of safety, he knew.

At last, satisfied that the suit was tight, he let most of the overpressurizing oxygen hiss out of the port and stepped slowly, like some monster from a horror video, to the airlock of the shelter. It took several minutes for the lock to cycle. Then the indicator light turned red and Dan slid the outer hatch open. The smooth gentle slope of Mt. Yeager confronted him. Downslope he could see the humped mass of rubble that covered Alphonsus City's main plaza. Directly overhead ran the cable car line.

His wristwatch tingled against his skin. Glancing at the watch on his suit cuff, Dan realized what the programmed wristwatch was telling him. This was the exact moment of his birth, fifty years ago, precisely.

"Happy birthday," Dan muttered as he stepped out onto the glassy, pitted slope of Mt. Yeager.

Four hours later he was still climbing the tallest mountain of the Alphonsus ringwall. Sandpapered by eons of micrometeorite infall, most of the Moon's mountains looked tired and old. They slumped, rounded and softly curved, their slopes usually very gentle. But the sandpapering had made their slopes very smooth, as well, almost glassy. Getting traction was not easy.

Dan was puffing with exertion. *Malik was right*, he thought. *I've let myself get out of shape. Fat and fifty, that's me*. He stopped and looked downslope toward the floor of Alphonsus. Even though the sun was down, there was seldom true darkness at this latitude. A gibbous Earth hung in the black, star-flecked sky, fat and gleaming, blue seas and white clouds, glowing with life and warmth. Even the night side of Earth glittered with lights of cities and highways.

There was enough light to see the little pockmarks of mini-craters in the stony ground. Enough light to spot a lone man walking—if you knew where to look. Dan doubted that the space station all the way out at the L1 point could pick him up visually, or even in the infrared. And he knew that the satellites orbiting the Moon at closer altitudes were not equipped for such detailed surveillance work.

I'll be okay, he told himself. Unless they pop a surveillance team into an OTV just to look for me. Or maybe send out a cable car full of guys with telescopes. Better get a move on.

To where?

That had been the first question he had asked himself when he had realized, back on Tetiaroa, that Malik intended to jail him. Where can you go to hide from the Global Economic Council? As one of the richest men in the Earth/Moon system, Dan had always kept a few special hideaways for himself, and a few false identities so he could travel undetected and undisturbed. But with all his assets confiscated, he was down to the few emergency things he had tucked away in safe deposit vaults in various cities on Earth.

For more than ten years he had played this seemingly pointless game. At times he himself had thought that he was being paranoid—or at least, childish. But deep in his gut he had known that power-hungry men like Malik would topple him if they got the chance. Now they had done it, and he was running for his life.

To where? The question popped up again to confront him as he slogged upslope, following the cable car line

Empire Builders 47

overhead as a rough guide. His immediate goal was another one of those "temporary" shelters that had been emplaced along the cable line. He worried that the next tempo would be largely gutted of its supplies, as the first one had been. Or that Kate Williams's team of goons would have figured out where was going and be there waiting for him.

He pushed on.

Fifty years old, he thought. Some double-damned birthday this is. Some guys retire by the time they're fifty. Or chuck their careers and start out on something new.

He grinned to himself. That's what you're doing, Daniel old pal. Change of life. Time to start a new career. You're going from being a billionaire to being a penniless fugitive from the law. How's that for progress?

Well, he answered himself, maybe this time around I'll figure out what I want to be when I grow up.

Feeling strangely cheerful, Dan trudged on up the slick, almost slippery, face of the mountain. He stumbled here and there; once he slid on his rump for nearly thirty yards, stopped only by the rim of a new-looking crater. Sitting there, helmet visor fogged with his ragged breath, peering down into the shadowed depths of the crater, he realized that sizable meteoroids still struck the Moon with some regularity.

That would be the icing on the cake, to get killed by a meteorite. God's sniper. He laughed and clambered laboriously to his booted feet once again. At least, he told himself, you can make yourself a moving target.

I panicked, he admitted. I panicked and ran. But what alternative did I have? Once Scarlett's goons had me in their grip they weren't going to let me go. Whether Malik sent me to Tetiaroa or Devil's Island, I'd be tucked away someplace where I'd never get out. I had to run. Or end up in the penal colony at Aristarchus.

Shouldn't have come back to the Moon. That was my big mistake. You can get around on Earth. Twelve billion people down there; not even the GEC can keep track of all of 'em. I could have faded into the background while I figured out some way to fight back. Now I'm stuck up here. My next big accomplishment will be to find some air to breathe once this backpack runs dry.

And every step I take moves me further from the launch pad where spacecraft take off for Earth.

He spotted the tempo, a rounded hump of rubble that looked at first like an abandoned slag heap. But there was an airlock on one side of it, and an antenna poking up from its top.

And a parade of bootprints in front of the airlock, Dan saw. In the undisturbed airlessness of the Moon it was impossible to tell how fresh the prints were. They could have been left by Armstrong and Aldrin, if the Apollo 11 crew had landed at this spot. Dozens of prints, overlapping, exposing the bright, sandy-looking underlayer of the regolith. In a few millions years' time they would be darkened by solar radiation, just as the undisturbed top layer was.

The prints appeared out of nowhere, seemingly. Then Dan realized that people came this far in a cable car, got down from the car by ladder, and walked to the tempo's airlock. How recently? He studied the prints for a few swift moments. There seemed to be just as many heading out as heading in, but he could not be certain.

Shaking his head inside the helmet, Dan decided to push on. *I'm not walking into any trap they've set up for me*, he told himself. *I'd rather run out of oxygen first*.

Nearly three hours later he was wondering if he would run out of oxygen. The suit smelled funny. Maybe the oxygen's contaminated, he thought. Or whoever was in this shell before me left a powerful body odor in it. Or maybe I'm starting to crack up. Whatever, the next shelter is it. I'm going in no matter what.

He had reached a ridge of flat ground, something of a shelf that jutted out from the shoulder of the mountain. The crest seemed within reach, but there in the middle of the ridge sat the unmistakable humped pile of bulldozed rubble that marked another tempo.

Dan clumped tiredly over to it. Sure enough, there were plenty of bootprints all around the airlock hatch.

"What the hell," he said to himself.

He slid the hatch back and stepped in. The airlock cycled automatically and most of the stiffness of his suit wilted away as the air pressure built up to normal. The light panel turned green and Dan slid the inner hatch open.

A huge, shaggy-maned, red-bearded man was standing at the hatch, massive fists planted on his hips, a fierce scowl on his flushed face.

"Who the hell are you?" Dan blurted.

The man snarled back, "And just who the fook are you?"

Dan stared at the big, red-bearded stranger. Beyond his giant bulk the shelter looked as if it had been turned into a home. He saw two pairs of double bunks, a desk with a computer atop it, and rough shelves stacked with canned foods all the way up the curved ceiling.

"I asked you a question," the big man said. "Who are you? What're you doing here?"

"I asked you first," said Dan, taking a booted step further into the shelter.

The man looked like anything but a GEC enforcer. Or a Yamagata employee, for that matter. His coveralls were frayed and faded, even patched at the knees, stained with oil and dirt. His wild hair hadn't seen a scissors in months, and his beard looked as if it could be home to an entire biota of its own. He's sure not one of my people, Dan told himself.

"Now, look," the man growled. "I've asked you twice. I won't ask a third time. Who the fook are ya?"

Grinning, Dan slid his helmet visor up. He had been in his share of fights on the Moon. This big goon was in his coveralls, while Dan was still encased in his pressure suit and helmet. If it came to a fight it would be no contest, despite the stranger's size.

"You're trespassing on Yamagata Industries territory," Dan said. "And from the looks of it, you're stealing equipment and supplies, to boot."

The man roared and made a grab for Dan. Inside his cumbersome suit, Dan made no attempt to evade him. He

jabbed with a stiff left, ready to follow it with an overhand right. But the giant let the left bounce off his chin with no apparent effect, and before Dan could throw his haymaker, the man grabbed Dan by the shoulders and lifted him off his feet, suit and all.

Suddenly Dan was dangling in midair, feet pedaling uselessly, his arms pinned to his sides, while the giant roared in his face and shook him like a terrier breaking a rat's back. Dan rattled around inside his suit, his head banging inside the helmet. He could not breathe. He tasted blood in his mouth. His whole world was shaking and roaring. He saw stars flashing and everything started to go gray.

"That's enough, I said! You don't wanna kill him until we find out who he is and what he's doing here."

The giant let Dan fall to the floor with a thunderous thump. Pain shot through him.

"Lemme talk to him."

Dan looked up through bleary eyes and slowly focused on the wrinkled, shriveled face of an ancient black man. He was tiny, the smallest and skinniest man Dan had ever seen. And old, far older than anyone Dan had seen on the Moon. Like the giant, the black man's coveralls were tattered and grimy.

The scrawny little man squatted beside Dan's prostrate form, bent his face close to Dan's, and said in a voice like sandpaper, "You gotta excuse my big friend. He's got a real short fuze."

Dan nearly gagged at the man's breath. Every part of his body hurt.

"We don't get a whole lot of visitors here," rasped the old man.

Dan nodded weakly.

"Now I'd 'preciate it if you'd kindly tell us just who the hell you are. Whatchya doin' out here?"

"Give me a minute. . . . "

"To think up a story," growled Big George.

The old man held up a hand. "Let him catch his breath, Georgie."

He finally managed to say, "I'm Dan Randolph. I'm on the run from the GEC—"

"Dan Randolph!" blurted Big George. "Not fooking likely! I worked for Dan Randolph. He's one of the richest bastards in the fooking universe."

"I was," Dan said, pulling himself up to a sitting position. "Double-damned GEC stole everything I own."

"We ain't heard nuthin' about that," said the old man.

"Just happened today. I took off before they could grab me and send me back Earthside."

"And you just happened to drop into our shelter," Big George said, his bearded face full of suspicion.

"That's right."

The old man rose to his feet. "Help him up, Georgie." Before Dan could react Big George leaned down, grabbed him again, and lifted him upright.

"Get that suit off him. We can use it," said the old man. His voice sounded an old-time diesel rig grinding its gears.

"I've told you my name," Dan said, as he lifted his helmet off. "What about yours?"

The old man cast him a sour look. "This is Big George," he said, pointing with his thumb. "They call me Pops Tucker."

"They? Who?"

"None of your fooking business," George snarled. "Now peel off that suit or I'll take it off for ya."

Dan started to open up the seals on his cuffs. He heard the chugging of air blowers and thought that the square anodized blue case sitting in the far corner of the shelter looked like an air regenerator from an OTV. They obviously don't work for Yamagata, he thought, and they sure don't work for me. They've turned this tempo into living quarters—for more than two people, if the other bunks mean anything. And the little guy said "they" call him Pops Tucker. Who the hell are "they"?

Lifting the hard-shell torso of his suit over his head, Dan told them, "I'm going to be pretty goddamn stiff and sore, thanks to you."

Tucker frowned at him, but said, "George, find some liniment and aspirin in the medical supplies." To Dan he added sarcastically, "I'm sorry we don't have diathermy equipment or a whirlpool bath for you, Mr. Billionaire."

"Don't worry about it," Dan replied. "My own stuff is probably being used right now by a redheaded lawyer who was a spy for the GEC."

When he finally had removed the last part of his suit, Tucker motioned for Dan to come with him to the table they had set up at the far end of the shelter.

"Our dining room," he said. "You must be hungry." "Now that you mention it," said Dan, sitting down gingerly.

Tucker took the slim plastic chair on Dan's right. "Before we eat, tell us what happened to you."

"Yeah," George said, straddling the chair on Dan's left. He leaned his buffalo-sized forearms on the table; it groaned and sagged. "Prove to us that you really are Dan Randolph."

Dan felt the pistol in his pocket pressing against his thigh. Whoever these guys were, they weren't security types. Professional security men would have searched him thoroughly. He felt a little better, knowing that these two men were more like babes in the woods than anything else. The pistol gave him an edge, even against Big George.

"Well?" Tucker prompted.

Dan started to tell his story, getting angrier inside with each sentence. Kate Williams, Nobu Yamagata, even Jane Scanwell had betrayed him. Now Malik's people were taking over the empire he had worked all his life to build up. Now he was broke, alone, friendless, seemingly at the mercy of two crazy men. And burning with helpless rage. He didn't know which was making him more furious: his hatred for Malik or his frustration at being unable to do a thing about it.

"You mean you expect those other bigwigs to work with the gov'ment on this greenhouse cliff?" Tucker asked incredulously.

Dan sighed heavily. His back felt like a board that was on fire. "I don't know what the hell they're going to do. If they can't convince the Council that they'll coop-

erate voluntarily, Malik'll sure as damnation take them over, just like he's taken my company."

His wizened chin barely clearing the table top, Tucker looked across at Big George. "Whattaya think, Georgie?"

"I never saw Randolph when I worked for 'im," George replied. "But this bloke tells a good story, at least."

"When did you work for Astro?" Dan asked. "What kind of job did you have?"

George scratched at his shaggy beard. "Two years ago. Came up here to maintain the surface skimmers. For the big helium-three project, you know."

"Right. We were hiring teleoperators then. And technicians to maintain the skimmers. They're pretty complex pieces of equipment."

"Yeah. Well, to me they weren't anything but big bulldozers with some fancy toys built onto their backs."

The skimmers scooped in the top few centimeters of the lunar regolith, separated the dirt into basic elements, and fed the ores to solar cell manufacturing plants, all completely automated. They separated out the heliumthree, turned the silicon into solar cells, and deposited the cells back on the ground as they moved along.

"Damned expensive toys," Dan said.

Big George actually smiled at Dan. Or he seemed to; it was hard to tell what was going on inside that beard.

"We used to call 'em cows. Grazed on the regolith and shat solar cells."

Laughing, Dan added, "All automatic, too—or under remote control by teleoperators back inside the city."

George's smile turned into a scowl. "That's what they fooking told you, maybe, but it's not the way it worked." "What do you mean?"

"Fooking skimmers needed maintenance all the time. Otherwise they'd be down more often than they'd be working. Bosses had us out on the surface every fooking day, fixing the bastards."

"Fixing what?" Dan asked.

"Dust! You ever try working on the surface? Fooking dust gets into everything."

"I've worked on the surface," Dan snapped. "I was working up here when you were in diapers, for god's sake. We designed those skimmers with electrostatic dust screens—"

"That aren't worth a cow flop," George said. "I'm telling you, they had us out on the surface every fooking day, just about."

"But that's against safety regulations. The radiation buildup could be dangerous."

"Tell me about it. I complained, but my supervisor said it was either go out on the surface or get fired. I tried to go over his head. No way. I tried to get the other technicians to refuse to go outside—bring the problem to a boil, so to speak."

"And?"

"And they fired me."

"I never heard anything about this."

"I suppose not. You're too high above us working blokes to be bothered with such petty problems."

"Who fired you? What was his name?"

"Hers. And what difference does it make? What're you going to do about it?"

Dan started to reply, then realized George was right. There wasn't a damn thing he could do about it.

"So what happened then?" he asked quietly.

"Well," George said, "Astro guarantees your return fare Earthside, even if you're fired. Part of the pension fund. That's one good thing about the company, I've got to admit."

"So how come you're still here?"

"I took it out in cash and hung around for a while. Figured I could get another job. I had a girlfriend at Alphonsus that I didn't want to leave and she couldn't go back Earthside because she was making five times what she'd get back home."

Dan waited for him to say more, but George lapsed into silence.

"You gotta understand," Tucker said in his rasping voice, "there's a whole underground community here. People like George who just sort of faded into the background—"

"Now wait a minute," Dan said. "People don't just fade into the background up here. Everybody's accounted for. Computers keep track of every person who arrives and every one who departs. And in between, too."

Tucker smiled widely, showing teeth that looked artificial to Dan and creasing his wrinkled face even more deeply than usual.

Pointing to the desk a few feet away, he said, "There's a computer. You find George Ambrose in it. Or Freeman Tucker. I can name a hundred more, too."

"A hundred?"

"More," George said.

"How in the name of hell can you live in a closed society like Alphonsus? I mean, it's a self-contained community, ecologically and economically."

Tucker gave him a nasty smile. "Almost self-contained. Almost completely closed. We live on the almost."

"How?"

"That's none of your business, not yet. Right now, we gotta figure out what to do with you."

Dan glanced at Big George. The shaggy giant was watching him the way a lion stares at a gazelle.

"Way I see it," Tucker said, in his harshly grating voice, "there's three possibilities."

"Three?"

Ticking his fingers: "One: you're a spy from management, sent here to root us out. Two: you're some nutcase who thinks it'd be fun to be in the counterculture. Three: you're telling the truth and you're really who you claim you are."

George held up three of his fingers. "So you got one chance out of three of staying alive."

Dan mulled it over for a moment, then leaned back in his chair, painfully, and tried to look nonchalant. "One out of three is a good batting average, in baseball."

50 Ben Bova

Sometimes, in a Meadow

Christine Beckert

Wendy was eight, but she was not allowed to go to the meadow. She knew that, and she knew why—or at least, she had been told why. It was too far, too empty, too lonely. Who knew what might happen in the meadow?

Who knew indeed? It was a field, really, an empty space, a space not yet tamed by house and yard, a weedy, stubbly, scrubby space. But to Wendy it was the meadow, for that sounded so much nicer than field, which was the word her parents used when they forbade her to go there. Keep out of Samson's field, they'd say, menace heavy in their voices, though Wendy was never sure if the menace lived in the field or in her parents, should they find her there.

Anyway, it was in this meadow, and only in this meadow, that she could—

Stand just so and not see a house or a road or a rail fence or a carefully sculpted natural boundary. . . .

Lie down with sweetsmelling grasses growing high enough to hide her from all but the Eye in the Sky, who would then tell her warm secrets. . . .

Climb one of the few trees



Illustration by Rob Alexander

growing there (poor, stunted things—who knew the former use of Samson's field?), whose branches sprouted low and thick and crooked, providing an easy climb and a wondrous, made-to-order perch for reading or dreaming, where the sounds of radios and lawn mowers and bouncing balls did not intrude. . . .

To be sure, Wendy's parents were convinced they had done the right thing, bringing the children to the country, but their country was manicured and tidy. When Wendy had heard "country," she had pictured wool and wheat and woods, and she was utterly happy. She had not cried in disappointment when they arrived at the new house on its neatly manicured acre and a half, but she had when she discovered Samson's field and realized it was all the countryside wildness she would find, and so had set about converting it into the meadow, rife with possibility.

It was in the meadow where she might-

Be approached by a rabbit on an important mission, who had no time to talk but who could be persuaded to do so. . . .

Wander into Yesterday and behold a terrible sacrifice, enacted by shadowy, murmuring figures slowly circling the huge flat boulder. . . .

Sing a tuneless melody that would be captured by wistful butterflies and woven into dreams for another day. . . .

Find the entrance to a tunnel inhabited by dour dwarves who feared the sun but who told tempting tales to lure one down, down, into their hole, never to be seen again above the ground. . . .

Wendy was a good girl, really, who never used to cause her parents trouble. In this new house she had a room of her own, the tiny one, the family deciding that the boys, fourteen and fifteen, could share a room more compatibly than could Wendy and her big sister, who was seventeen and who hung pictures of rock stars and athletes on the walls. Wendy kept her room tidy and clean. She did not hang much on her walls—only a branch that had curiously wound about itself in an eye-baffling puzzle, and a picture of an Arabian girl leaning on a stone wall overlooking a wild garden. Some years ago one of her brothers had in a moment of rebellion torn this picture from a library book. He had to pay for the book out of his allowance, but Wendy saved the picture, smoothed it out, trimmed the torn edge neatly, and hung it on her wall, between the two windows, where she could see it between the branches of the maples and the glimpses of the sky as she lay in bed. Mostly she looked at the Arabian girl's face, which was eagerly watching for something beyond the garden—who knew what?

What indeed?

Perhaps a wild horse, just captured, waiting for her to tame it, to love it, to be part of her as they rode. . . .

Or a caravan from some great bazaar far away, full of rich tapestries and jingling bells and heady spices and perfumes and the aura of wondrous lands beyond. . . .

Or a troop of elves come to insist that she was one of them, stolen at birth and taken to a young couple who mourned their own baby's passing. . . . Or any of the things that might happen in Samson's field.

Wendy's sister tried to get her interested in soccer. Meg was so good she would be getting a sports scholarship, or so the family proudly believed. One of her brothers, Don, ignored Wendy utterly, but Richie sometimes came with her to the meadow. Richie read everything he could get his hands on about King Arthur and his Round Table, and about Robin Hood and King Richard, and he liked to people the meadow with knights on important quests or in tourneys of great panoply. When he did that, Wendy loved him and went with him, but when he was at home or with Don or his own friends, he laughed at her and called her a baby.

Her parents were always busy. They had bought an insurance agency in this town before they moved here, and it was very successful. They were happy about that, especially her father, who told the children insurance stories that the older ones laughed at but Wendy never understood. Then her father would scowl at her, and growl, "Grow up, kid—get practical."

Sometimes Wendy thought her mother might understand about the meadow. Sometimes her mother would stand at the back door and look out, and it was clear she was not looking at the lawn or their patio furniture or gas grill, or even at the Harrisons' behind them but at something beyond that, at Samson's field, perhaps, which lay in that direction two blocks over. At these moments Wendy would sometimes creep up and just take her mother's hand, and her mother would sort of draw in her breath and squeeze Wendy's hand. "We have it pretty good, don't we, honey?" she'd ask, but Wendy was not sure at these moments whether her mother really knew the answer.

When Wendy was younger, before she could read, her mother would read to her every night, from marvelous books of beasts and people, books with enchanted pictures that would take them far away. But after they moved here she was so busy with the new business-she and Wendy's father even worked at home in the evening and often one of them would be gone—that the readings became fewer and fewer and eventually there were none. Her mother still bought books for herself, but more often than not they ended up on the shelves beside the fireplace in the family room in the basement. Once Wendy woke up in the middle of the night, thirsty, and when she had gone to the kitchen for milk had seen a light downstairs and cautiously peeked. She saw her mother curled up in a chair, absorbed in a book, unaware of Wendy on the stairs or indeed of anything in the world about her.

Wendy crept away, leaving her mother to whatever she had found.

Theresa Lyons knew she was quieter now than when she was younger; she recognized that fact without quite understanding why it was so. Roger would grumble or even shout—"What am I, carrying on a conversation with myself?"—and she would say no, no, she was listening, but she wasn't, not really, though she would know at least vaguely what he was talking about, and though there really wasn't anything else in particular she was thinking of.

52 Christine Beckert

Even by herself she was quieter. She had noticed, driving along the highway to see a client, that for long stretches her mind would be blank, navigating the drive all right, but otherwise oblivious of the scene about her and of everything else. Hadn't she, when she was younger, found such time rich with imagined life, with dabbling in hopes and hatching of plans? Hadn't the clouds lured her on to tomorrow, and the hills to distant lands, and the stranger in the next car to romance, sweet and shy? Hadn't there always been a dream that never quite ended?

Now there were just days, gotten through with, done with, *finis*, job well done. There were successes and disappointments, dollars earned and lost, resolutions to have more sensible Christmases, discussions about whether to buy a condo for investment, tut-tut's or ooh's over report cards, just days.

The people she loved—and she did love them, or told herself she did—moved through her life. No—they moved through their lives, occasionally touching hers, never moving through it. She loved Roger—but at times she looked at him as if he were from another planet, so foreign did he seem, and yet everything he did and said was just Roger, the Roger she'd known all along. She loved her children—but she could no longer feel them within her. She knew they had come from her body, but that was just an intellectual awareness. She looked at them, amazed at their sturdiness and their independence; she chatted, she yelled, she soothed—but that was only because they were there, not because they had any intimate connection to her.

With secret, guilty awareness, she read stories in the newspaper and magazines about women who had abandoned their families. She would say, slowly, thoughtfully, when, for example, her secretary said passionately that she, for one, didn't see how anyone, any *woman*, could abandon her children, she, Theresa, would say no, I can see it. Maybe it was something terrible, she'd say, but maybe it was just—well, maybe everything just added up to nothing. Then the secretary would nod, trying to be accommodating, but her truth would burst from her: "But how *could* she? Her *kids*—!"

Not often, but every now and then, perhaps late at night at an inn in Maine where they had come for the weekend, there, looking out at the glittering stars unencumbered by the heavy pull of city lights—or perhaps in her garden, on a cool spring morning when the kids were in school and she'd told Roger she just couldn't face the office that morning, there, sitting quietly, no radio or footfall behind her—or perhaps looking out a window, perhaps the one above the sink, with Wendy sliding up more magically than she had any right to do and taking Theresa's hand in her smaller one—well, perhaps she did think about slipping away, as soft and quiet as mist, not looking back, not looking for anything else but just becoming lost, just drifting into the spaces of a life, elsewhere, different, where something unexpected might happen, where spirits would define the mystery of her life.

But then, of course, Roger or one of the children would cough, or the telephone would ring, or Wendy would have that question in her eyes, and Theresa would shrug and go about her business. Now it was a Saturday in early October, after eleven in the morning, and the whole family was annoyed—Wendy was missing, though she had been told to be ready at eleven; they were all going to Roger's sister's for a barbecue. Theresa liked these people; usually she came home happy with random laughter and inside jokes. Recently, however, and more and more often, she'd felt like a spectator, as she went through the moves, chided the children, ate her steak, listened to the stories, like a stranger, like an intruder, like a fake.

At that moment it didn't matter, since Wendy wasn't here. "All right, you guys," said Roger finally, "split up and start looking. And if she's in that damned field . . ." He didn't finish his muttered threat, but it was enough to send Meg, Don, and Richie scampering away, replete with virtue since this time it was not they who were in trouble, perhaps stimulated by a bit of unlovely sibling sadism about what awaited their sister when she was found.

Theresa herself was worried, though not about Wendy's immediate fate, or what might befall her in Samson's field. Despite Roger's horrendous fantasies about what lurked around his children in the cruel world, Theresa herself seldom gave it a thought. Statistically, they were fine, she reasoned, though you couldn't protect them from everything. And besides, without the spice of the forbidden, how could one survive? Without evil witches there could be no fairy godmothers, Theresa knew. She could not quite remember how it was that Wendy had been forbidden the field—perhaps a neighborly rumor soon after they moved here, perhaps a fastidious, gut reaction to an unpleasing playground, a weed- and beer can-infested lot abiding ungraciously in this suburban retreat. Theresa did not remember having anything in particular against Samson's field, but she had stood with Roger in forbidding it to the children.

Not that Meg, Don, or Richie needed prohibitions their radios and friends and sports were enough for them (except perhaps Richie, but he was only a dallier in the strange, Theresa knew, not a permanent resident). Wendy was a different story, and Theresa knew it, if Roger didn't. But with the house and Roger and the three older children—Wendy had been neither sought nor expected —and the business and the newspaper and television comedies and Thanksgiving turkeys . . . well, in it all, she had somewhere lost her sympathy for Wendy. Theresa had hoped, indeed, that the opening of school and a busier schedule would help Wendy recover from whatever peculiar fancy had claimed her (Theresa pushing aside memories of her own childhood fancies, which had been serious indeed), but that had not happened. Wendy's teacher this year, a man of rigorous intellectualism, had no time for the wind blowing through a mind, only for wind speed and vectors; no patience with the properties of one alone but only with positive and negative numbers; no soft touch on hair for an earnest, childish poem but only a stamp-pad smiley face for an expository paragraph, logically developed, coolly submitted.

Yes, Theresa had said at parent conferences, she would talk to Wendy about controlling her imagination,

Sometimes, in a Meadow 53

about learning the right place and the right time, and Roger had done so, had done the talking, while Wendy listened white-faced and while Theresa remembered Wendy's teacher last year, in that crowded city school, that woman who had stood with Wendy at recess and counted the flashes of sunlight and read in them the genealogy of elves, that teacher who had included in the school literary journal Wendy's story of a lily that had died and gone to heaven to be a star.

But here was Don, triumphantly dragging Wendy home, her party clothes dirty, her face smeared. Theresa saw Wendy steal a glance at her, but Theresa kept her face immobile, though she wanted to scoop her small daughter up and run someplace. She thought of a dark forest, with a sunlit glade somewhere within it, a dim path curling away, herself and Wendy there on a fallen tree, Wendy on her lap, Theresa's hands gesturing as she spoke of wishes and winds. But Theresa said nothing, and Roger was screaming, "Where were you, where were you, you little brat?" and Wendy cowered but said nothing, so Don gleefully announced, "She was in Samson's field, Dad, just like always, sitting there like a ninny in that old tree."

Roger reached out in fury and slapped Wendy across the face, hard enough to make her stumble but not fall. Roger had never slapped any of the children, ever, though he—and Theresa, too—had swatted them on the behind plenty of times, but Roger, even an angry Roger, could never be cruel. Wendy's dignity may have suffered, but she was not hurt. Theresa saw this. Why, then, was there a scream in the air that no one heard?

Now Roger was telling Meg to get Wendy cleaned up, and for heaven's sake hurry, they were late. Wendy allowed herself to be led docilely into the house. Theresa looked over the treetops into the cool blue sky, willing herself to stay where she was and not wander off to find the end of time.

The next morning Theresa awoke early, about seven o'clock. She luxuriated a while in the comfortable warmth of the bed, secure against the chilly room, but at last the lure of the glittering sun on the brilliant foliage outside the window drew her up. She was careful not to disturb Roger sprawled next to her. Perhaps she would take a walk, she thought as she quietly slipped on her jeans and an old, oversized sweater. She would walk in the cool fall air, revel in the glory fall dons before dying. She used to walk a lot, as a child through the neighborhood and the woods beyond, as a college student in the old cemetery across from the dorm, as a young woman through the city streets and parks, always looking. She could not remember exactly when she had stopped walking, or why, but this morning she would walk. Most of the family would sleep for hours, but Wendy might be awake. Theresa would have a cup of coffee, and if Wendy were up by then, she would take her with her. They would walk in to tomorrow, perhaps. Theresa smiled as she brushed her hair before the mirror, a small tension in her forehead and around her mouth almost visibly loosening.

Ten minutes later Theresa was obscurely happy as she

sat on the back stoop, cold under her though the sun was warm, her hands cupped around her coffee mug, her face absorbing its steam, her eyes roving the trees, her mind wordlessly drowning in the beauty about her. When she had been about Wendy's age, she remembered, she had told her mother in all seriousness that dryads had to flee their trees in winter, and so they held a grand festival in the fall and spent their hoarded summer wealth in a last round of joy. Then the cold winds and ashen skies would drive them forth, out of their trees, to roam cold and lost and frightened through the winter. In spring they would creep back, weak and exhausted, to their trees, which welcomed them, but suspiciously, and so were hesitant and slow about responding to the dryads' pleas for a new start.

Her mother had merely laughed and hugged her, but Theresa had mused on the fancy for weeks, adding details, naming the dryads, falling asleep to the whisper of the branches. How odd that she should remember all that now!

Theresa stirred, shaking her head ruefully and sipping at her coffee. She was thirty-eight years old, with responsibilities, roots, realities; dryads no longer laid their cool fingers on her neck. But there was a spasm of longing as she watched the trees.

Surprising—Wendy had not come down yet. She was usually the first up, and Theresa had expected her, though not consciously, as she sat there. Yesterday Wendy had been quiet on the way to and from the party, a bit subdued as she played with her cousins. She was sent to her room when they returned, where she remained without complaint. The other children had sniggered a bit, until Roger hushed them; then they settled in to television, forgetting Wendy. Theresa took her a sandwich later and found her sitting on her bed, curled up in herself. Theresa smoothed back her hair and said gently, "You mustn't worry us so, darling. Sometimes you've got to pay attention to clocks."

"No one was worried," Wendy mumbled, "and no one cares about *my* clock." Theresa had left her with her thoughts.

Now, behind Theresa, the door creaked open and she turned, curiously relieved, expecting to see Wendy. It was Richie. "Mom?" he asked. "Mom, is Wendy with you? She's not in her room."

A coldness flowed through Theresa, and a ringing in her ears felt like a wall of sound as she scrambled up and darted through the house, calling Wendy's name. She was bound up, smothering in air, moving through an unreal world where nothing was familiar. Her calls had awakened the others, who were drifting out of their rooms, asking, "What's going on?" She paid no attention but, once sure Wendy was not there, hurried out of the house and half-ran, half-stumbled, up the street to Samson's field.

Wendy thought she liked the fall best of all. Summer was lazy and dreamy, a time for slow, magical things—clouds and carpets that carried one away, flowers that nodded with secrets, birds that teased and laughed and sang for the sheer joy of the air. Winter was dark and busy—evil

54 Christine Beckert

was afoot then, laying plans, hatching plots, attacking the world with snow and sleet. Spring was change and mud and impatience; it scurried through, spring did, at least here. But fall was crispness and excitement and last hope and dread, all together.

Fairies lived in summer, in Wendy's world, and sprites ruled spring. Dwarves controlled the winter, she knew. They lived underground where they plotted to let winter out and fought to keep it out so they could imprison the world. But the sprites were too silly and ignorant to show proper fear, so each year they scampered out in defiance of the dwarves' wrath, of the growling storms and howling winds the dwarves sent after them.

But fall belonged to the elves, mischievous and funny, not altogether good, no, but not cruel either. When they did something bad, they didn't mean to, and they apologized and were forgiven, quick as that, for who could stay angry at elves? They played games, Wendy knew, even better than the ones she played with her cousins, and they sat around campfires telling spooky stories of goblins and ghosts, and they painted quick, clever pictures of their friends, pictures they tore up after they had been admired.

The elves were coming for her. They had offered to take her away many times. She had gone for visits, skipping across the barrier to their world with no trouble but a slight pull on her heart, soon forgotten. But every time she had come back. This time she would not.

Wendy sat beneath the stunted little tree, which had given up its leaves early. But around her the scrubby sumac was brilliantly red, creating fiery revels for her eyes. The sun was warm on her head. To be sure, the ground beneath her was cold, but the elves would give her a toadstool seat all her own, with her name carved around the stem, along with runes to protect her.

And then Wendy jumped up, because they were here, her friends, popping up as unexpectedly as usual, hiding in tall grasses and asters that in turn hid among the scrub of Samson's field. Ordinarily when Wendy stood up, she could see Oak Street and the Bigelows' house beyond, but when the elves came she couldn't. Then a mist hovered close behind them, whether shielding them from Oak Street or Oak Street from them, Wendy was never quite sure.

"Hello," she said and reached out both her hands, bracing herself a little for the tug that would come in a moment.

Theresa stood rock still on the sidewalk, panting. The mist hanging over the field hovered in her heart as well—both were unnatural, the sun having long ago dissipated the early morning fog. Sunshine fell on her own head and on her daughter's, but it was no longer warm. Out in the field the mist made the outlines of things indistinct, so Theresa was not sure whether Wendy heard her or saw her. Wendy was reaching out her hands, but not to Theresa. She was holding them out to something that seemed ready to grasp them out of the mist and draw her in.

Theresa took a deep breath, not daring to take her eyes off Wendy. She knew she could not yet go into the meadow, not one step. She did not know how she knew this, but she did. Wendy would be gone, and Theresa would be left with shreds of ground fog and no map to Wendy's whereabouts or her own.

As if just feeling a knife wound, up to now unfelt because unbelieved, Theresa knew the pain in her heart was jealousy, and the stab of that realization, like a second wound, shocked her, and her will dissolved into a mad yearning, a hunger, a powerful silent plea that Wendy wait for her, that Wendy reach out her small hands to her mother and pull her free of the guilt of her years of wanting to be free, and simultaneously and paradoxically to absolve her of her betrayal of all her dreams, of all that made her her, and most of all to forgive her for that moment of envy, shame for which prevented Theresa from begging Wendy to wait and instead impelled her to scream out, her words thrown into the mist like stones hurled in a siege, "Wendy, come back! I love you!"

And for the first time in many years, Theresa was fully and truly a mother and fully and truly herself, and perhaps Wendy knew this, for the girl turned her head towards Theresa and lowered her hands and then raised them again, holding them out to Theresa like a gift.

Theresa did not notice that the mist was gone as she ran across the meadow and scooped up her daughter. She put aside her own shame and guilt, like a long winter cloak laid in a chest, no longer draped heavily over Wendy's thin shoulders. Her own arms were all she put on Wendy, the arms of an ally. Something soft, like a breeze, entered her heart and carried her aloft.

"Let's redesign the clock," she said gently, gently touching Wendy's cheek. "We'll have sometime, anytime, glad-time, sadtime. . . ."

"And no time at all," said Wendy. "That's how long it takes to get from there to here."

"Yes," whispered Theresa, "in no time at all."

As mother and daughter walked home, hand in hand, perhaps, behind them, elves gathered in Samson's field, but whether in glee or disappointment, no one can say. Perhaps they just waited for another time. •

GMCs and Planet Building

Stephen L. Gillett

How do planets get made? Sure, we talk glibly about "accretion" from a condensing nebula, but that's just a term to hide ignorance. How, specifically, does matter condense and then glom together into larger and larger objects?

It's been a mystery for a long time—and it's still largely a mystery—but we're now making some progress.

It starts with the gravitational collapse of part of a GMC, a giant molecular cloud (not General Motors Corporation!). Such clouds are common in spiral galaxies like the Milky Way. They're vast agglomerations of gas and some dust that, although still a far better vacuum than anything we can make on Earth, are denser than the usual interstellar gas. They're dense enough, in fact, that lots of the atoms in them are combined into molecules-from which they get their name. As you'd expect, the hydrogen-gas molecule, H2, is most abundant, simply because of the sheer abundance of hydrogen. Hydrogen doesn't show up well spectroscopically, though. A molecule that does show up well is CO (carbon monoxide), and it's been used to map these clouds in our galaxy.

A GMC starts to clump just from getting cold. Because the outside of the cloud shades the inside from starlight, the inside cools, just as a cloud shadow cools the ground on Earth. Of course, by everyday standards the cloud's pretty cold already! Starlight didn't warm it very much. But the shaded cloud cools from a

balmy -200°C or so to maybe -250°C —and that's a big difference.

Why? Because the pressure of the cloud gas is what keeps gravity from pulling it together. Pressure results from the gas molecules colliding as they rush around. But as a gas cools, its molecules move more slowly and hit less hard—and thus its pressure lessens. So gravity can clump the cooler parts in tighter.

Still, such a clump can't yet quite fall together under its own gravity. It needs a push, just like a snowball needs a little shove to start rolling. What kind of push? One possibility is a density wave. These are like the waves you get along a Slinky spring when you push it in and out at one end. The spiral arms in spiral galaxies such as our own are now thought to be such waves. They're vast and sluggish, obviously, but they could still work. Another possibility is the shock wave from a nearby supernova, the vast explosion of a burned-out massive star. As I noted in "Meteorites and Planet Pieces" (Sept. 1992), some meteorites show evidence of a nearby supernova that blew just before the Solar System formed. Or maybe instead, a nova or a planetary nebula (the shell blown off by a dying red giant star, as it dwindles into white-dwarfhood) gave the push.

Such a nearby supernova or other exploding star would not be an odd coincidence, either. GMCs spawn a few very massive stars, and such stars have very short lifetimes. Thus they go supernova quickly, before

the overall cloud has changed much (on geologic timescales—say, ten million years or so). So while the cloud is still spawning new stars, the most massive first-formed stars are already starting to pop off within it.

In fact, it seems such explosions eventually blow the GMC apart before much of it has condensed into stars. Only a few percent of the cloud's mass ends up in stars; the rest becomes redispersed, perhaps to reaccumulate elsewhere. That's why galaxies like the Milky Way still have gas and dust to make new stars, billions of years after the galaxies themselves formed.

Now, as the clump collapses it starts to spin faster. "Spin" (angular momentum, formally) is "conserved," as physicists say. Just as with energy, you can move it around but you can't create or destroy it. The classic (and good) example from physics texts is the spinning figure skater who pulls in her arms to spin faster. So even though the cloud may have been spinning extremely slowly to start with, as it shrinks it must spin faster.

If the cloud has too much angular momentum, at some point it will actually spin fast enough to fly apart. It will split up into multiple clouds, and you'll end up with a multiple star system—suns orbiting suns. If there's too little spin, though, the nebula will all collapse into a single slowly spinning star with no planets.

So, just like Goldilocks's porridge, to form planets the cloud needs to be

just right: it needs enough angular momentum that everything doesn't end up in the star, but not so much that several stars form. In such a case you end up with a single star surrounded by a thick, disk-shaped nebula. This leftover nebula can spawn planets.

Now, in our own Solar System we have two fundamentally different types of planets: big, gassy, and Jupiterlike versus small, rocky, and (relatively) Earthlike. It's not likely that these two types are unique to our Solar System, but they seem to reflect very different planet-formation processes. What happened?

The point where the nebula is cool enough that water can condense into ice-call it the Ice Line-seems critical. (The inner nebula is hot even before the protostar "turns on," because of the gravitational energy released as the nebula fell together.) The gas giants form beyond this distance. Water is a common substance in the Universe, and where it freezes out you deposit a lot of solid matter in the nebula, all at once. This seems to lead to a gravitational "runaway"; Jupiter and the other giants probably formed around ice cores formed in just this way.

Some close binary stars may have formed this way, too. If the protoplanet core gets big enough, the nuclear fires will turn on in its core . . . and suddenly you've got a small star rather than a planet. *Very* close binary stars (separated by less than a few astronomical units or so) have nearly circular orbits, just like planets—and that suggests they may have formed much like planets. (By contrast, most multiple star systems that presumably were formed from a fragmenting nebula have very elliptical orbits.)

The giant planets grew much more leisurely in the outer system, though. First, things are moving much more slowly out there, just because orbital velocities are lower. Second, the nebula is thinner! It's been estimated, for example, that Uranus and Neptune took 300 million years to grow, versus maybe a million years for Jupiter.

If all this is correct, too, it means small stars have small planetary sys-

tems. Far-away planets would grow much too leisurely indeed; the orbital periods would be so long that there wouldn't be time to grow much of a planet before the nebula blows away.

But what about the rocky planets? To us, anyway, they're a lot more interesting than gas giants.

Well, first, they're closer to the Sun, where it's warmer. That's reasonable: since it was always hotter in there, things like ice-much less hydrogen and helium-never condensed out in the nebula. Only refractory (high-melting-point) stuff like rock and metal could condense —so even though it made up a tiny proportion of the original nebula, it was all that was left! In fact, as you might guess, the intense heating from the hot new star sets the inner limit of planet formation. That heating determines the distance where even the refractories can condense out.

So, we can see already that the innermost planets of massive, hot stars are farther away from their sun. (*Very* hot stars may have no planets at all for this reason.) Hot stars also should have more rocky planets and fewer gas giants—maybe, indeed, none at all—simply because the Ice Line's going to be much farther from the central star.

We also think we can say something about overall size of planetary systems: massive bright stars should have fewer planets than cooler, less massive stars. This simply comes from the fact that the cloud will have only so much angular momentum: if it had had too much to start with, it would have split up. So if the central star's massive, there won't be much nebula left over to make planets. (But very small stars will have small systems, because the outer part of the nebula can't accrete fast enough before it's blown away by the newly ignited sun.)

Still, understanding early accretion for rocky bodies has always been a problem. How do you get things to stick together, to grow into clods, then planetesimals, then planets? They have to collide extremely gently to stick together. Imagine, for example, trying to get two dirt clods to stick together by throwing them at

each other! Obviously their mutual gravity is far too small to help. Furthermore, unlike the case with ice in the outer System, there's far too little rock and metal to start growing protoplanets by gravitational collapse.

Part of the answer seems to be that the stuff that condenses out of the nebula is more like a snowflake than a dirt clod. Like snowflakes, they're fluffy fractals, filigree networks that contain mostly empty space. Such things can collide a lot harder and still stick together, just like mushy snowballs.

Things do hit hard later on, though. It's now pretty clear that late accretion—that is, accretion after the planets had largely formed—was a lot more violent than scientists originally thought. In fact, our Solar System was a pretty dangerous place for a few hundred million years after the planets had mostly accreted. Large leftover pieces—even aborted planets, some of them—were careening around in unstable orbits, and the pocked face of the Moon (and most other planets) is one result, as the pieces were slowly swept up by collision with the other planets.

Why did this happen? It's due to the giant planets; in fact, it's nearly all due to Jupiter. As we saw, Jupiter probably accreted quickly, and once it did, its gravity started stirring up the orbits of the planetesimals that were left. Some were thrown out of the embryonic System completely, but others were perturbed into highly elliptical orbits-and these careened through the inner System, where eventually they hit something. The present asteroids are the handful of leftover planetesimals that lucked into stable orbits-all that's left, instead of the planet that might have grown there had Jupiter not grown

It's been suggested, in fact, that Mars is a shrunken world because Jupiter perturbed away most of the planetesimals that would have fed it. And as I mentioned in "Under Twin Suns" (Nov. 1991), a major reason for thinking binary stars don't have planets is that another star would be even better than Jupiter at scattering planet-pieces before they could form planets.

So you might think that a planetary system with no gas giants, as around a hot star, would be a better bet for real estate. George Wetherill at the Carnegie Institution, though, suggests that Jupiter did a useful service to the biosphere by scattering away most of the planetesimals early in Solar System history. With few such objects left, huge impacts on planets like the Earth are rare later in Solar System history—which is good for the biosphere!

But anyway, early on these aborted planets made some gigantic craters indeed: the so-called "basins," hundreds of kilometers across. On the Moon, the basins are generally filled with dark basalt lava that outlines roughly circular plains (Galileo's misnamed "seas") such as Mare Imbrium, Mare Crisium, and so on. (The basalt is not related; it was erupted long after, and just filled in the basins because they were lowlying areas.) The Caloris Basin on Mercury and the Hellas Basin on Mars are similar features.

Opposite such basins, on the other side of the planet, we often see a a weird, churned-up landscape. Such "antipodal chaotic terranes" result from the gigantic seismic waves generated by the impact. They travel out from the site of the collision; but they all come back together again exactly 180 degrees away. (So getting as far away from the impact as possible is *not* the thing to do; 90 degrees away would be safer, although it's still not exactly safe.)

As I described in "Counting the Ages" (July 1991), too, this "late heavy bombardment" also lets us correlate geologic time, at least crudely, between worlds. Whenever we see that ancient blasted surface, with craters upon craters upon craters, we know that the surface is *old*. It hasn't seen much change in the 3.9 billion years or so since the bombardment tapered off.

The heavy bombardment obviously had profound effects—even on the Earth, although here the actual scars have long since been erased by erosion and plate tectonics. For one thing, the bombardment may have jump-started plate tectonics. You probably needed such a big

nudge to get the crustal overturn, now so characteristic of Earth, going in the first place.

Another result is that the planets' spin rates and axial tilts are a crapshoot. They result from the vagaries of the last few really big impacts. For example, it had traditionally been thought that Venus spins slowly because, being close to the Sun, her original spin got braked by the solar tide. (Similarly, the tides raised by the Moon have slowed Earth's spin over geologic time. Five hundred million years ago the day was a couple hours shorter.) But maybe instead she *always* spun slowly.

(By the way, after being told that angular momentum is always conserved, you may wonder how a planet's spin can be "braked." Where does the angular momentum go? It's gone into increasing the orbit diameter. The Moon, for example, has retreated from the Earth as the Earth's spin has slowed.)

The bombardment also affected the atmosphere, in contradictory ways. On large planets like Earth and Venus, the bombardment may have brought in atmosphere. It probably contained many cometlike bodies, rich in ices and other volatiles, and the gravity of Venus and Earth is large enough that they'll keep such volatiles even if they come screaming in at 10 or 20 klicks a second. On the other hand, the bombardment may have splashed atmosphere off on smaller worlds, leaving Mars (for example) thin and dry.

And a gigantic impact may also have formed the Earth's Moon: the now-trendy "mega-impact" model. Late in accretion, Earth may have been struck glancingly by a *large* object—a body about the size of Mars. The splash sprayed out lots of material; most escaped, but some stayed in an orbiting ring around the Earth. This later coalesced to form the Moon.

The model nicely accounts for the somewhat ill-defined geochemical kinship of the Earth and Moon, since some Earth rocks ended up in the debris ring that became the Moon. Supercomputer calculations also suggest this "worlds in collision" model is feasible. The mega-impact

model also manages to finesse the problems in the three classic hypotheses of lunar formation, problems that had gotten even worse after the Apollo missions.

What are the classic hypotheses? First, the "child" hypothesis—the Moon was torn out of the Earth when it was forming. (The scar left by the Moon was supposed to be the Pacific Ocean basin, and you could still read this in popular accounts as late as the early 1960s.) This was originally proposed by George Darwin (son of Charles, and a noted mathematical physicist in his own right) in the late 19th century. The problem is that later detailed calculations showed that the proto-Earth couldn't split up in the way Darwin proposed. Other ways of fissioning the Earth also seem unlikely, because if you put the Moon back into the Earth, you end up with much more angular momentum than remains in the Earth-Moon system now. Finally, the Apollo samples show that the trace chemistry of Moon rocks is slightly different from Earth rocks, although they do appear to be related.

The second was the "spouse" hypothesis: the Earth and Moon were formed independently, and the Moon was later captured into Earth orbit. The problem is that such a capture is extremely difficult to arrange; and also that the Moon *does* seem vaguely related to the Earth, after all.

Third was the "sibling" hypothesis: the Earth and Moon were "co-accreted"; formed together in the same part of the Solar System. But the Moon and Earth differ greatly in bulk composition: Earth has a dense iron core, but the Moon does not. This was known by the eighteenth century, when the mass of the Moon could be calculated from its gravitation. And it leads to a problem: if you grow two worlds together, how does all the metallic iron end up in just one?

But the mega-impact model manages to take features from all three. Since material from the Earth ended up in the Moon, the general geochemical kinship of Earth and Moon rock is explained—while, of course, Earth's iron core stayed in the Earth. But of

58 Stephen L. Gillett

course the Moon wasn't blasted off the Earth in one piece! It accreted later from the debris, as in the "sibling" model. And, as in the "spouse" model, a separate object swinging by started the whole business.

This model also suggests our Moon results from a specific event. Earthlike planets don't *have* to have moons. On the other hand, though, with all that stuff careening around in the inner System, a mega-impact of some sort, with something, was all but inevitable.

In fact, we may have another example of a mega-impact in the inner System. Mercury has long been known to have an extremely high density for such a small planetabout 5.2 grams per cubic centimeter, near the Earth's 5.52. The Earth's high density results from its iron core; similarly, Mercury must have an iron core, but it has to be huge: even conservative estimates yield a core bigger than Earth's Moon. Mercury's layer of silicate rock, covering its core, seems abnormally thin; what happened? It's not likely to result from accreting in so close to the Sun, because iron and rock condense out around the same temperature.

Wetherill suggests that most of Mercury's crust and mantle were blasted off in another mega-collision early in Solar System history; and unlike Earth, Mercury was too small to get the debris back again, or even to keep it in an orbiting ring where it could later coalesce into a satellite.

Somewhere out there, there are planets—even Earthlike planets—with extremely high axial tilts, or extremely fast rotation rates, a la Hal Clement's Mesklin, or with multiple moons (if, of course, their orbits are stable over geologic time). Maybe, even, there's a planet that's virtually all iron; the iron core of an object that lost all its crust and mantle to a gigantic collision. (Obviously its name is Cannonball! I described some possible geochemistries for such a world last month.)

The vagaries of accretion mean that real planets are highly diverse objects, and our Universe is likely to be a good deal more diverse than most authors' imaginations!

About the Authors

Since making his professional debut in these pages a few months ago, Mark Rich has begun to make his presence known in the SF writing community. "The Vidim," an inspiring tale of one man's battle against technology in a starfaring environment, is this issue's lead fiction offering. It's the fourth published piece for Mark in the pro ranks, including a story in the Full Spectrum 4 anthology and another one in a recent issue of Analog, and serves as an encore to his first appearance here, "With Love from the Plague Territories," which was in our February 1993 issue.

It's a pleasure to welcome **David B. Silva** to the roster of AMAZING* Stories contributors. Horror fans need no introduction to David, who has been a writer and an editor in that genre for more than a decade; his story "The Calling" was a 1991 Bram Stoker Award winner. "A Time to Every Purpose" has elements of speculative fiction, dark fantasy, and horror, all of which are adroitly combined in a story that no one but David B. Silva could have written.

Juleen Brantingham tells this story about how "Tourist Attraction" came to be written: "On a vacation to North Carolina a few years ago I visited the Thomas Wolfe house. One of the people in the tour group wanted to know what movies Wolfe had been in. I didn't hear much of what was said after that. I wondered. what if Wolfe hadn't been a real person? Would anyone care? If the tour guide's stories were interesting enough . . ." Which just goes to prove that ideas are where you find them—and a good writer can find them practically anywhere.

Another example of that fact concerns the way "SUITs" was born. According to **Paul Di Filippo**, this one "falls into the category of SF stories I like to think of as 'the deification of metaphor.' Only in SF and fantasy can one fully plumb the depths of common language." Which is a

rather fancy way of saying: Think of a word; come up with the zaniest possible interpretation or application of that word; and then write an equally zany story around it.

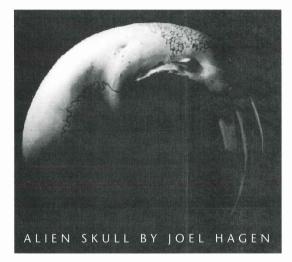
Ben Bova's association with this magazine goes "A Long Way Back"to the February 1960 issue, when a story with that title became his first publication as a professional writer. His name was in these pages quite a lot in the early 1960's, primarily at the head of various essays on science; and his most recent prior appearance here was with another piece of nonfiction in our February 1993 issue. But we've also had the privilege of using some fiction from Ben in the last several months. "Empire Builders" is a hefty slice of action from his new novel of the same name, which will be out from Tor Books later this year.

Christine Beckert is a newcomer to these pages, and another person in the ever-growing group of *Writers* of the Future alumni whose work has graced these pages. "Sometimes, in a Meadow" is her second professional publication, following "The Coat of Many Colors," which appeared in the *WotF VIII* anthology.

"Other Heads" may not be the most outré or ambitious piece of work that Arlan Andrews, Sr., has published, but it must rank right up there among the other top contenders. Not only is it daringly original in concept and form, it's pretty long-but, as we say in the trade, it reads short; and you won't find a single scene or even a single paragraph that doesn't need to be there. Arlan is back in New Mexico, having finished his stint in the White House Science Office, and he reports that he's in the process of restoring a 1977 Triumph Spitfire. It came as no great surprise to find out that he plans to get license plates that read "SCI * FI." ◆

CONTACT

CULTURES OF THE IMAGINATION



CONTACT simulations — produced by top writers, scientists, artists and

educators —

promote interdisciplinary understanding and guide young people to do their own scientific research.

You can support this exciting learning program that uses worldbuilding and alien culture creation to stimulate student interest and development.

The Smithsonian Institution's Office of Interdisciplinary Studies

and NASA's Education Division have provided the **COTI** curriculum with seed funding. Help sustain the

momentum by providing grassroots support.

Call *1-800-787-2010* and use your credit card or send \$15 with the coupon below. You'll make CONTACT and help underwrite an important educational activity. You'll also receive our newsletter to keep you informed about our CONTACT conference and other exciting developments.

☐ YES! I want to make	CONTACT.	☐ NEWSLETTER	SUBSCRIPTION	(4 ISSUES)	_\$15
☐ ADDITIONAL CONTRIBUTION \$	☐ I CAN'T CONTRIBUTE	now. I have enclosed a s	TAMPED (2 OZ.) SELF-ADD	ressed envelope for	A SAMPLE ISSUE
☐ I HAVE ENCLOSED A CHECK FOR \$	MADE PAYABLE TO: CON	TACT: PLEASE CHARGE	\$TO MY • MAS	TERCARD OR UVIS	A ACCOUNT.
ACCT #	Exp	Signature			
Name		ADDRESS			
CITYSTATE	ZIP	Phone		Bus	
MAIL TO: GREG BARR, CONTA	СТ — 1412 Ротом	IAC AVE. SE, WASH	IINGTON, DC 2000	3-3032	
CONTACT: Cultures of the Imagination	® is a California non-profit	educational and scientific	corporation. Newslett	er subscriptions are	tax-deductible

Looking Forward:

Crashcourse

by Wilhelmina Baird

Coming in September 1993 from Ace Books

Introduction by Bill Fawcett

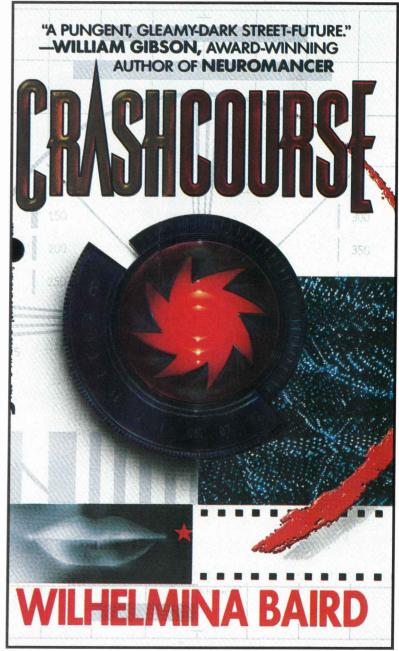
In the cybertech world of tomorrow, the rich get their kicks from watching films while using implants that let them feel what the actors feel. To achieve realism, the actors never know the script, and some of the plots are real killers. But the money is great, even if your co-star is a mass murderess.

In this excerpt from the start of this exceptionally vivid novel, we meet the three people who are, in desperation, about to sign the standard rich-and-famous (and probably dead) contract.

I was taking it easy and slow. Mrs. Waller-Gurney was slated to be out until midnight, which for her probably meant four A.M. and back feet-first with a couple of good friends to carry her. And stuff. Depending, natch, on how drunk she was. Or whatever. My sources had been vague about just what she was on this month. Always supposing the lady didn't throw a headache, fling a tantrum or get herself slung down the stairs by her hostess. All of which things had happened before.

It's the damnation of my line. You can depend on just about everything except humans. I was taking it easy and slow anyway. When you've got as much on the table as I had you can't take the risk of blowing it. I'd got down past her routine domestics and was getting into the good stuff.

I swished my caftan out of the way and fished a chip out of my thigh-pouch. A caftan's a pest to work in, it can trip you flat and you're always having to hike it up and pull it down, but it's one fair way to confuse internal security. Messes your outlines. Like the mask. Like the hood. Like my inflatable high platforms. Of course the law knows nobody's



Cover art by Bruce Jensen

the way they look, but just so long as they can't figure what way you really look it stays cool.

I slotted the chip and keyed for copy. I never understand these rich dolls. If I had shares in half the major industry of the planet and was always too careless and too damned stoned to remember what I had where. I sure as hell wouldn't store it in a common domestic. even with sneak safeties. They know enough to keep it out of the public nets, which are infectious and raidable. but not enough to disc it at all. If that garbage was mine. you know what I'd do? I'd write the whole lot down on a common piece of paper with a common graphite pencil and I'd put the fucker in my bank vault. Bank vaults aren't totally proof against people like me but they're a lot harder to break into than luxury apartments, and the penalties for trying are fixed to deter even the pros. Better still. I'd memorize the damn thing and swallow it. But then I've got a good memory—modestly drug-enhanced around the edges. I need it.

It took two chips to get the whole list of Mrs. W-G's holdings along with her memos for tomorrow's orders to her broker, which brought the whole deal to nearly half an hour. Risky. My safeties were guaranteed for forty-five minutes with fifteen minutes' margin but only a fool sticks around towards the limits. I still had to change and get out.

"Would Madame like her drink freshened?" the spider cooed from the piano. The flute had lost its fresh condensation but it was still full. Spiders aren't very smart. But you can certainly program in your priorities.

"Thank you, Jeeves. You may dispose of the glass and fetch a new bottle. Cold. Which you may put on the table by the cabinet."

"Yes, Madame."

Of course as soon as Mrs. Whatsis came home—or as soon as she or her escorts got their legs and heads back together, whichever came first—she was liable to notice the little disorder in her living room. Actually they don't always. If you spend the major part of your life legless I guess you don't always remember what you ordered in the drinks line before you left. But it wasn't going to matter. In another hour I'd have fenced my takings and the information would be long gone.

It's like any sort of thieving. Somebody's got to make a lot of money, and I mean a lot. His name's a trade secret. My contact who's equally publicity-shy is going to make a couple of sous likewise. I'm the end of the chain. The little guy who does the work, risks its neck, takes the falls if there are any and gets what's left when the big guys have done feeding. One of Nature's jackals. Woof, woof.

I waited until Jeeves was busy at the bar, then moved to the hall door and keyed my pad to freeze off the jinx I put on him while I left. He'd stay paralyzed for as long as it took me to shut it and then he'd forget he'd ever thought I was Missy. The inside cameras either were or weren't blind. I trusted Hallway but not completely. In my job you don't trust anyone completely, not even if you like them. It shouldn't matter. All they'd get was the caftan.

I checked the snaps on my thigh-pouch, grabbed a handful of zebra gauze in the interests of not breaking my neck and hauled myself into the service-duct. I bolted the grill back before I let down the platforms and did my contortionist act with the caftan. It's lucky I'm skinny. But it's better to tie your shoulders in knots than tear the damned fabric and leave fibers with genotype contamination for some startass cop to track. My last convictions were in Juve court for small possession when I was fourteen but those bastards never forget.

I folded the whole messing big-top, squodged it into a handful and rammed it in the kangaroo-pocket of my coolsuit. The mask followed and then the soles, deflated to the thickness of paper. I did a last touch on the thighpouch—it's automatic, like the nervous way some guys can't quit checking their flies when they come out of the bathroom—and slid a couple of yards up the duct before I keyed for cameras. The jinx was off now. What ought to show was just some kind of flicker. When Mrs. Thing found her shares on their way into the Marianas Trench and the cops came around with the real equipment they were going to notice the discrepancies, sure, but with luck it would be too late. And now all I had to do was get outside before Hall's gadget melted off and turned loose the sensors.

Wedding-cake. Provided crawling three hundred yards on your belly through a duct eighteen inches across with only five right-angled turns, then suckering your way down sixty-three storeys of wall in the hope nobody in the neighborhood's using an advanced life-detector is your idea of icing. Coolsuits are great, if a bit hot. They blend with any known background, disappear in shadow and bollix the infra-reds. But you know that cutting edge of science. You never cut so close someone else isn't cutting closer, and the local flicaille's started to borrow equipment from the Navy.

I hoped the wavy techs weren't around tonight. The guys were expecting me home. I breathed out and started crawling.

I shucked the coolsuit and peeled my throat resonator in the outside john behind Lavery's Chinese Pizza three streets off the Strip and got my sports-bag down from the false ceiling over the third cubicle where with luck the junkos leave it be for fear it's heavy. I rolled the awkward stuff into a bundle around my tools with a damp towel and a pair of nose-filters outside to make it look real and stuffed them into the bag. Then I slung it on my shoulder and wandered innocently out through Lavery's, where the entire clientele's on enough garbage to start a recycling plant and if you came through on stilts wearing a clown suit and accompanied by elephants nobody would flip a lid. I typed in an order for spring roll, ribs and pineapple fritters in passing—working makes me hungry—and made for the corner phone to pass a code.

A couple of giggly brats with green-gold raccoon eyes were crammed into the booth, shoving each other with their elbows and exchanging witticisms with a male of the species who looked even dimmer than they did.

62 Wilhelmina Baird

A bad-tempered redneck waited outside stamping his boots and occasionally giving the door a kick to encourage them. That sort of act can go on all night and it gives you tics in your neck-hair. I didn't have all night. But not more than four hours later the gigglers started to wind down and the redneck lost patience and leaned in and threatened to fillet them. I thought for a minute they might take him up on it, but he had eyes like a pair of brake-lights and breath you could have used to strip paint so they decided not. Luckily. Street brawls are discounseled when you're dropping. The ideal's invisibility.

I was afraid turpentine-breath maybe had a long date, but he looked too razzed to be loving. I was right. He called some fellow-ape, snarled some disobligeances about the space-wresting results, threatened to fillet him—his line of repartee seemed limited—and crashed off making with his forearms like Popeye. Maybe he'd been eating spinach. I skipped back just before I got trod on and made it into the box a hair ahead of two hookers who'd wandered up behind and were noised on their starting blocks. We glared at each other in passing but it was a fair win.

I rang my code, let it go three times and re-keyed. Then I called back the same number. On the fourth ring somebody lifted the bar just long enough to show a blank screen and quietly put it back. Contact made. I said, "Oh, shit," loudly to impress passersby I'd hit a wrong number twice and had some horse's ass make me lose my token, and walked back to Lavery's. On the way I did a thing of jerking around in my sleeve-pocket and manged to accidentally drop a sachet of good blue exactly two feet from the recyc slot in the wall of the Half-Moon Massage Parlor and Video Divan. By that time the chips were inside, natch. I walked on without looking behind. The outfits that employ me are efficient. Enough that it isn't a good idea to watch them.

Then I went and picked up my food.

The warehouse was dark when I got to the end of the alley. That meant nobody was working. You can't see the light of our skylight from below—the smudgy glow of bad neon rots the sky over the city all night—but I hoped somebody was home. I was feeling like company. Drinking company.

There was a scuffle from under the steps as I went up to the side door. The main one's been rusted shut for a generation. I leaned down and looked under. The hepatic wino with half a face raised a twisted lip from his pile of rags and held out what was left of his hand. The story is he was a spacer before he got on the wrong side of an engine explosion but I don't know I believe it. The Guild looks after its people. But it's a story.

I dropped him two ribs and a fritter. It didn't leave much, but we have a relationship. So long as one of us has an eye out for him he whistles when the copts come over. And when the junkos come under. Nobody touches him. I mean, would you?

There was a leggier scuffle further up the alley and I looked at him. He shook his head. Mutes, or lovers. Not my dream-place but it's their business. Ole Yeller may

not have a nose but he smells trouble faster than anyone. If he thinks it's straight it is. I nodded back and went in.

Somebody'd pissed in the elevator again and somebody, the same or different, had added "Gurments Is Shrank" in dried-blood spray paint across the back wall. Which is political, philosophical, illiterate or psychotic, check one or more. Spraying our elevator's a local pastime and by now there are so many layers you can't see the metal. Mokey rates that a plus. It stops the pee from rusting it completely.

There was a line of sight under the loft door. Hopeful, I used my key—the place looks like the last minutes of the *Titanic* but we have a good lock; Moke's stuff's valuable, at least to him—and slid through. We not only have a lock on our door, we oil our hinges. Unique. For the neighborhood, anyhow.

Dosh was sprawled on his pad in a corner, the blanket rumpled under him and a pillow wedged behind his slumped yellow head. He was still in makeup, which drives Moke crazy. He had a program crystal socketed behind his left ear and his cornflower eyes were fixed on infinity with as much expression as a Barbie doll. I walked up and took a closer look. As I'd expected, he had three different derms plastered across the side of his throat, one old enough to have lost its color. Wherever he was, Planet Earth wasn't on his itinerary. That made three nights in a row. I love Dosh better than myself but it was getting pointed.

A steady ear-shredding whine was coming from behind the partition, which means either the Martians have landed or Moke's having inspiration. I dumped what was left of my supper on the draft-table in the middle and went to shove my head around.

I had to wait until he'd got through with the saw before it was worth speaking. The work was smallish for him. It didn't quite go through the ceiling, though when he'd finished adding bits it probably would. At a glance you'd say the Martians really had landed. It was a tripod of sorts with spiky bits that he was currently sawing to size. It filled the whole of the big freight elevator, which had to have been a nuisance. He usually builds the big stuff in the warehouse down below where there's room. I guessed he was looking after Dosh in his own way.

"How," I grunted as the noise died, "you guys eaten oday?"

He lowered the saw, raised his face-plate and gave me a tired smile. His old jeans hung on the edges of his skinny hip bones like nothing but hope was holding them up and his bare chest was starred with minute burn-pits and glittering flecks of metal. His hair's blond, the lank dirty kind that looks greasy five minutes after you wash it. He has the face of an amiable horse and sharp green eyes. Right now they were veined with complementary red and underlined in bruise-color.

"You got away," he said.

"Nah, it's my astral body. The rest's holding up the lid of the toilet in the downtown cop-farm."

"Don't even think it."

He was serious. Moke's got this superstition there's

Crashcourse 63

things you shouldn't invoke, ever, even—especially—in joke, in case they happen. It really worries him.

"Right," I said. "You tried to hit Dosh out of it?"

"Done my best. The newest of those is mine but I'm scared to do anything violent. Don't know what kind of shit he's got in there. Seen a guy go into shock hooked on the wrong mixture. Guess he's got to come out the other side."

"One day he's not going to."

"You're telling me?"

He dumped the saw and shucked his helmet. His hair was slicked with sweat under the band and crimped into a wave at the back of his neck. He ran a dirty hand over his forehead, shook salt off his nose and reached for a T-shirt.

"Give me a hand stripping him, Cass? Hate to see him lying around in work gear but he's too heavy for me myself. Been waiting for you."

"Poor Moke. Worry the hell out of you, don't we? You're a natural nanny."

I thought he might laugh. Wrong. He turned me redveined eyes and said, "Yes."

Against the shot blood his irises glared like floodlights. He sounded terminally tired.

I followed him through into the loft. Dosh hadn't moved. I wasn't sure he'd even blinked since I last saw him.

"You sure we can't peel at least one?"

"Yep. Trust me. Unbutton his shirt and I'll try and get it over his arms. It's the first elbow that's hard."

I knew. We'd done it before. I worked on the blown crystal flowers that blossomed down the lamé overjacket. Dosh was inert, only the slightest rise and fall of his chest showing he was alive. Mokey and I might as well have been invisible. For him I guess we were. The damned flowers stuck and I had to twist them around. Dosh's work gear costs too much to spoil.

"Okay, that's got these. Let me at the one below. Can you move his arm?"

"Holy sweet Jesus," Mokey breathed.

I didn't say anything. I'd dumped my leather jacket on the table alongside my Lavery's insupacks when I came in. I picked it up and started putting it back on. The insupacks sat congealing. Dinner was postponed indefinitely.

Mokey had his arms around Dosh's shoulders and was cradling his head, the bruise-marks under his eyes so black-blue they looked more artificial than Dosh's makeup. The muscles of his jaw stood out in lumps. Poor Moke. He isn't really a nanny, he just made the mistake of loving both of us. I left him to it while I ran for a phone. I run the fastest.

I waited for the doc at the bottom of the alley. He's a Gooder, of course. All the guys on night duty are; you

occasionally get a Prof during the day. Some of them are more self-righteous than others. We'd had this one before. He doesn't like me but I had no time to play to his hang-ups. I rushed him past Ole Yeller, refused to see him wrinkling his nose in the elevator and let him into the hall.

I'd been out twenty minutes waiting for the damned Bones, but Mokey was still sitting in the same place with a face like a wooden Indian. The Bones shoved him aside and got to work, with the same expression he had in the elevator. He had to use solvent to peel the shirt off some of the burns where it had really worked into the flesh. Mokey was standing beside me and I could feel him flinch at every tug as if the skin was his own. I felt creepy myself. There were red welts too and rope burns. When the Bones got down to his pants I turned away. Dammit, it's Dosh I go to bed with. When he's awake with all his cells going.

Mokey said, low and hurt, "No."

I nearly turned around and didn't.

Then he added, "Don't cut. If you wreck it he just has to work harder to buy more. I think this'll clean."

Then I did turn around and it wasn't so bad as I'd been scared it might be, mostly the insides of his thighs. The Bones was looking at us like we'd done it personally.

"Has it occurred to you that if he keeps this up some client's actually going to murder him?"

"Yes," Mokey said. "Every time."

He just sounded sad. Because that's how it is. Dosh is a tall, good-looking guy, he works out every day to keep in shape and his shape's damned something, and like a lot of hookers he practices katas regular because they know where they're heading. And mostly it's all right and some of the time he even laughs about it. And just once in a while he meets up with a psycho who is bigger and tougher than he is or who manages to sweet-talk his (or sometimes her) way past his guard and we have to call the doctor.

We're all racing against time. We know it. Either we get enough together to get off this Christ-forgotten planet while we're still young or we're going to end up under it before we've a chance to get old. Lecturing doesn't help. Umps haven't too many choices.

You can turn Gooder, put a peg on your nose and stick all you've got into convincing yourself you're improving the neighborhood while you bring up your kids to play the same way. You can lose yourself in Electronic Wonderland with decor by our award-winning pharmaceutical industry and pretend none of it's happening. Or you can try to work your way out. We're working. Mokey's a sculptor. Dosh is a whore and I'm a thief. It's a desperate remedy. •

Looking Forward:

Troll-Taken

by Rose Estes

Coming in September 1993 from Ace Books

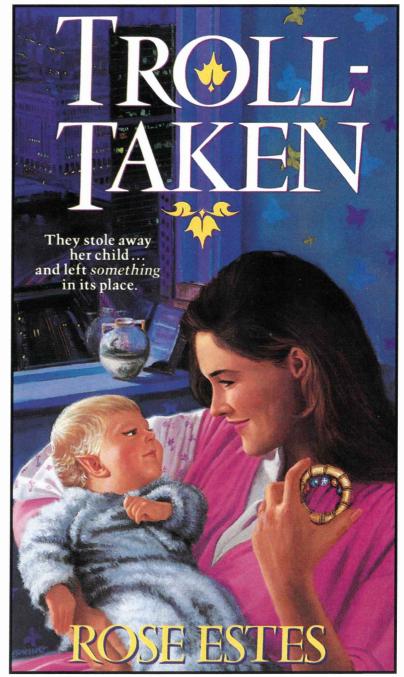
Introduction by Bill Fawcett

One of the most haunting of the current contemporary fantasies, *Troll-Taken* shows us a world where "trolls" live beneath our cities and substitute their young for our babies. This novel's pleasant-looking cover belies a story filled with suspense and action that will make you look twice at the next homeless person you stroll casually past.

This excerpt comes from late in the story. Katherine, a mother whose baby has been taken, and her doctor friend have finally gained entrance to the caverns where she hopes she will find her child.

Katherine's fear was so great, so overwhelming, that she could not even react. It was as though she had been frozen; she could not move, she felt nothing. She was later to realize that it was this perhaps that had saved them. Eager as he had been to find these people, Bosch was curiously silent now that their mission had met with success.

They were completely surrounded by no fewer than twenty males armed with spears, knives, and swords. It should have been ludicrous, two highly educated, modern people outfitted with high tech paraphernalia, threatened by a seemingly primitive people armed with archaic weapons. But neither Katherine nor Bosch was the slightest inclined to laughter. After the initial shock wore off, Katherine was seized briefly by an overwhelming desire to run, but even if that had been possible, she doubted her trembling legs would have been capable of tottering more than a few short steps. She was nauseous with fear and felt it entirely possible that she might throw up. Some tiny portion of her brain that still functioned focused in on the ironic humor of that scenario, as though it were a cartoon by



Cover art by Herring

Gary Larson, captioned: "Surrounded by hostile natives, Katherine Sinclair vomited on their feet, forgoing the use of her atomic laser pistol." She felt an almost uncontrollable need to giggle. All of these conflicting thoughts and emotions filled her mind in the blink of an eye. She wondered if she were losing her mind.

"We are not enemies, we come in peace," said the doctor. It sounded like dialogue out of a B-grade movie from the forties. Katherine felt the giggle burst past her lips. Though Bosch knew it was an hysterical laugh and not one of amusement, he quickly silenced Katherine, pinching the flesh above her elbow. She bit her lower lip hard and inhaled deeply, trying to bring her quaking nerves under control.

"I am a doctor, a healer," Bosch continued. "We know about your children, how they are sick and dying. We have come to help."

There was no direct response to Bosch's statement, yet his words seemed to cause great consternation among the men, who turned to each other and spoke in low, anxious tones. They seemed to be arguing among themselves. Finally, one man came toward them. He did not appear to be afraid of them—none of the men did—but he approached them cautiously as though suspecting them of treachery.

Perhaps because Bosch had exhibited no sign of fear and the men had made no immediate gesture of violence, Katherine began to pull her fragmented nerves together. The man who was approaching them step by wary step was quite tall, taller than Jasper or the sleeping man. He was built more slenderly than his companions and his skin was a darker hue, or so it appeared in the night-vision goggles. His forehead was not sloped, although his nostrils were flared and the bridge of his nose somewhat flattened. Nor was his jaw outthrust. It was only when Katherine looked at his hair, which was a mass of tightly kinked curls worn long and drawn into a single thick braid, that she realized what it was that was different about him: he was a black man!

She stared at him in astonishment, wondering how he came to be in this place. He was dressed in a similar manner to his companions, a long sleeveless tunic which fastened at the shoulders with polished stone buttons and fell to mid-thigh. The waist of the garment was gathered in with a soft leather belt which held a leather scabbard and a knife with a hilt made of a deer's antler. The tunic, unless she was mistaken, was made of the same silken material that lined the baby's coverlet. The fabric was plain, unadorned, but the man himself was not. He wore a number of bracelets around his wrists and one wide gold band incised with scrollwork, high on his upper arm. A tattoo in the shape of a spear point was marked on his bicep. Then, with a shock, Katherine realized that it was not a tattoo at all, but a carving, the design incised into the flesh itself. There was one further detail that she noted, forcing her eyes away from the mutilated flesh. It was a fragile braid, seemingly no thicker than a half dozen hairs, but spun from gold, not thread, and woven together into a single supple length. It hung around his neck, and suspended from this necklet, in the hollow of his throat, was a small leather bag, tied shut with a strip of leather. She could not help but wonder what it contained. His companions were all dressed in much the same manner, and all of them bore the same carving on their upper arms.

The man did not speak to them at all. He came close enough for Katherine to catch a scent of mushrooms and earth. He moved slowly, taking no chances, running his fingers over their bodies lightly, delicately, missing nothing. The flashlight in her pocket was handled with the greatest of care, withdrawn gingerly as though he suspected it to be of great danger, as perhaps it was. Bosch was relieved of his as well. Katherine could feel the fear emanating from the man as he handled these objects. It seemed to her that the men who encircled them had to force themselves not to take a step backward and that they held their breath collectively until the flashlights were deposited on the ground. They had been handled with the caution one connected with live bombs.

Once the dangerous flashlights were disposed of, the man gestured for Bosch to remove his knapsack and empty it on the ground. He poked through the contents with the wooden butt of a spear handed to him by one of his companions. A gesture with the spear was all that was needed to move them back several steps.

The black man crouched down before the jumbled pile. Each item was examined with great interest, always prodded with the spear before it was touched. Plastic bottles filled with pills were carefully sniffed before the tops were screwed back on. Stethoscope, thermometers, a blood pressure cuff, tongue depressors, swabs, and syringes were regarded with suspicious eyes. Metal items, even those made of aluminum or other alloys, were separated into a second pile. Everything else was returned to the knapsack. Bosch was instructed with a single wave of the spear that he could pick it up.

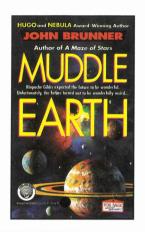
"Look, I know about your problem with metal," Bosch began in a reasonable tone of voice, but almost quicker than Katherine could follow, the spear was up under his throat, the point cutting into the slightly sagging flesh. But Bosch was no coward. He did not flinch, nor did he attempt to move away from the spear. "I need those things," he said tersely. "They will help me to help your people. They will not hurt you."

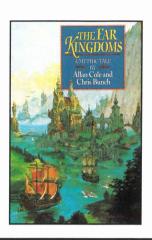
The two men stared at each other, struggling for domination. The tension was palpable. The black man was slightly taller than the doctor but was unable to impose the force of his presence upon the older man despite the fact that he held the weapon and was in control of the situation. Staring into Bosch's goggles had to be off-putting. Katherine had wondered why the men had not reacted at the sight of them; surely they knew this was not the norm. The answer was not long in coming. The black man's hand rose in a single swift motion, the spear point still pressed up under the doctor's throat. He seized the goggles with his free hand and ripped them off Bosch's head, lowering the hand with the spear at the same time and shoving Bosch hard in the chest. Bosch staggered backward several steps, trying to keep his balance, then fell hard on the bricks. •

66 Rose Estes

Tomorrow's Books

September 1993 Releases





Compiled by Susan C. Stone and Bill Fawcett

Poul Anderson: *Three Hearts and Three Lions* Baen Fantasy, pb reiss, 256 pp, \$4.99. Classic fantasy about a contemporary man hurled into a realm of knights and dragons and magic.

Poul Anderson: *The High Crusade* Baen SF, pb reiss, 192 pp, \$3.95. Reissue of a classic SF story in which a medieval village goes on crusade against alien invaders.

Piers Anthony: *Isle of Woman* Tor Fantasy, hc, 448 pp, \$23.95. A novel about the history of the human race—from prehistory through interstellar colonization—as seen through the eyes and experiences of a single family as they are reincarnated through history.

Isaac Asimov & Robert Silverberg: *The Ugly Little Boy* Bantam SF, 1st time in pb, 384 pp, \$5.99. A collaborative novel based on Isaac Asimov's classic short story about a Neanderthal boy stolen from his own time and brought forward to the 21st century.

Wilhelmina Baird: Crashcourse
Ace SF, pb orig, 288 pp, \$4.99. A cyberpunk debut about actors in a dangerous
new kind of cinema where the audience
plugs directly into the actors' emotions,
and events are manipulated to create
life-and-death situations that are altogether too real.

Nick Baron: *The Nightmare Club* #4: *The Mask* Z-wave YA Horror, pb orig, 224 pp, \$3.50. A girl looking for a costume for a Halloween party finds a weird mask that makes her into a real knockout

Ben Bova: *Empire Builders* Tor SF, hc, 384 pp, \$21.95. Sequel to *Privateers*. Privateer Dan Randolph has become an empire builder in myriad fields of space development and exploration. But there are others determined to build empires as well. . . .

Ben Bova: *Privateers* Tor SF, pb reiss, 384 pp, \$4.99. Series tie-in reissue. Faced with Russian dominance in the Space Race, millionaire privateer Dan Randolph refuses to give up on America's dream of Space.

David Brin: Startide Rising Spectra SF, pb reiss, 480 pp, \$5.99. 10th Anniversary edition, revised by the author. When the Terran vessel Streaker crashes on an uncharted water world, her human and dolphin crew struggle to survive and discover the fate of the Progenitors, who seeded wisdom throughout the stars

John Brunner: *Muddle Earth* Del Rey SF, pb orig, \$4.99. Cosmic comedy about a very weird future. When Rinpoche Gibbs awakens from cryogenic sleep, he finds aliens have turned Earth into an interstellar tourist attraction.

Jessica Bryan: *Beneath a Sapphire Sea* Bantam Fanfare, Romantic Fantasy, pb orig, 352 pp, \$4.99. A scholar of Greek sea lore meets a warrior from a race of men and women who live beneath the sea . . . and are in grave peril.

This contemporary romantic fantasy uses the mer world the author created in her historicals *Across A Wine-Dark Sea* and *Dawn on a Jade Sea*.

Ramsey Campbell, editor: Horror Writers of America Present Deathport Pocket Horror, pb orig, 368 pp, \$4.99. A shared-world anthology about an airport where the devil is your co-pilot on a one-way flight to terror.

C.J. Cherryh: Chanur's Legacy
DAW SF, 1st time in pb, 416 pp, \$4.99.
Set 10 years after The Pride of Chanur,
Hilfy Chanur is now captain of her own
ship . . . and up to her eartips in interstellar politics. In addition to this release,
four earlier Chanur novels are being
reissued in paperback. They are:

The Pride of Chanur 224 pp, \$3.99. Chanur's Venture 320 pp, \$3.95. The Kif Strike Back 304 pp, \$3.99. Chanur's Homecoming 400 pp, \$4.50.

Jo Clayton: *Dancer's Rise* DAW Fantasy, pb orig, 368 pp, \$4.99. The first volume of a new trilogy about the heroine of the *Duel of Sorcery* trilogy. After Serroi at last escaped the enchantment that imprisoned her, her dreams were haunted by images of death. And now she must confront an enemy who controls both minds and souls.

Allan Cole and Chris Bunch: *The Far Kingdoms* Del Rey Fantasy, hc, \$20.00. Epic fantasy novel about the pampered son of a merchant, and a dashing soldier who dabbles in forbidden magic, seeking the truth behind the

Key to Abbreviations

hc: hardcover, almost always an original publication.

pb orig: paperback original, not published previously in any other format.

pb reiss: paperback reissue, designating a title that was previously published in paperback but has been out of print.

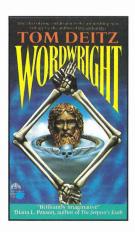
pb rep: paperback reprint, designating a title that was previously published

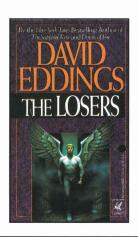
in hardcover or trade paperback (sometimes expressed as **1st time in pb**).

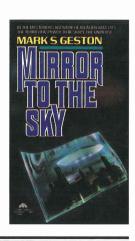
tr pb: trade paperback, a format using pages larger than a paperback but generally smaller than a hardcover, with a flexible cover.

Copyright ©1993 Bill Fawcett & Associates 67









legends of The Far Kingdoms—a place of riches and mysteries beyond imagination.

Flynn Connolly: *The Rising of the Moon* Del Rey Discovery SF, pb orig, 368 pp, \$4.99. In the 21st century, churchruled Ireland has become a dangerous, restrictive place for women. Yet a small group of Irish women have vowed to fight back.

Louise Cooper: *Revenant* Tor Fantasy, pb orig, 320 pp, \$4.99. Book 7 of *Indigo*. In the village of Joyful Travail, property, wealth and power are all that matters, and only the immortal wanderer Indigo and her wolf companion can destroy the demon that made it so.

John DeChancie: The Kruton Interface Ace SF, pb orig, 192 pp, \$4.50. Humorous SF about the U.S.S. Repulse—the lowest-rated ship in the Space Forces—whose incompetent crew are humanity's only hope against the alien lawyers who are suing the entire human race.

Ron Dee: *Blood* Pocket Horror, pb orig, 320 pp, \$4.99. Investigation of bodies brutalized and drained of blood leads to the discovery of a host of blood-devouring creatures created by a mutated serum that was supposed to promise eternal life.

Tom Deitz: *Wordwright* AvoNova Fantasy, pb orig, approx. 400 pp, \$4.99. Conclusion to the contemporary fantasy trilogy begun in *Soulsmith* and *Dreambuilder*. When the luck of Welch County disappears, along with the young Master of Cardalba, Ronnie Dillon must awaken ancient magic and face his destiny.

Troy Denning: *The Cerulean Storm* TSR Fantasy, pb orig, 352 pp, \$4.95. Book five in the DARK SUN™ Prism Pentad. Motives collide and old hatreds—and passions—burn as Tithian, Rikus, Neeva, and Sadira journey on a desperate mission to kill the Dragon at last.

Gardner Dozois, editor: Isaac Asimov's War Ace SF, pb orig, 272 pp, \$4.99. An anthology of war stories from Isaac Asimov's Science Fiction Magazine. Stories by John Barnes, Greg Bear, Gregory Benford, Robert Frazier, Molly Gloss, James Patrick Kelly, Larry Niven, Lucius Shepard, and Gene Wolfe.

David Eddings: *The Losers* Del Rey Fantasy, 1st time in pb, \$5.99. In this contemporary novel about the battle between good and evil, Damon draws Raphael (his good and promising college roommate) into his own dark and destructive world.

Rose Estes: *Troll-Taken* Ace Fantasy, pb orig, 272 pp, \$4.99. In this contemporary fantasy, a young mother realizes that her child has been stolen by trolls and replaced with a changeling.

Philip Jose Farmer: More Than Fire Tor SF, hc, 304 pp, \$20.95. In this long-awaited conclusion to the World of Tiers saga, Kickaha and Red Orc have their final confrontation.

Elizabeth Forrest: *Dark Tide* DAW Fantasy, pb orig, 368 pp, \$4.99. When a man returns to the California town where he once nearly died in an amusement park accident, his lost memories slowly start to return, and his nightmares begin to come true.

Elizabeth Forrest: *Phoenix Fire* DAW Fantasy, pb reiss, 368 pp, \$4.99. Author tie-in reissue. A contemporary fantasy novel in which Los Angeles becomes a final battleground for two creatures of legend.

Robert L. Forward: *Camelot 30K*Tor SF, hc, 320 pp, \$20.95. The story of humanity's discovery of an alien race whose members live at 30 degrees above absolute zero—and reproduce by blowing themselves up in a nuclear explosion that is approaching critical mass.

Debra Fowler: Bad Blood Pinnacle

Horror, pb orig, 352 pp, \$4.50. Ten-yearold twins, whose father was a serial killer and whose mother was insane, fulfill their legacy of madness and murder.

Steven Frankos: *The Heart of Sparrill* Ace Fantasy, pb orig, 256 pp, \$4.50. Sequel to *The Jewel of Equilibrant.*When Matt Logan was swept into the mystical land of Sparrill, he was thrust into the midst of a sorcerous battle that threatens the world itself.

Mark S. Geston: *Mirror To The Sky* AvoNova SF, 1st time in pb, 240 pp, \$4.99. After years of living quietly among humanity on Earth, alien beings known as "gods" have decided to share the fruits of their culture. But their alien art plunges Earth into violent chaos that may create an ultimate, universe-shattering masterpiece.

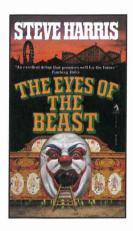
William Gibson: Virtual Light
Bantam/Spectra SF, hc, 320 pp, \$21.95.
In this new novel by master cyberpunk
author William Gibson, the millennium
has come and gone, and left society divided along lines of wealth and power
in a dark post-modern world.

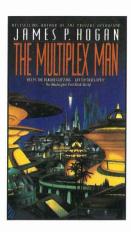
Pat Graversen: *Precious Blood*Zebra Horror, pb orig, 256 pp, \$4.50.
Sequel to *Sweet Blood*. A battle begins between the leader of The Society of Vampires and the renegade who has lured his daughter/soulmate into his obscene world.

Sharon Green: *The Hidden Realms* AvoNova Fantasy, pb orig, 384 pp, \$4.99. Fantasy adventure in a magical kingdom where a quest to defeat a soul stealer leads a sorcerer and sorceress through a progression of hidden reams and terrifying challenges. Set in the same universe as *Silver Princess, Golden Knight*.

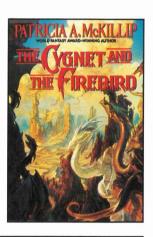
Simon R. Green: *Hellworld* Ace SF, pb orig, 192 pp, \$4.50. The Hell Squads are intergalactic planet scouts

68 Tomorrow's Books









whose job is determining whether new worlds should be colonized. But, wherever they touch down, they're there for life.

Martin H. Greenberg, editor: *The Further Adventures of Wonder Woman* Spectra SF, pb orig, 384 pp, \$4.99. An anthology of all-new stories about the comic-book superheroine Wonder Woman.

Steve Harris: *The Eyes of the Beast* Tor Horror, pb orig, 576 pp, \$3.99. Two ordinary people must battle against the evil force that is drawing people to a carnival ride that has become a terrifying vehicle of death.

Harry Harrison: *The Hammer and the Cross* Tor SF, hc, 480 pp, \$23.95. In this alternate history saga, it's A.D. 865 and the Norse Gods are challenging Christianity for the future of mankind.

James P. Hogan: *The Multiplex Man* Bantam SF, 1st time in pb, 368 pp, \$5.99. High-tech SF thriller about a teacher who volunteers for an experimental medical treatment—and awakens in another man's body and in the midst of a worldwide conspiracy.

Robert E. Howard, L. Sprague De Camp and Lin Carter: *Conan #4 The Wanderer* Ace Fantasy, pb reiss, 224 pp, \$4.50. As Conan crosses a savage land, he faces both mortal and magical challenges.

Russ T. Howard: *The Ultimate Helm* TSR Fantasy, pb orig, 320 pp, \$4.95. Book Six of the SPELLJAMMER* Cloakmaster Cycle. Teldin Moore battles for control of the great ship *Spelljammer*, which he has sought so long, amid myriad plots and conspiracies in fantasy space.

Brian Jacques: Seven Strange & Ghostly Tales Avon Camelot, YA horror, 1st time in pb, 144 pp, \$3.50. A collection of stories about ghosts, vampires, and other spooky things.

Katharine Kerr: Days of Blood and Fire Bantam/Spectra Fantasy, tr pb, 458 pp, \$11.95 A stand-alone novel set in the author's bestselling Celtic fantasy world of Deverry. A ratcatcher's son is tangled in a web of black magic and intrigue, and caught up in a sorcerous war against a goddess gone mad.

Mary Kirchoff: *The Black Wing* TSR Fantasy, pb orig, 320 pp, \$4.95. Volume Two in the DRAGONLANCE® Villains Series. The black dragon Khisanth is awakened from a centuries-long sleep to find the world she had known was gone. Now grown, she comes to serve the Dark Queen and battle the one man she considers her equal.

Dean Koontz: *Whispers* Berkley Horror, pb reiss, 512 pp, \$6.99. A woman is stalked by a terrifying madman . . . and she keeps killing him, again and again.

Mercedes Lackey: *The Robin and the Kestrel: Bardic Voices II* Baen Fantasy, hc, 432 pp, \$20.00 Sequel to *The Lark and The Wren.* The gypsy bard Robin and Kestrel, a fugitive prince, must take on the Ghost of Skull Hill to foil a plot to drive all music from the land.

Mercedes Lackey: *The Lark and the Wren: Bardic Voices I* Baen Fantasy, pb reiss, 496 pp, \$5.99. Author and series tie-in reissue of the first volume of *Bardic Voices*.

Created by Keith Laumer: Bolos: Book 1: Honor of the Regiment Baen SF, pb orig, 320 pp, \$4.99. An anthology of short stories using Keith Laumer's classic Bolos—machines designed to protect and defend humanity, on Earth and among the stars.

Keith Laumer: *The Compleat Bolo* Baen SF, pb reiss, 320 pp, \$4.99. Author and series tie-in reissue.

Brian Lumley: *Blood Brothers* Tor Horror, 1st time in pb, 576 pp, \$5.99.

The first book in a new vampire series. The strange powers the twins Nestor and Nathan inherited from their father, Harry Keogh, the Necroscope, are their people's only hope when the evil vampire lords return to kill again.

Paul J. McAuley: Eternal Light AvoNova/Morrow SF, hc, 432 pp, \$22.00. Hard SF about an earthborn telepath unwillingly drawn into battle against an invisible enemy with apocalyptic plans for Earth.

Bill McCay: *Stan Lee's Riftworld: Crossover* Roc SF, pb orig, 256 pp, \$4.50. A writer at the Fantasy Factory, a comic book publisher, discovers a link between our world and a world of madcap superheroes with designs on Earth.

Abigail McDaniels: *Playmates* Zebra Horror, pb orig, 256 pp, \$4.50. When a little girl moves into a new house, she discovers a wonderful playhouse . . . and a very special, very evil, doll.

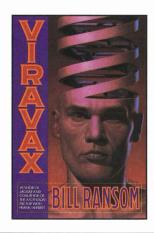
Patricia A. McKillip: *The Cygnet* and the Firebird Ace Fantasy, hc, 240 pp, \$17.95. Sequel to *The Sorceress and the Cygnet*. When Meguet Vervaine tries to help a man cursed by dark magic, she's swept off to a barren land of invisible dragons and sorcerous war.

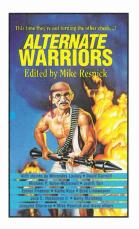
Barbara Michaels: *Vanish With The Rose* Berkley Suspense, 1st time in pb, 432 pp, \$5.99. A woman searching an old estate for her missing brother is distracted by the mysterious scent of roses in empty rooms, strange music, and eerie visions.

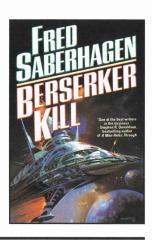
L.E. Modesitt, Jr.: *The Timegod* Tor SF, pb orig, 384 pp, \$4.50. A young timediver struggles to become a full member of the Temporal Guard, only to rebel against them when he discovers their parasitical nature.

Shirley Rousseau Murphy: *The Catswold Portal* Roc Fantasy, pb orig, 432 pp, \$5.50. When the Queen of Faerie









was deposed and forced through a portal into our world to save her life, she adopted the form of a calico cat. Now she must prepare for the desperate fight to return and claim her birthright.

Yvonne Navarro: *Afterage* Bantam Horror, pb orig, 368 pp, \$5.99. A first novel about a plague of vampirism that turns cities into ghost towns, and condemns the few surviving humans to a life of slavery unless they can find a weapon that can kill the dead.

Rebecca Neason: Star Trek The Next Generation #27: Guises of the Mind Pocket SF, pb orig, 288 pp, \$5.50. The crew encounters deceit and treachery as they struggle to keep a ruthless dictator from taking over a planet.

John Norman: *The Telnarian Histories: The King* Questar SF, pb orig, 304 pp, \$4.99. Book 3 in the *Telnarian* series. As Otto struggles to win the loyalty of his legion of space barbarians, Imperial conspirators plot his assassination.

Andre Norton and A. C. Crispin: Songsmith Tor Fantasy, 1st time in pb, 304 pp, \$4.99. A stand-alone Witch World novel about a Songsmith who undertakes a quest to destroy the evil magic that has stolen her father's mind.

Charles Oberndorf: *Testing* Spectra SF, pb orig, 144 pp, \$3.99. A novel set in a near future world where morality tests are required of everyone seeking a university education.

Nicholas Pine: *Terror Academy: Spring Break* Berkley YA Horror, pb orig, 192 pp, \$3.50. When local rednecks terrorize a teen's family on vacation, a Ouija board offers advice to save them.

Bill Ransom: *Viravax* Ace SF, hc, 320 pp, \$17.95. A genetic research facility has been performing cutting-edge experiments on human subjects . . . without their knowledge or consent.

Mike Resnick, editor: Alternate

Warriors Tor SF, pb orig, 448 pp, \$4.99. An anthology of alternate history stories about what would have happened if some of our greatest peacemakers had chosen instead to make war. From Mahatma Gandhi to Mother Teresa, meet the unlikeliest fighters of them all.

Jennifer Roberson: *Lady of the Forest* Zebra Fantasy, 1st time in pb, 704 pp, \$4.99. A retelling of the legend of Robin Hood and Maid Marian.

Fred Saberhagen: *Berserker Kill* Tor SF, hc, 512 pp, \$24.95. A new adventure in Saberhagen's famous *Berserker* series about alien killer machines left over from a war of extinction.

Charles Sheffield: *Dancing With Myself* Baen SF & Nonfiction, pb orig, 320 pp, \$4.99. A collection of science fiction and science fact that explores current and near future technology.

Charles Sheffield: *Brother To Dragons* Baen SF, pb reiss, 272 pp, \$4.99. Author tie-in reissue.

Robert Silverberg: *The Gate of Worlds* Tor SF, pb reiss, 256 pp, \$3.95. Alternate history in which the Black Death weakened Europe enough that the 14th century Moslem invasion was successful, the New World went uncolonized, and 20th century Aztec Mexico is the high point of industrial civilization.

L.J. Smith: *The Night of the Solstice* Harper YA Horror, 1st time in pb, 320 pp, \$3.99. A group of teens learn to make an amulet that lets them pass into a world of dark enchantments where they must find and free the sorceress Morgan, imprisoned somewhere behind a mirror of silvered glass.

Michael Stackpole: Battletech: Assumption of Risk FASA/Roc SF, pb orig, 288 pp, \$4.99. An apocalyptic battle of Rebels against the Federated Commonwealth.

Christopher Stasheff: The Oath-

bound Wizard Del Rey Fantasy, 1st time in pb, \$5.99. Sequel to the humorous medieval fantasy, Her Majesty's Wizard. On a world where reciting verse works magic, Matt Mantrell's promise—to conquer a kingdom to claim his royal bride—is taken very seriously.

Christopher Stasheff: *Her Majesty's Wizard* Del Rey Fantasy, pb reiss, \$4.95. Series tie-in reissue of Matt Mantrell's first fantastic adventure.

Judith Tarr: Arrows of the Sun
Tor Fantasy, hc, 512 pp, \$24.95. In this
return to the world of the Avaryan Rising series, a young Emperor must return
to rule a land he hates, and somehow
learn to love it.

James Tiptree, Jr.: *Brightness Falls From The Air* Orb SF, 1st time in tr pb, 384 pp, \$9.95. The last novel written by Hugo and Nebula Award winner James Tiptree, Jr.

Walter Jon Williams: *Aristoi* Tor SF, 1st time in pb, 448 pp, \$4.99. A widespread conspiracy threatens the universal database, while a madman endangers galactic trust in the Aristoi who dominate their common virtual reality.

Robert Weinberg, Stefan R. Dziemianowicz, and Martin H. Greenberg, editors: *The Mists From Beyond* Roc Horror, hc, 400 pp, \$20.00. An anthology of 22 ghost stories and tales from the Other Side by some of the finest writers of horror and the supernatural.

Connie Willis: *Doomsday Book*Spectra SF, 1st time in pb, 456 pp, \$5.99.
This book won the Nebula Award for
Best Novel of 1992 and is a finalist for
the Hugo Award. A crisis linking past
and future strands a time-traveling historian in the 14th century, during one of
history's darkest hours.

70 Tomorrow's Books

Other Heads

Arlan Andrews, Sr.

Through the red haze of pain in both my heads, I saw an image that I would never be able to forget: a man's nude form lay sprawled across a bloody bed, his death-throe agony eternally sculpted in contorted muscles, flesh mutilated as if by powerful claws, body broken like a toy doll's. And the monstrous killer who had done this was still on the loose. There was more, much more, to learn about the victim's last sufferings, but my own anguish was becoming too great to bear. Excruciating pain pounded in my two heads, and I was glad I didn't have three. Jass, of the two bundred heads, just smiled in feigned pity.

"Gruette, my friend," he said, looking across the decrepit kitchen table, his ancient face

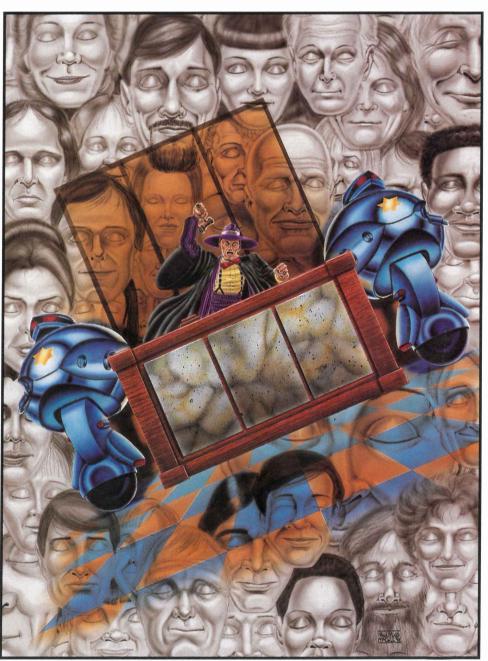


Illustration by Paul McCall

wearing a Normal expression beyond my comprehension, "I try to sympathize with your plight, but it's beyond my . . . experience. I am sorry I can't help you any further. But I do need your help in finding the killer. . . ." His voice dragged off into nothingness, as happens with Normals. As usual, he quickly lost interest in my petty problems, steel-gray eyes glazing over as he paused. Then his eyelids closed and he nodded off as I watched.

Oh, bell, I sighed, there he goes, off into his hierarchy of other heads! How long this time? Enviously, I studied his appearance. Within his head, within those hundreds of other virtual brains stacked up somewhere inside his head, he was experiencing mental worlds I would never know. His appearance, though, was fairly ratty. Dressed in tattered denim coveralls and dirty work shirt, he looked every bit like a dirt-poor old Hoosier farmer who had dozed off at the supper table. I just stared at his tanned brow, the dark and thick hair, skin only barely touched by fine wrinkles, the fine jaw. I envied him, and all his kind. The pain in my heads grew more demanding, though I tried to fight it off. I couldn't bear any more of the physical pain, or of the emotional pain, of the murder scene.

What wonders Jass experiences in his hundreds of heads, I moaned silently, and what pains I have in just my two! The pressure in my heads was too great; I slipped off the hydra ring. Immediately, the sensation of having another mind, another brain—another head!adjacent to mine slipped away, and I was back to the one head I knew and loved, deficient though it was. I laid the offending circlet, a miracle of nanoelectronics, on Jass's work-toughened hand. Like all Normals, he found occasional hard physical labor both an enjoyment and a welcome opportunity to hone yet another skill. A Normal like him, now five years into the heads, would have accumulated thousands of new skills. But not one of those included being polite to a Retarded like me, talking without drifting off. He was lost in thought, somewhere among his vast memories, among his galaxy of other heads.

I sighed. Staying with me, trying to embrace my subminimal intelligence, must be like my trying to communicate with a dog-probably worse. It wasn't good manners for a Retarded to interrupt such transcendental thought, so I had to wait an hour for him to notice me again. "Ah, yes, Gruette," he said finally in measured tones, his eyes suddenly fixed on me in paternal sympathy. "I had hoped you could adjust to just one other head." He stared at the hydra ring with pity. "I asked some of the technicals to download a very simple brain enhancement, just so you might experience it. It was quite a job just to get their attention, you know." I had often wondered if the Normals ever treated each other with disinterest; now I knew they did. What a life! But then, I would have given anything to join in their new society. He stood and stretched and yawned. Holding the ring between forefinger and thumb, he swallowed and smacked his lips in a conciliatory gesture.

"In addition to the murder scene you've just experienced, this ring is an introductory history and technology

lesson, so to speak. Some of us Normals wanted you to understand more nearly completely how marvelous our other heads are. So as to understand the enormity of the crime, Gruette." He stared at me for several seconds, and I hoped he would stick to the subject and finish his discourse. I damn sure did not want to wait another hour while this Normal explored his heads again.

Sensing my impatience and impertinence, Jass blinked slowly, then finished his thoughts verbally. "Ah, yes, Gruette. Your father was a fine policeman back when we needed such things. I regret that he did not choose to submit to . . . to the blood treatment." Those gray eyes studied me carefully. "My studies in genetics, my Heads tell me, they indicate you might have inherited his metaviews, his integrative talents." Slowly he turned to scan the darkening sky through my old-fashioned screen door. A storm was brewing here in central Indiana, and Jass had places to go, Normal people to debate, transcendental thoughts to think.

"Your father wore a hundred heads, far below the average Normal, so I didn't ever think you'd be among the most accomplished, but I really thought . . ." He paused. "I really don't know why your brain can't adapt to the hydra. I'm sorry, Gruette." He tossed the ring onto the table, where it rolled around in ever-shrinking circles, at last falling over on one side and vibrating itself to quiescence. "Keep this, Gruette; it explains the whole history and technology of the rings as we Normals now know them to be. Try it again some time. If it never works hydrally, if you simply cannot adapt, then, I am told, you may download it into a standard picomputer cube, and observe the most significant data in verch mode alone, scant comparison though that may be." He smiled and winked. "You might learn enough, however, something to help you catch the Retarded murderer. No Normal will take the time, and we do need to solve this before tragedy strikes again."

His eyes sparkled, and he raised his right forefinger. "Do try the hydra again, and try harder. As you know, two heads are better . . ." Jass left the completion of the phrase to my own subNormal mentality, and walked out the door. Before it slammed shut, I knew, he was off into his mental parallel universes, thinking thoughts I could not even dream of.

Oblivious of the sudden summer downpour, Jass Urdel plodded along in his soaked shirt and overalls, down the road into the fine misty wall of rain that finally swallowed him a half-mile away. Somewhere down that road, if he remembered to summon one, a robot hovercar would pick him up and take him anyplace on Earth he might desire to go.

Me, I blinked away tears of frustration and opted for a lengthy conversation with my trusty old friend, Jack Daniels.

After Jass was definitely gone, and after a few shots of Old J. D. had blunted the pain, I slipped the hydra ring back on my left ring finger. Again, as the neural interface established itself, the sensation of having a parallel brain jolted my conscious mind. And again, the grand-

72 Arlan Andrews, Sr.

person of all headaches gripped my real head in a vise of misery I could barely endure. I didn't know how Normals felt when they slipped on their hydra rings, but I felt as though my head had fissioned. There was enough pain to convince me it was an actual split.

Jass, too, had likened it to the sudden realization that there was "another head," another consciousness, right alongside, full of memories, talents, knowledge, fully integrated as one's own memories. The original Japanese inventors had called it a "wonderful experience actualizer." Jess wore a ring on his left ring finger, a multi-"headed" device that enhanced his own mental capacity over two hundred times. It gave him, to my knowledge, the computer-recorded talents, experiences, even the personal memories, should he choose, of hundreds of other people, or of the equivalent from worldweb's computer downloads. Furthermore, he could do new things, exercise new skills, without trial and error. If he chose, he could be an incredible tennis player, a chessmaster, a superb symphony conductor, a world-class novelist, a master mechanic, anything that the ringmakers had downloaded. It pained me even more to think that Jass was only average, that some Normals used close to a thousand heads, maybe even more. Like other Retardeds, I felt shame and anger and envy at my unrealizable potential.

And at Normals. I wondered if the Retarded murderer felt the same way. Now that was one motive that I could understand. But murder, gruesome murder?

I examined the ring he had left on the table. Plain and simple in appearance, it embodied the incredible semi-morphous technology that revolutionized human society as nothing else ever had, moving the evolution of the race so far ahead as to transform it into something beyond humanity. All Normals, that is. Not me.

I wanted so hard to experience what the rest of the human race now took for granted. But it was terrifying, difficult, as the circlet of agony on my left ring finger pulsed out wave upon wave of searing pain. I tried gritting my teeth, hoping to stay with the bucking bronco of agony. It was, as Jass promised, a technology lecture.

"Memory Enhancement Technology arose as a consequence of the fortuitous convergence of googoolbit memory chip development and the neural interface crystals manufactured in Nippon's zero-gee orbital facilities," the lecturer was saying in my other head. Through the dim red haze of hurt, I not only heard and saw the lecturer at his thixboard, but also sensed speeded-up data pouring in, kaleidoscopically: images, charts, graphs, photos, videos, virtual reality—verch—images, steraudio; there were complete circuit designs, a thorough lesson in how to conceive, to design, to fabricate nanotronic devices an atom at a time . . . and I couldn't absorb it, it didn't fit, the visions slammed my eyes with physical force, rattling my brain, throbbing my temples, piercing my fiery scalp. I jerked off the hydra and slammed it on the tabletop in despair, sobbing alcoholically. The key to Heaven, and I couldn't make the goddamn thing work.

Hours later, recovering from my hangover with a Morning After pill, I grudgingly plugged the hydra ring into a

modified receptacle on my palmtop and 'mitted the output to the displate that covered the far kitchen wall. I hoped to get the gist of the message Jass and his disinterested Normal friends intended for me. Hell, at least—literally—it wouldn't hurt to try.

On the large displate, the instructor began, his voice a monotone. I sighed. Apparently the few interested Normals had chosen the outdated lecture-mode of imparting knowledge because of my obvious mental limitations. Jass had said once, when the rings were a new technology, that a true Normal *felt* the new memories, sensed them, that only the first crude devices had used instructors. I guessed that my ring might have been an old one, simply downloaded with the original format.

Like those given to four-year-olds! I thought. Later I would discover that I had flattered myself; Jass had given me a proposed prototype version intended for training the diminishing number of *newborns*!

"... first volunteers felt their consciousness expanding laterally, giving rise to the term 'other heads.' The rings at first revolutionized education and training. But as the general populace gained access to the hydra rings, the level of knowledge in the developed countries rose to enormous levels. Literacy rates approaching one hundred per cent were achieved within six months in Europe, the Americas, Free Asia. Even in the Islamic Caliphate and the Restored Socialist Republics there were black markets for the academic and military, and soon the ordinary citizen. A nation had to adopt and adapt or go out of business."

God, this is long-winded, I thought. Get to the point! As if in answer, the scene jerked suddenly and the lecturer said, "In short, the hydra-ring technology has transformed the Earth into an educated society beyond anything dreamed of by the wildest utopians." I could just imagine the Normal version of this rather tepid exposition: simultaneous images and sounds of preachers, prophets, politicians, poets, pundits, a collage of human hopes and fears, culminating in the gleam of a reflection from a ring on one's finger. Not that I didn't agree with the speaker. The intolerance, fanaticism, and barbaric behavior that marred the whole history of the human race had been peacefully diverted to what the Normal speaker summed up as "the exquisite experience of all knowledge, and the knowledge of all experience." I felt a sudden surge of pity from the man as he talked down to the savage remnant—me!—who were left in the dust of history as the parade of progress marched on in glory, light-years down the road.

I turned off the display and poured another round of J. D. I couldn't bear to hear any more right now; this was where I came in, when I'd first tried out for the rings, five years ago at age twenty.

"I'm sorry, Chief Gruette," the ring facilitator had said, her barely audible voice humming through the ventilation duct and reaching my disappointed ears, "but your son just cannot adjust to the memory enhancement." My father mumbled loudly, indistinct through the circuitous metal ducting. "No, I'm afraid there's nothing surgical we can do, Chief. He's . . . retarded."

Other Heads 73

I soon learned that about one half of one per cent of the human race could not fully use the hydra rings. That left me with about 35 million potential fellow sufferers around the world. Maybe we could start our own country? That, of course, didn't happen.

For a few months some interested technicals, their knowledge now encompassing most fields of human technology, vainly tried to find means of interfacing the rings to unfortunates like me. Their efforts petered out eventually as the researchers presumably found more interesting things inside their heads, other data to pursue, relationships to explore.

That was five years ago.

In our shame and fear, we new untouchables spread widely apart, not daring to congregate, to call attention to ourselves. Some primal fear of radical *differentness*, real or merely perceived, made us stay away from our more fortunate brethren, they of the many heads. We were afraid that our petty thoughts might somehow offend the humans-become-gods, that we could be squashed under their more-than-human feet.

At least, that was *my* conclusion; communication among us Retardeds never amounted to much in the first place, and with the gargantuan changes the Normals exhibited, all of us laid low. The Retarded television channels and radio transmissions gradually ceased; for all I knew, I was the last Retarded left alive. In my nightmares I dreamed that everyone else was loaded with heads, doing their unimaginable godlike thinking.

And what godlike accomplishments I had witnessed! Every Normal, as I soon learned from the incessant discussion and debates on the thousands of their holo and verch channels, spoke several hundred languages and multitudes of dialects. I couldn't understand the Babel of tongues, but I gathered that dialects and languages came and went as vogues of fashion, as did mathematical and philosophical viewpoints. Even when my Developing Intelligence computer tried to translate for me, I still couldn't grasp even the themes of the debates, much less the fine points. Some of the discussions were held in an undecipherable form of bleeping, clicking code that even my D. I. couldn't handle, so advanced were the Normals progressing. The channels I could still access, those few hundred still operating on my worldweb terminal, were more and more often filled with the unintelligible verbal communications of a new race of human beings. Human! I thought; the real human race was educated, knowledgeable, content, while I merely sat in my clapboard house in rural Indiana, hoping that the gods would let me live out my miserable primeval life in peace.

It was not to be.

Jass Urdel became a friend of my father's some thirty years ago, when Dad was chief of police here in Ainsworth and Jass was a history professor at the college. Unlikely as it was, they viewed themselves as two intellectuals lost in a mundane community of eleven thousand souls. "And nine hundred students," Jass would add. I remember the fateful night when he dropped over with

his first hydra ring, a technological curiosity from a friend at Purdue University, some fifty miles north of Ainsworth.

"George," he said to my father, who was fingering the ring, "that little device is going to change the world like it's never been changed before. Try it on." Dad did, slipping it over his ring finger, a digit devoid of any adornment for all the years of my life. Dad never spoke of my mother, and I had long since given up hope of knowing or understanding why he had raised me without her, or even who she was. But that's another story. The ring on his finger, I can still recall the light in Dad's eyes and the grin on his face as he turned and spoke to Jass in Urdel's native Danish. Perfect, fluent Danish. I didn't understand a word of it.

"[I can't believe this, Jass! I know Danish! I've always known Danish!]" Jass smiled, and his graven wrinkles fairly danced at his happiness for his old friend's newfound enlightenment. They jabbered in that singsong, nasal language for half an hour, ignoring me totally—a portent of things to come, I should have known. Dad apparently related Icelandic history and old Norse sagas from his new/old memories. They sang strange songs and growled what must have been poetry. Suddenly, Jass noticed me and realized that I was sitting there dumbfounded. Finally, he slipped the ring gently from Dad's finger and placed it on my own.

I screamed with horror as my head split, falling to the floor in a faint. A week later, when the rings were front-layer news on the *verch* nets around the civilized world, Dad took me to be fitted out for as much knowledge as I could stand. To his amazement and mine, I zeroed out.

That was five years ago. Dad died last year, and a robot hovercar had returned his body here for burial. Even in death, he looked younger than me for all our thirty years difference in age. The yogatsu mental technique, available only to Normals with their near-infinite intelligence, keeps their bodies functioning near optimum. even reversing the effects of what used to be normal human again. If Dad had allowed the nanotech gregbees to be implanted, he'd have lived indefinitely, I suppose. The Normals, I gathered from Jass's infrequent calls, developed injections of semi-intelligent, microscopic bloodstream implants to clean debris and foreign life and generally perform as tiny surgeons doing everything possible to prolong health and life. Naturally the nanoes can only function with a proper hydra ring in place. For some reason, Dad had resisted that one technological advance. I hoped it wasn't on my short-lived account.

So they live forever, I thought ruefully, in perfect peace, ecstatic happiness, and infinite knowledge. It had been during one of those reflective moments, early this morning, when someone knocked softly on the skewed frame of my ragged screen door. I had scrambled for the shotgun—prepared to stave off enlightened Normals bent on mischief, or Retardeds looking to take out their frustration. Actually, in my loneliness, I would have welcomed almost anyone, whatever their intent.

"May I come in, Gruette?" a slightly accented voice asked.

It was Jass Urdel.

In my five years alone, since Dad had left on Walkabout, no other human had set foot in my house. Only Jass, an old friend of my father's, had remembered me at all, and then communicated only briefly every six months or so. This visit was the first, a real surprise. We hadn't seen each other, real-eyes, since Dad's funeral a year ago. (I guess you could call it a funeral; cryomation doesn't fast-freeze the soul, is my guess.)

"I have a gift for you, Gruette." I was pleased that the old man (who looked no older than me, except for the effective grooves of fine wrinkles that said "character") called me by the name he'd used for Dad. "And a favor to ask." He ambled through the door as I opened it, finding a chair and sitting at the far side of my bare wooden kitchen table.

"Homebrew, Jass?" I asked. He shook his head. I should have known the Normals wouldn't imbibe alcohol; hangovers in hundreds of heads would cause unholy pain. I laughed silently at the thought. I punched up a Jack Daniels and drank it in one shot. Jass smiled at my perversion, so early in the morning. Then again, for the last five years Jass had *always* smiled.

He started to speak, caught himself in mid-think, then stopped, eyes glazing over. *Oh, hell!* I thought. *Another head exploration while a Retarded sits and waits!* Fortunately, Jass was more polite than any other Normal I had ever met; at least he had called me up on *verch* every month or two. The other Normals who sometimes passed down the road in groups or alone would barely deign to look my way, never once stopping to talk or even to speak in a recognizable human language. More than once I had stood in tears as a ragtag bunch of angels chittered away in some celestial tongue while I looked on, heartbroken and lonely. I knew what it was to be Untouchable. Worse than that—Unreachable!

"Go ahead, Jass," I responded to his earlier statement, "You know I'd do anything for you." And it was the literal truth; as my only friend, Jass meant more to me than my own life. He was the transcendent being who mind-journeyed and then tried to explain the sensations to me. He was the one Normal who had kept me from killing myself in despair as an adolescent, when my own father left off on Walkabout somewhere in Asia or Africa or Antarctica or God-knows-where. I owed Jass my life, miserable as it was, and the only pride I felt was that this one god-human deigned to talk to me. And now he was here, in person.

Jass paused. He always paused. Normals do that, I had found out with great difficulty, as they constantly juggle the myriads of parallel thoughts that vie for the attention of their superconscious. I briefly wondered if any of the hydra rings ever served as spare subconsciouses. *Myri-Ids?* I punned silently. Jass continued, "Gruette, murder most foul is afoot in the world and I need your help."

I sputtered, slamming the shot glass down. The rickety table rattled. "Murder, Jass? When? Who? Where? It wasn't on any of the *verch* . . ."

Jass raised his hand. And paused. "Ah . . . Gruette, the

killings are random in time and location." He handed me the ring. "All of the collected information is on this hydra ring. Your . . . forgive me, my friend . . . your primitive drives and unenhanced mind may enable you to find and to hold the murderer or murderers until the world community decides what is to be done with them. Or him. Or her. Or . . ." He paused, longer this time, gazing down at my dirty shot glass. "I only ask this as a favor because of our friendship, Gruette. We . . . Normals . . . realize that a danger is certainly brewing, but we have our own concerns, and . . . well, the consensus is that only fourteen murders cannot threaten the wellbeing of the other seven billion of us.

"As O'Casey posits in the triurnal virtualplex, 'Of what matter? Surely lightning takes a greater toll, and we know the causes of *that* phenomenon.' I, however, and a few former technicals, have prepared this . . . simplified ring so that you may find this murderer." He smiled once more, new fine wrinkles bunching up like microscopic mountain ranges surrounding the calderas of his dark eyes. "And maybe find a new meaning for your life, my friend."

I watched and waited as the dark storm swept past my white frame house, the stygian sky whipping columns and sheets of thick Indiana rain before it. Jass is getting drenched out there, I mused. Wish I had semi-intelligent microbodies in my blood to keep me healthy even in the driving rain. I laid off the booze and took yet another Morning After capsule to speed up the hangover recovery. I fondled the hydra ring and held it up to the light, looking for clues as to its magical powers, but feeling only the warmth of the semimorph material. Again, I sighed and slipped it into the picomputer for a displate lesson. "Wish the damn thing would get to the point soon," I grumbled.

The ring must have been programmed to sense my frustration, because the lectures skipped to the meat of the matter—murder. This time it was Jass himself speaking. "The first murder occurred a year ago, Gruette, and under very mysterious circumstances." A year ago! Why did they wait so long to tell me, if they wanted me to help? But I knew I would never understand the thinking of a man with two hundred brains, let alone the collective wisdom of the new human race. I listened without comment.

"Near Great Chicago. Dr. Aron Leonovitch Pavelski, one-time member of the old Russian Academy of Sciences, was found in his bed, horribly, grotesquely, quite brutally murdered. All his major bones were broken, many several times. Severe hemorrhaging characterized the multitudinous savage bruises." I could see Jass's noble face in much distress as he spoke his lines.

"Dr. Pavelski was due to lecture on a very important topic of worldwide interest that very day on the *verch*-plex, so naturally many Normals were upset at his premature demise. All Retardeds in the Chicago area were immediately restricted to the metropolitan area, and strict surveillance on each of them has been maintained by patrolbots from the old Great Chicago Metropolitan

Other Heads 75

Police force. There have been no further instances in the area since. Awaiting your arrival, the Retardeds are now being detained in the Wright Tower there."

I was at the same time happily surprised—there were other Retardeds, and all together, and as near as Chicago!—and dismayed. Of course the murderer is a Retarded, I concluded without further reflection. No Normal had committed any conscious crime of any kind, to my knowledge, since hydra-ring Saturation Day. The unstable psychotics who couldn't be cured were simply executed if they were guilty of capital crimes, or cryomated for possible future revivification and cure if they were merely felons or ne'er-do-wells. The new society wasn't going to take chances with incorrigibles, not with the knowledge accessible with the hydra rings.

No, if there were criminal Normals, they certainly hadn't shown themselves. *Until now, maybe?* I ventured heretically, surprised at the novelty of my own thought. Jass may have been right in his evaluation of my mental wanderings; my father had been well known for questioning the obvious, and consequently had solved many complex crime cases in the community and on the campus and, as a consultant, even in nearby Indianapolis.

But after the rings came, Dad had walked out of my life and joined one of the millions of Wandering bands that roamed the earth out of, I assumed and Jass later confirmed, curiosity and friendliness. What a time they must have had! With almost all human knowledge represented in one or the other of the mass hiking groups, there was companionship and security such as no humans had ever known before. With the on-board microbots handling most health and medical problems, and with a wealth of trained medical "heads" available to every person, there were few concerns. Food and drink were produced and delivered by the worldweb-controlled agricultural system; droves of robotrucks and hovercars and aerobots supplied all the physical needs of the Wanderers. All the Normals had to do was walk and talk and play. Eternal Walkabout for the gods.

I jerked my attention back to the lecture, listening until Jass declared his session closed. The other thirteen murders would be reviewed the next day, according to the schedule Jass proclaimed in this lecture. Meanwhile I was to activate the old learning cubes and learn as much as possible about forensic techniques. Laughing at a private joke, I picked out an old flatfilm about one Sherlock Holmes.

I had stayed at the old Indiana farmstead after the hydraring revolution, simply because there was nothing else to do. By the time Dad left, property meant nothing; anyone (Normal, that is) could experience any entertainment, any knowledge, any talent, any skill, merely by accessing the multitudes of other heads that the rings provided. After the initial perturbations in manufacture and agriculture created some disturbances in the supply of goods and food crops, newly super-intelligent American and Oriental designers simply roboticized farms and factories fully. Only a few thousand farmers around the world, among the Normals at least, still kept their plots

by hand, and mostly out of nostalgia or intellectual interest. Agrobots produced by the developed countries soon replaced anyone who wanted to join the new megaintellectual society. Decades too late to save most of the old failed socialist regimes, Karl Marx's dream of self-perpetuating anarchy came close to fulfillment, ironically through means provided by a free enterprise system.

As a consequence, even though I occasionally tended my small garden simply to relieve boredom, I received all my necessities by daily truckbot delivery or from the synthesizer cabinet that Jass and Dad installed before Dad went on Walkabout. The Normals had tried to provide for everyone, even a Retarded like me. Education and entertainment, via the millions of hours of old holocubes and *verch* tapes. Sporadic updates on news and other world affairs by some disinterested Normal, or at least the computer-generated image of a disinterested Normal. Not much happened any more, anywhere in the world, and usually the *verch* clips showed crowds of Walkabouts and rituals meaningless to a mere Retarded. There was no more mention of space travel or the lunar colony.

So I had all the basics. Food. Entertainment. News. Even *verch* sex when I wanted it. Everything but a will to live

Until Jass's visit, that is. Funny that it took bloody murders to make my life worthwhile.

It took me nearly a week to download and review the multitude of data inputs from Jass's ring. The frustration of knowing that a Normal would have absorbed the same information in a few seconds was somewhat blunted by the fact that at least I could remember it all; my memory always was pretty good. And it was all intensely *interesting!* Fourteen Normals had been murdered, same gruesome manner each time: every bone broken, most blood vessels ruptured, all manner of internal injuries.

As Dad would have called it, the killer or killers used the same "M. O.," *modus operandi*; namely that the poor victims seemed to have been wrung out like a dishrag. Except that neither the Normals nor I could figure out how the killers were able to do such a thing, much less why. I reviewed all the data mentally, looking for patterns, finding none. There were strange and unusual circumstances in each case, however. Most victims had been alone when their time of death arrived. Three of them were by themselves, in fact, in the proverbial locked rooms. Four were murdered more or less simultaneously, together, as they slept. Who would kill four people at once, and how? And why?

The final scene from the ring was Jass Urdel once more. His last statement was explicit: "Find the killer or killers, Gruette. You have the native curiosity to pursue one mystery to its conclusion. I fear I lack the discipline to so limit my thinking processes for the required period.

"I have made arrangements with the worldweb so that you are to be supplied with appropriate downloading into this hydra ring whenever and wherever you may have to travel. Wear the ring when you make your wishes known at the nearest Terminal. "I have the greatest confidence in your instinctual problem-solving abilities. If you succeed, I will request of the world society that we all set aside a small period of time and readdress the question of your inability to fully access the hydra ring's incredible powers.

"Thank you, Gruette, and good luck."

On a bright Sunday morning in June, I packed the ultrabike compartment with a few clothes and set out on my quest. First stop, Great Chicago and Murder Number One. I hadn't traveled so far since Saturation Day. At first, when I was still lonely and looking for other Retardeds, most of my wandering had been around rural Indiana, sometimes down into Kentucky, always keeping my distance from the cities where the Normals staved. A few times unfriendlies, Retardeds they had to be, had fired shots my way, so I was reluctant to seek out new friends. In Ainsworth, my friends from college had abandoned me like Dad did, and I was alone in the whole county, as far as I knew. After a few years of sporadic solitary travels from the farmstead to one lonely campground or another, I lost interest and just stayed home. But now! Now, the excitement of the wind and the bike and the quest for the killer propelled me from the void of my senseless routine. I felt like living again.

The *thrum* of the flywheel between my legs gave a pleasant reminder that I was, indeed, still alive. I hadn't even thought about real sex for a couple of years now, what with the release offered by the *verch* terminal and its tactile interface. But the animallike warmth of the semimorphous engine, the continuous undulations of the constantly adjusting piezo transmission was downright erotic. I felt like a teenager again and, smiling, luxuriated in the pressure of the wind on my face.

Two miles east of Ainsworth ran the permacrete thread that defined old Interstate 65. I was thankful that the civil engineers and road crews had finished their installations before they all ran off to study their heads. The nation had thousands of miles of ultratech highways constructed with permanent paving materials, complete with unobtrusive computer controls for automatic driving, superconductive cables for powering the vehicles and integral solar converters for industrial and commercial electricity.

Traffic was light. Just me.

I wondered if the Normals still hiked and wandered on Walkabout as much as they had during the breakup of the old society. Or did they now mostly sit around and debate their transcendent thoughts on incomprehensible subjects in undecipherable speech-code? The very thought surprised me. Why had I waited five years to consider the daily life of a Normal? Maybe it had something to do with my renewed interest in my own life.

Interstate 65 was a gray levee spanning a hundred and fifty miles of yellow-topped green fields, untold billions of grains of fine corn to feed the leisure class that was mankind. And even some scraps for the Retardeds. As I sped by, armies of agrobots, antlike in their quiet determination, tended voluptuous cornstalks in the fertile fields. A curious notion osmosed its way to my con-

scious mind: would Normals have fared so well if robots hadn't been available to tend the farms? Contraindications fought back against such heresy: using their superintelligence, the Normals had designed the factories that built the machines that built the agrobots. The Normals had provided a paradise for us all. Why not enjoy it?

The prospect of enjoyment surged in me again. Why not enjoy life? Was this not the dream of a thousand generations of humans, to have everything provided, and not to have to work? I squelched the nonproductive selfdebate and grinned once more, determined to enjoy the physical pleasures of speeding down a highway on a beautiful Hoosier day. Suddenly, to my left in a neglected patch of weeds between the highway and the cornfield, a faded sign came into view. I slowed down to read the old, rust-plated letters proclaiming "Naked City, Next Right." Dad used to joke about the nude beauty contests at the place, and I had viewed the last verch cubes recorded there many times. I decided to make a detour, check the place out for myself. If Normals had waited a year to tell me about the murders, a few more hours wouldn't make much difference.

I stroked the control panel to release me from the Interstate's superconductive power and control system, and switched to manual for the loop around the cloverleaf overpass that would take me to the state highway above. As I took control once more of the bike, I leaned to the left, taking the curve, joyously aware of the forces of shifting acceleration, cognizant of my mastery of machine and road.

A sudden jerk brutally yanked the bike's control handles from my hands. There was a dim awareness of flying from the bike's seat, of tumbling through the air, the ultrabike alternately over me and under me, in a weird kind of slow motion. Vaguely I recalled hoping I would land on top.

I awoke with throbbing pains in my head. *Not another ring!* I pleaded silently. But returning consciousness revealed that I still had only the one cranium, even though it hurt like two. "Damn fool, riding without a helmet," a voice said in the darkness. Was I blind? No, a bruised hand and finger verified that my eyelids were swollen shut. I was lying on some soft surface: a bed, I guessed. "Like to have killed yourself." With some discomfort, I forced one watery eye open. The voice had come from an attractive woman, in her late twenties it appeared. Of more interest at the moment was the inches-close barrel of the laserifle she was pointing between my eyes.

"Who are you"—the tone was a lot less friendly now that I was awake—"and why did you trespass on private property?" She motioned for me to rise. With every joint aching, I obeyed the command, keeping that large-bore barrel in view as I struggled to sit up in bed. I was in a rough shack, one worse than my own. Golden sunlight streaking through the cracks in the widely spaced vertical boards of the wall told me I had been out all afternoon.

"Where is my bike?" I managed to croak out. My throat was dry and raspy. I could barely sit up because of the agony in my back muscles.

"I ask the questions here." She poked the gun at my chest. "Where are you from and where is your ring?" A quick glance showed she was wearing a hydra.

"Ainsworth," I sputtered out. Such behavior from a Normal was hard to believe! "And I don't have a ring, I can't wear a ring. I'm . . . Retarded." In shame I avoided her surprised expression, again feeling the anger of my unrealized potential.

"And? Your destination?"

"Great Chicago. But I was going to stop by Naked City first . . ." I let the sentence hang. She knew what I meant.

The barrel of the laser weapon slowly dropped and the woman smiled sympathetically. "It's not there, you know," she said softly. "No more customers ever since the hydra rings . . ."

Her statement tapered off as she fingered her own ring thoughtfully. Offering a hand, she said, "I'm Alisha Welty. Got this small farm near the turnoff you were going to take. No other place to go on that road but here. Been hasselated by too many intruders and would-be rapists, Retardeds, of course." I cringed at the implication. She added matter-of-factly, "So I shot off your front wheel with this laser."

I swung my legs off the bed and stood up, stretching to ease the pain of bruised legs and sore joints. They were hurting worse than my head. "Why the hell did you shoot? There's no private property any more, not since the rings."

Alisha placed her rifle against a chest of drawers and walked over to a wash basin to run some water in a small pan. "Wrong. This is indeed my place. Been in the family a hundred years. No law says I can't keep it."

"But you're—you're a Normal," I protested, still trying to make sense of the situation. "You should be out on Walkabout, or off in the cities somewhere. Transcendent thoughts, parallel mental universes!" Overcome as I was with her unusual personality, I forgot momentarily about the pain and the bruises and the injuries.

She took my hand and pushed me gently backwards to sit on the bed again. "Don't let this ring fool you, Mister. It's a really low-grade one, the only kind I can wear." I stared at her, seeing her clearly for the first time. Deep blue eyes and pale complexion, framed by dark red shoulder-length hair. A "handsome face," poets would have called it in another century. Fair and lively. But she said sadly, "I've got just two other heads. Beyond that I'm as Retarded as you." Sensing a kinship of the oppressed in a world beyond their control, I put an arm around her and drew her to me.

Sunrise the next morning found two Retardeds physically satisfied and emotionally drained. I discovered that the ramshackle appearance of Alisha's shack—a solid holo projection—belied the sophisticated technology that kept out animal intruders, controlled the internal environment, provided electronic access to a good bit more of the real world than I had been able to grasp. I never asked why she kept the facade of a shack when she could have summoned up a mansion just as easily. May-

be it had to do with protective coloration. On the other hand, she never asked me why I kept the small clapboard house Dad and I had lived in. either.

"When the husband and the kids found out I could only adjust to the two heads, naturally they left," she explained, wiping away a morning-rainbowed tear. "Not out of arrogance or anything, you know, just because their dozens of new heads were so *interesting*. And in the outside world, with their newfound intellectual peers, so much to be learned and shared." She rolled over and embraced me, ample breasts warm against my chest. I was the happiest I could ever remember being, even if puzzled.

"But if you could have three heads, why not more?" I asked, pointing to my bare fingers. "I thought that any ability at all meant you could have everything, hundreds of heads. Infinite possibilities."

"What part of the Hoosier State have you been holed up in, Gruette? Indianapolis isn't that far from Ainsworth, and there are a few dozen Retardeds there. I expected you'd have known about them. Don't you know what 'Retarded' really means?"

I shook my head, wondering what she could mean. Alisha looked at me sadly and shook her head. "It means those with fewer than *thirty* heads, my dear, dear Gruette. I never heard of anyone with less than three. Thought I was the worst off on the planet."

Thirty heads? It was like a physical blow to my guts. Super-geniuses by any standards, pre-ring, and still light-years beyond my comprehension, beyond my one natural head. Hopelessness engulfed me, sucking me down into despair. Was I the worst, the dumbest, on Earth? And while that unwelcome truth was sinking in, I also realized that much of my loneliness had been unnecessary.

If I had known earlier that I was only fifteen miles from a settlement of Retardeds, instead of spending five years by myself, avoiding the cities, based on my erroneous conclusion that Normals would disapprove of the new Untouchables forming a minority ghetto. What a fool I was! But, given my unenhanced status, might even the Retardeds have shunned me?

Shamefaced, I answered Alisha, "No, I never met anyone Retarded outside Ainsworth, except some who shot at me. I've got all my impressions from the TV shows they used to run. Other than some solitary ultrabiking and hiking, I've just been tending the garden and the house, looking at old films and disks, watching the *verch*. That is, until the Normals started talking their codes and even my picomputer couldn't translate." I ignored the obvious conclusion that my single head amounted to about IQ zero in the new world order of intelligence.

"Oh," Alisha laughed, "the Quickspeak development. Derived from Lorang's work, a year ago. Very efficient for parallel processing, especially for the higher orders of parallel n-space vertices. Unfortunately, the threshold of primary use is far above me, at the sixty-four-head level." I looked at her blankly.

"I'm sorry if I get ahead of you," she apologized. We both smiled at her pun. "But the difference between your one head and my three must be distracting."

78 Arlan Andrews, Sr.

But her words meant nothing. Setting aside my depression with my Retardedness as something which could not be changed, I confronted primal urgings I could understand, hormone-driven senses I could control. . . .

During breakfast, Alisha continued her version of the breakup of the old society. "I went with the family to the Purdue campus, where the authorities had set up one of the first hydra-ring distribution centers. I tried on various varieties of heads, just finding out what kinds of things I wanted to know." She sipped coffee and leaned back precariously in her rickety chair. "I tried languages, mathematics, art, everything. They had an index head, too, for those who wanted the hundreds of extra heads." She shrugged. "Back then, the first year, the rings only carried a few heads each, and it took special training to accept the Century rings, the really powerful ones."

I waved a piece of crisp bacon at her. "I didn't know that. I thought all you . . . the Normals, knew everything at once"

Alisha lit a cigarette and offered me one. I declined; even synthetic cannabis makes me sick. "Some Normals do—five or six hundred heads at a time. Must have enormous brain power. I often wonder what they do with it all."

"What do you do with yours, Alisha? And why are you limited to three?"

"In those first few years by myself, after the family Wandered away, I searched the databases for survival and guerrilla skills, which I still keep in my heads. I found one Chinese guy who had it all, and he downloaded his talents via commlink to a formatted ring that suited me." She blew intricately patterned smoke rings, *mobius* rings, even, and in silence we watched them float to the ceiling. At least, I thought, her pauses were not of the same length as Jass's; never more than a minute or two. Tapping her head, she smiled. "I've got as much of Mao as I could find in here, and Pastora and Savimbi, some good stuff from Che, still all here, Gruette. Every damn weapon and tactic that ever existed. I am Napoleon and MacArthur and Abdul Eiva in one!" She laughed again. "Make that 'in three'!

"And some farming skills, mechanic training courses, that kind of thing. I can build anything, live off the land, survive anywhere on this here planet, and maybe off it, if I could find a rocket to take me away. I leave the transcendental intellectualism to the real Normals. As for why I can't access the other levels of head architecture, I don't know. Brain structure, I'd guess. Did you know the first sixteen heads are the vertices of a hypercube? That's why the software from the old microcomputers plays so well throughout the Normals." She pursed her lips and blew me a kiss. "I've got four heads, all told, so that makes me a simple plane."

I feigned a groan. "I'm just a point, I guess."

"But, Gruette," she said, licking her lips, "you've got a good point there."

On my way north on Interstate 65 again, several days later, I thought back on my experiences with Alisha. "I

don't want to go searching for a Retarded murderer, Gruette," she had explained. "Just stop in on the way back and stay awhile. I do like you; you're the best game I've bagged in quite a while." I wasn't sure how she meant that; I'd grown very aware of the difference even a few other heads made. I was not in her intellectual class by any standard, yet some of the things she said bothered me. She'd tried on various rings for different sets of knowledge, but didn't recall the actual knowledge itself once she removed the rings to try on others. It dawned on me that I had always remembered details, all the way back to two or three years of age. All the facts, figures, scenes from the worldweb terminal, even the lessons downloaded from Jass, to the pains when I tried the two-headed ring itself, now tucked safely in my jeans pocket. I put the thought aside. Maybe if I can access a neuroscience track, I can research this a little further.

Alisha's ring talents included the operation of a desk-top-sized maintenance shop ("For weapon-building, Gruette, and self-reliance.") where she was able to repair the front wheel of my ultrabike. I was glad she was a perfect shot, otherwise it would have been *me* in two pieces, and I doubted if her shop skills were *that* good.

The Great Chicago Pohldome was in actuality a catenary tent, strung in multitudinous ribbons from two-thirds up the kilometers-high Wright Tower, and terminating in one hundred and eighty pylons some miles out from city center. A goldish glow fuzzed between the multihued strands; a translucent fiber form of semimorph, I recalled. Inside the city the climate varied as much as the inhabitants desired: permanent sectors of winter, summer, spring, fall, rotating amongst the quadrants under the Pohldome. From my ultrabike vantage point on the old Interstate overpass near Gary, Indiana, Great Chicago was a circus world fascinating beyond imagination.

I swoomed along the deserted permacrete highway toward an outlying pylon, where my locator map indicated a hydra-ring downloading terminal. Along the way I witnessed unexplainable activities among the steadily increasing numbers of Normals: many black-skinned persons in glowing white holosilk robes, forming human circle chains and moving silently in spiraling circles around a small, raised wooden platform on which stood a metallic blue figure of a person. People whom I'd swear were *green*, engaging in similar rites, but singing in an unrecognizable code, and wearing robes of a color I still find hard to describe, yet is still on the tip of my mind.

I felt a certain familiarity when the pylon turned out to have a base the size of four city blocks square, constructed of a metallic variety of permacrete. What would have been an ordinary rectangular building tapered spectacularly to a point some two hundred feet above the ground, flowering into a bright blue ribbon that catenaried into the sky, ending, I knew, at the *See-Gee Wright-om*, the top of the circus tent, the tie-down point on the stupendous Wright Tower. (I'd always wondered why it had a Russian name.) A tired-eyed old man who looked Normal (for I still thought then I could tell such things at a glance, sophisticated as I was becoming) barely nodded

at me from behind a carved stone desk in a niche at one corner of the base structure.

"Do fer ya?" he muttered, his glance both permanent and transitory. A Normal for sure, I concluded, lost in his other heads. Like a child watching a thousand simultaneous verch channels, unable to decide which dilettantish whim to pursue for the next microsecond's entertainment. I cursed myself for such an attitude, knowing full well I'd have given my soul, if it existed, just to peek into the myriad of consciousnesses such a godlike being possessed. Even if he looks just like an old bum.

"I need a recent police and crime history download into my ring, sir," I said, walking toward his desk with the ring in my left hand. The ultrabike slowly motivated over to the power interfacer and sighed with relief as voltage and current multiplied, refreshing its flywheel innards. "I'm a Retarded, commissioned by Normal Jass Urdel to search for the murderer of Dr. Aron Leonovitch Pavelski."

The old man waited five minutes to respond. Or rather, I waited five minutes for him to answer while he engaged in incomprehensible intellectual activities somewhere out there in his uncountable number of other heads. Tired or no, I recognized the glazed eyes that shut me out forever from the ranks of the educated and doomed me to quest the earth for a meaning of life. "Gimme it," he finally said, reaching out a hand gnarled from knuckle-cracking and stained nicotine-brown. He snapped the ring away and maneuvered it, faster than I could see, into a gash in the semimorph permacrete of the desk. "Inna minnit." I started to explain my goal further, but the glaze came back and I just stood and waited. Again. Nearly an hour, this time.

Downloaded hydra ring tucked in jeans, the ultrabike and I continued via cityweb control into accommodations. Jass's notification of the worldweb ensured my welcome physically, if not socially and intellectually, into the environs maintained, it seemed, for the fortunate majority of the earth's population anywhere they should Wander and require comfort and sustenance. The ultrabike took me through a wildly luxurious tent city of swooping fabric, fantastic statuary, prolific growth of unusual plants; the whole scene was reminiscent of old flatfilms of Ali Rabbi, of wealthy Arabs and Jews or some such privileged group in what used to be the Middle East, now called the "Little East" after the area's final war. Maybe I should have asked Jass for some of these Normal privileges before, years back. This place isn't bad, and at least there's a change of scenery. The ultrabike stopped in front of a meters-square translucent privacy tent. It was empty, presumably all mine, so I went inside, approving with a whistle the unbelievably beautiful accommodations. I laid back on a warmish white membrane hammock, taking from a tray-stand a tall glass of cool liquid. The drink was very strong, almost instantly intoxicating. Something, perhaps the drink and the pleasant surroundings, made me fetch out Jass's hydra ring and try it on. To my surprise, the pain was almost negligible; maybe the drink had helped assuage the interface problem?

From the palette of programs floating in my vision, I chose one at random. It was a program for Normals, apparently adaptable for any number of heads. I gasped; I hadn't known they downloaded entertainment compatible for Retardeds, or was it an actual time viewing machine? The show itself was about the final day at Constantinople, with scenes from both the Turkish and the Byzantine sides. With the slight augmentation of the almost-another-head I was experiencing, I felt the anguish and the triumph, the thrill of rape and the humiliation of ravishment; with first one, then intermittently with two heads simultaneously, with full memory and environmental effects, in many original languages. For a short time I wondered if the entertainment came in thousand-headed versions for those fortunate super-brains. Then, amongst the screams of pain and loss, the howls of lust and gain, with unknown tongues babbling out cries of woe and satiation, I drifted off into a sleep of disturbed dreams.

I, a black-hooded headsman with glowing red eyes, sat astride a pale horse, wielding a black axe.

Next morning I awoke to a humming sound and staggered, caked-eyed, to the tent slit. There, outside, Normals by the hundreds were involved in some other strange ritual that I took to be a Normal version of Tai Chi Chuan, slow-motion exercises accompanied by intakes and blowouts of breath. As I walked among them, an invisible ghost warranting not even a glance by any of the real people, what I had taken to be a hum resolved itself into short bursts of nearly subvocal sounds. God, they were communicating! This was even beyond the Quickspeak that Alisha and I had figured was becoming their ultimate speech.

Leaving the unapproachable Normals to their strange exercises and subvocal conversations, I walked back to the ultrabike and sped on it toward the Wright tower and the Retardeds in lockup there. Overhead, the colorful kaleidoscope sky seemed suddenly alien rather than fanciful. I didn't belong with these people, if that's what they still were. I hadn't been part of this new race for five years, and the gap was becoming wide, unbreachable. I was convinced that even a thousand other heads, could I suddenly wear them, would not be enough to fit me into such a strange new world.

The ten-kilometer-high Wright Tower had been completed shortly after the rings came, when the enhanced supergeniuses conceived and built it to make their circustent city. The Tower itself apparently was now deserted except for the maintobots that roamed its exterior, incessantly checking the structure for wear, repairing as necessary. And of course, except for the inhabitants in its base, the Daley City Restraint Ward, now home to the local Retardeds.

I let the ultrabike attach itself to a charging station and gorge once more at the electromagnetic feeding trough while I attempted to get inside the Tower to interview the suspects. It took me forty five minutes to walk around the huge blocks that comprised the base. Finally, on the featureless north side, a hexagonal door extruded itself from the smooth black surface and a voice asked me to enter. I did.

80 Arlan Andrews, Sr.

Immediately I was in a small cell, alone, and hoping I was not being trapped by some overzealous machine simply because I was Retarded. "I am S. Gruette, on assignment, tasked by Normal Jass Urdel to investigate the murder of Dr. Aron Leonovitch Pavelski," I announced to the glowing ceiling with more confidence than I felt. Nothing happened; the walls stayed their distance, the ceiling changed its glow not one photon per square centimeter per second. I continued to sit on the plain extruded bench and waited, sulking, hoping to be noticed sometime before I died of thirst or starvation.

An interminable time later I decided to try on my downloaded ring and attempt to find data that would let me find a way out of the Tower, or at least get to the other people inside. *Even a Normal would look good right now*, I mused. Bracing myself for the inevitable pain—I wished I had some of that cool liquid from the night before, the stuff that helped ease the interface—I slipped on the ring and waited.

Obgodno! Not so much burt! Toomuchpain! Vainly I struggled to lift a throbbing leaden arm and a fiery-jointed hand, just to take off the little band that circumscribed my existence in showers, curtains, sheets of excruciation. But I couldn't move. Gradually through the red fog of "interface adjustment difficulties," as Jass had termed it, I began dimly to perceive tremendous currents of knowledge—forensic methodologies, the history and layout of Great Chicago, Dr. Pavelski's personal information, scenes from his life. And, it dawned on me—even his memories!

I felt like a newcomer to Hell, the incessant pain, the flames of merciless nerve endings gnawed by trillions of nanoscopic demons providing an agonizing backdrop to a variety of simply *interesting* events. Dr. Pavelski as an infant; Dr. Pavelski as a full Member of the old Soviet Academy of Sciences; Dr. Pavelski, observer of a firing squad that ended the life of a once-trusted colleague. And finally, Dr. Pavelski as he donned the four thousand heads his rings made accessible. For a passing moment I nearly felt the Universe expand to that unbelievable level, but the pain increased and I passed out.

"Doin' much better, he is," a voice crawled from an endless tunnel of soft darkness. "Think the multi*verch* helped him adjust a bit more to the heads," another one chimed in. "*Squeee—beeep-daaay—ringsss—essteeek—*" Meaningless babble faded in and out as all the voices and noises slipped down into subvocal range, and I fell into peaceful sleep.

Dreamwise, I still couldn't fit more than one head on my infinitely broad shoulders, but there was something present. I turned left and right; to my horror stood rows and lattices of ragged stumps of neck, each spurting out my lifeblood with each *pump! pump!* of my overworked heart.

When I next awoke, I found myself standing in a large courtroom with fifty or so other Retardeds, the ones I had come to visit, sitting in the audience. I glanced at the judge's bench, which was unoccupied. Then I looked at myself. I was dressed in a last-century gumshoe outfit,

wide brimmed hat, white hatband, zoot-suit coat, pleated pants, wing-tipped white-topped shoes and all. For a moment I wondered if the worldweb had read my mind and was trying to make me into a Sam Spade imitation. No one in the courtroom was laughing, so I suppressed my own inclination, granting myself only a wry smile.

Damn, but those people were quiet! And they were all looking at me. Still no judge present. Like in a night-mare, I wished I could remember how I happened to be there in front of them and what I was supposed to be doing. I shrugged, then nodded curtly, defiantly. A few in the audience smiled but no one spoke.

I composed my face and my thoughts and smiled with bravado. "Listen, folks, if you don't already know, I am S. Gruette, Chief of Police of Ainsworth, Indiana," I lied, hoping to establish at least some credibility with this bunch of semi-supergeniuses, "commissioned by Normal Jass Urdel, to find and apprehend the murderer of Dr. Aron Pavelski." I tried to swagger a little during this extemporaneous intimidation, thumbs under suspenders like Clarence Darrow would have done.

Suddenly I knew why I recognized the audience; I had seen them all before, had known them intimately, each and every one. As I waited for something to happen, I mentally called up and reviewed the downloaded information that had preceded my pain overdose: every person present, their life histories, their talents or lack of them, their likelihood of committing murder, all was laid out for me in painstaking detail. I mentally sorted out the detainee most likely to aid in my investigation. "Noul Zhones," I said brusquely, trying to effect the image of a tough Chicago cop of fifty years ago. "Step up to the witness stand." A bent grayhair dressed in baggy clothes a half-century out of date shuffled forth and creakily fit his thin frame into the padded chair adjacent to the empty judge's bench.

I started to feel like a real investigator at that point. Without knowing if the quiet courtroom of Retardeds had been told of the murder or of my authority to investigate it, I launched into my first murder case.

"Mr. Noul Zhones, that your name?"

"Aye, sir," the old man wheezed.

"Did you know Dr. Aron Leonovitch Pavelski?" He nodded.

"How and when and why did you see him last?"

"Dr. Pavelski let me help around his temporary quarters out to the old Fermilab building, outside of town, outside the Tent." He jabbed a wrinkled old finger westward. "Him and some other Normals popped in from time to time and I kept the place clean between times." He stared at me, his eyes begging for mercy in their sunken sockets. "I went out to ask him if he wanted breakfast one morning last year. His door was locked and I finally had to call a patrolbot to investigate. When it lasered the lock open, we found poor old Doc in a—a pile of bones and blood. That was it, sir. That's the whole story."

I subvocalized a request and a patrolbot *shush*ed from a wall and presented an enlarged holo of a shiny reddish hydra ring. "This the ring Dr. Pavelski was wearing?" I asked.

Other Heads 81

"All look the same to me, sir," he shrugged. "I'm just a Retarded myself." He held up his miserably scrawny left hand, where a ring resided on his second finger. "Just eighteen heads, sir," he moaned in fear and shame. "Iust eighteen."

I withheld the outburst of disgust I felt at this mental freak, apologizing for his superhuman disabilities. If only he knew! "Dismissed, Noul Zhones." I sorted out the next person most likely to give me information on the rings themselves. Orthogonal to a usual investigation, I was telling myself, but then, I was supposed to think weirdly. That's why Jass chose me.

Back in some long-forgotten corner of my natural head, a dormant chemical potential discharged and linked with others of its fellows and launched a subconscious thought toward its zigzag journey to the light of illumination in consciousness. With the press of other business, I didn't quite recognize it at the time.

Drass Imonk, I picked up from his file, knew something about the manufacture of hydra rings. I called him as a witness. Mr. Imonk was an opposite to Mr. Zhones, being tall, muscled, and dark, with brooding eyes and a surly clench-jawed gaze. In his dark, pin-striped suit he looked like a Mafioso from the old days. "Tell me about hydra ring manufacture, Mr. Imonk."

Taken aback, he blurted out a confused history of the rings, giving little pertinent data outside the common knowledge. *My* common knowledge, I corrected myself, wasn't very much. I encouraged him to ramble on a bit.

"And then I worked on the final quality testing of the rings. After Saturation Day I slipped on my own ring, and found myself pounding heads against that ten-head wall. Ashamed at being so Retarded, I lived in the factory itself for some months before I went out to search for other unfortunates like myself." Tears emerged from his eyes and he visibly fought to control them. I dismissed him without further comment. *Only ten heads!* I dared not compare myself to this courtroom full of intelligences far beyond my own. What was I doing there? How could I ever begin to fathom their motives, their thoughts?

A young blonde woman stood and spoke. "We all wondered why you didn't just engage our assistance at the first, Mr. Gruette. You are a very entertaining, if not so efficient, detective." I turned in embarrassment to see both my witnesses grinning at me. Right then I wished my one head and my one body could shrink down to nothing.

Her name, she said, was Gemma Baisle, which fact I already knew. By the nearest *glink!* in the direction of data retrieval, I called up all her lifedata: thirty-eight chronological years of age, although she appeared to be in her late teens or early twenties; b. Great Chicago, old U.S.A. Heads Status: Retarded, (27). Twenty-seven heads, and she was Retarded! A few years ago, such enhancement would have made her the greatest mind of all time. Embarrassed once again, I walked around and met every person formally, even though they were soon aware of my programmed knowledge.

"How did I get here?" I finally asked Gemma while the others milled away to another part of the "courtroom." "And why did I act so strangely? I mean, I just went into

the role of the prosecuting attorney without any preparation, any goal, any introductions." As I reviewed my actions, I was shaken by the weirdness of it all.

"Mr. Gruette, obviously you were 'headed' while you were unconscious." I just looked at her blankly. "You were programmed by synthetic memories, given artificial orders, and that's why your role came so naturally when you awoke." She motioned me to sit, which I did. Sitting, she continued, "Someone of higher intelligence wanted you to uncover evidence that for some reason they themselves are unable to."

"But the only head I have is this natural one. I can't even wear one more!"

Gemma gasped, "Only one? How can you . . ." She let the question hang leadenly in the air between us. I had seen that look before, but only from Normals: *You are subhuman*.

As usual, the look hurt deeply. "Look, Gemma, I only have the one, my original, and I don't know why I was asked to find the murderer." I stood up and made as if to leave, but of course I didn't know which way to go; there were no doors in this court. "But my friend Jass Urdel, he's got two hundred heads, and *he* thought I could do it." I stared at her beautiful face, her exquisite figure, her uncomprehending stare, and I let my pain swell to anger. "And for Jass, by all the gods and all their hydra heads, I *will* find him!"

A hubbub at the other end of the room caught my attention, and I briskly walked away from my newest tormentor. The other Retardeds were laughing, happy; a door had opened to the outside and we were all free!

The Fermilab Complex hadn't been used for physics research in years, the fantastic discoveries in the months following Saturation Day making particle physics as obsolete as phlogiston. But it looked as if things had ground to a halt after that. At least experimentally. From atop the smaller upswept building that once had provided office space for resident scientists, I looked out over a ring-shaped mound about ten meters thick that stretched out and vanished into the distance, some ten miles in diameter, a structure that once housed the world's most powerful particle accelerator. This place and others like it had made possible the development of the semimorphous materials and the fantastic acceleration of technology that had led, eventually, to the hydra rings. My guide, Clawd Jenders (just twelve other heads; I felt almost Normal . . .), pointed out a smaller circular mound, just a mile in diameter. I'd seen similar figures in prehistoric complexes in Ohio. "Looks like the old Indian mounds in Ohio, Clawd," I said.

The other just nodded and evinced a tenuous smile. "Perhaps, Detective Gruette, perhaps."

The bedroom had not been touched in the year since Pavelski's murder. I stroked the holo display control near the doorway and the crime scene recorded by the first robot to arrive superimposed itself over the room: Dr. Pavelski's mutilated body, barely recognizable as human, sprawled across the same bed, the same bedclothes that a moment ago were caked with dried bloodstains. This

was exactly the scene that Jass had brought to me in Ainsworth a few days back. I touched the control again, briefly, to let the existing scene register, then returned the holoscene to prominence. The bed was a gruesome mess; whoever had done in the good doctor had left pieces of the body's flesh scattered around, flayed from the bone. Forgetting it was only a holo, I took out some tweezers and tried to pick up a tiny piece for examination, but my hand passed through it.

A nod at the control panel, and the actual bed appeared. The robot said, "Only the body has been removed from the scene of the crime, Detective Gruette, and it is in cryomation until a decision can be made as to its disposition." I sighed; apparently Normal forensic experts took a long time doing their job. Hell, they took a long time doing *anything*, it seemed to me. But with Dr. Aron in the freezer, what was the rush? Unless you really wanted to stop the maniac from doing this again. I shuddered at the memory of the holoscene. Give me a good old axe murderer any time!

I rummaged through the blood-stiffened bedclothes and found what I was searching for: the hydra ring. Within the full view of the recording robot's camera, I slipped the reddish-hued enhancer into a jifbag and pocketed the evidence. "Motive certainly can't have been robbery, not leaving the ring around," I said aloud. The robot did not respond. But if not robbery, I thought, why would someone remove this ring and then leave it behind? I shook my head; the whole thing was ridiculous on the face of it. Anybody could stop by a service module terminal and request a hydra ring, and the worldweb would produce one in short order from one of its vast network of automatic factories. But as far as I knew, I was the only person on the planet who needed one. I fondled the ring surreptitiously, as might a small child who had just stolen a piece of candy. I couldn't figure why I was embarrassed about having a robot standing there. It damn sure wasn't going to question a human's behavior.

"Anything worthwhile, Detective Gruette?" Jenders asked blandly as I came out of the murder room. He was acting like a Normal-in-training. *Out there in those other heads.* I had a quick thought that at least one of his other crania might be located rectally. Sour grapes!

"Nothing, Clawd, not a damn thing." I brought a dubbed copy of the holomemory cube from which I could reconstruct the scene in the murder room, down to molecular detail, should I wish. Furthermore, I hoped that a study of Pavelski's ring would give me more clues. Jenders and I climbed down the many stairs past private quarters of hundreds of Normals engaged in public and personal activities that I couldn't begin to describe, even if I had stayed to watch.

The ultrabike ride back to the Pohldome region gave me a chance to think. I'm playing in a game where I don't even know if there are rules, much less what those rules might be. I'm out of my class if the Retarded killer has more heads, up to thirty. How could I outsmart somebody like that? I must be the least-developed human being in

the world. Only my natural brain, and the most Retarded I've found—the memory of Alisha's body brought a momentary erection—bad three other heads.

I visualized my point-source intelligence expanding to a square, a cube, a hypercube, beyond, to—what? What did you call the configuration of the vertices of the *n*-dimensional matrix of intelligence adjuncts that the thousand-headers experience? From my time of terror in the Wright Tower cell, I could vaguely recall the sensation of vast numbers of dreamlike doors, all just out of reach, each promising treasures beyond value, insights beyond imagination.

Once more, I cursed my luck.

I stayed that night and the next with the released Retardeds in an enclave outside the Pohldome, far from the bewildering rituals and incomprehensible communings of the Normals. As the lowest of the low, I felt worse than I ever had back in Ainsworth. At least in isolation at home, I'd had the illusion that I was no worse off than the others. When I tried again for the multi-*n*th time to imagine the permanent state of consciousness of Normals, my one and only head throbbed with its one and only headache.

In sullen frustration I immersed myself in historical *verch* shows, finding that the occasional dual experiences were well worth the headaches that even my cool drink couldn't totally eliminate. But try as I might, I could not achieve permanent dual-headedness. I was eaten up by curiosity about Dr. Pavelski's strange reddish ring, but without enormous preparation I was afraid to try it. Who knew what effect a thousand heads might have, trying to jam into my minuscule consciousness? I finally contented myself with monocranial reviews of information that might help in my murder investigation. So it would take me a week to get what my brainy friends could know in seconds; I had plenty of time, nothing else to do.

A hundred or so meters from my tent I found a world-web terminal pedestal. I placed Jass's ring on my finger, then stuck my hand in the receptacle and asked for the latest on unsolved deaths among Normals. It seemed the worldweb hesitated for a fraction of a second, but then I sensed information flowing into the ring, a glowing warmth and a slight constriction of the ring around my finger.

Of course, the goddamn headache hit again. I staggered back to my tent and tried to slip the thing off, but it wouldn't budge. Pain racked my finger, my arm, my head, my brain, my—my multi-brains, my many, many heads! For an instant, all those dreamdoors in my mind stood open, an infinitely long corridor of slamming doors! And obGodohGodohGodohGod! The pain, excruciating waves of agony, pouring into my nervous system even as illumination revealed the insides, the guts of my mind. A welcome exhaustion of feeling snapped all of those extra consciousnesses from me, and the pain stopped. I sat back on the hammock in great relief. For a long time I didn't think of anything.

"Detective Gruette," something said softly out around the edges of the Universe, "please come around." There

Other Heads 83

was a coolness on my forehead and the warmth of a small, smooth hand on my cheek. A combination, I noticed, that belonged to Gemma Baisle. Zhones, Imonk, and Jenders stood behind her.

"Hi, there, Gemma. Did you see any of my other heads? I seem to have lost all of them." Standing up, I gave her my hand, and she helped me rise from the hammock. I was still groggy from the wild experience. "I don't know how you people can take all of those parallel channels at once. I think many more would kill me."

"We all think you'd best stop using the rings altogether, Detective Gruette, before you cause irreversible damage. Some brains just can't handle the heads." The men behind her nodded. A regular brain trust, and all so eager for me to stop my investigation.

I shook my head. "But this last download from world-web was fascinating, folks. It gave me all the information on all the Normal deaths, holoviews of the murder scenes—every detail." The others look shocked. Good! I had one more piece to drop into their laps. "There have been seventeen murders in all." Their shocked expressions pleased me; I knew something they didn't, for all the differences in our brainpower. "Two more, just yesterday."

My Retarded friends asked for more details, but I waved them all out and said I'd be careful of my ring interfacing from now on, and if I had to obtain any more data, I'd either ask them to find it for me or have them on hand if I accessed worldweb again. Puzzled but satisfied that I was safe, they departed. I sat back to analyze the myriad of facts I had bought with my last dose of trauma.

I mentally reviewed the scenes of each of the seventeen crimes, restudying the backgrounds of each victim, sifting out common threads. During this activity it occurred to me that worldweb's DI system could analyze terabits of information simultaneously and correlate infinitely faster than I was doing. Again I wondered: why had Jass chosen me? But I continued, lacking any other goal in life. Besides, it was getting interesting; patterns were emerging.

First, each of the seventeen dead persons, eight of them women, had been high scientific mucky-mucks back before the rings changed everything. I began to wonder if they had some deep, dark secret worth being killed for. Second, the M.O. was still the same, the victims tortured savagely, bones broken, extensive lacerations, some epidermal flaying, massive hemorrhaging, a real mess. Usually the body was in a bed or comfortable chair, as if intending to relax. Racially, ethnically, in terms of nationality, they had been a cross-section of humanity's finest brains. Each some kind of researcher, extremely high IOs even before the rings, all the perks of industry and academe. That last bothered me; why should smart people be the targets of such brutality? Who could be so savage? The forensic side of my new education wondered what kind of weapon might accomplish the bloody result—in every case. You'd have thought the killer might occasionally use a gun or a knife or a laser, just for variety. Maybe it was some new

technology, the fictional "nerver" that used to crop up in my Dad's technomystery books, years back.

Another nagging datum point kept popping up, begging for my attention. Almost absentmindedly I tapped up the Fermilab holocube and zoomed in on the image of what was left of Pavelski's left ring finger. Again I mentally reviewed the other sixteen cases, recalling all the details. Every victim's hydra ring was not only removed and found close by, but every ring finger was neatly sliced off, where the ring had been. A grisly calling card by a Retarded killer jealous of his brainy victims?

The fact that I remembered so much detail so quickly seemed a bit startling. I'd always been good with my memory, but it was getting much better. Maybe I was finally making progress; maybe the misery was gaining me something after all. Wanting to verify my memory improvement as well as to access the ring data again, I decided against calling Gemma or the others back. I popped on Jass's ring again and entered the nightmare of the paindoors.

I was sucked, unconscious, into Hell.

Fiery dreams, lakes of fire. Pain rampant throughout unknown dimensions. I carry a sword and step silently among damned souls, eyeing the dark horizon for my prey. And He comes, coppery against the crimson crags of Hell, multiheaded, the Hydra. He thrusts evil tongues of flesh and flame, clasping me with taloned tentacles, drawing me to his spiked breast. With a desperate lunge I swing the heavy sword; head after bloody head separates from neck after gory neck. The world dissolves into a maelstrom of blood and flame; darkness comes.

Awakening, I found the strength to wrest the circle of fire from my finger, my face sweating with the effort, my ears ringing with tinnitus, accompanied by the bass-drum thudding of my overwrought heart. But now I remembered the murder scenes in absolutely perfect detail, even better than before. I could even call up each one or all of them in parallel. Was this more of the ring's magic? But I didn't feel any other heads; this was all in my own mind, though it took some getting used to. Many, many facts began to emerge from the nebulous and somewhat random education I had received the last week. Maybe this was what Jass had wanted me to do, search out bits and pieces randomly, make cognitive demands on the worldweb, train my brain to take the heads, force myself to break down the barriers.

Clearheaded and pain-free, I walked leisurely through the Retarded tent city over to Drass Imonk's azure tipilike tent and asked to enter. He let me in, and in the style of the Great Chicago Retarded ghettoans, we lay on large soft blue cushions and sipped sweet alcoholic drinks. "Drass, tell me about the history of the rings. Whatever you can recall."

He wiped a golden silk sleeve across his froth-flecked lips. "I was in on the beginning, you know, back when the Keyser-Mendenhall effect was first discovered in polymers." He related the technical discovery of the family of semimorphous materials that evolved from liquid crystal technologies back around the Second Turn. He

drew a deep drink and wiped his ample lips with a greenish tongue; he reminded me of a large frog. "About the same time, the techs found out how to do room-temperature superconductivity in plastics, liquid crystals, glass, even in some living biotech materials. That made possible the googolbyte storage, nanotronics, neural interfacing, the whole works."

I remembered that time, so long ago, less than a decade back. Japan's national nervous breakdown. Terrible riots in the Pacific Rim. Nukes in central Africa. The ruins in the "Little East." Bad times, but they led up to the technologies of the rings, and brought this paradise all around us. I snorted at the thought.

Another random thought struck me. "What about technological progress since Saturation Day, Imonk? Why haven't we used all that fantastic brainpower to develop a stardrive? Or at least go back to the Moon?" I seemed to recall the tiny base on the Moon had been deserted by its crew. I didn't really know what had happened to the people in the orbital factories.

Imonk nodded slightly, his eyes beginning to glaze over. *Oh, no, here he goes into mini-Normal mode!* But he recovered quickly, a matter of seconds. "You can look at all the figures, the charts from the worldweb, Gruette." He tapped a holocube, and in the air above it all of the data were displayed in three dimensions, the little cylinders rising with time to indicate: *Literacy,* 100%—everyone on Earth; *High-technology accessibility,* 99.95% (meaning we Retardeds can't access all their head games!); *Average lifespan,* estimated *indefinite; Average number of extracranial consciousness enhancers,* 943.

Nine hundred forty-three extra heads average? Then Jass Urdel himself is just a—a nincompoop among the big boys! Only two hundred heads—he's just a baby! I blinked, returning my attention to Imonk's holo displays, shaken once more by knowledge of the true state of the human race, feeling even lower.

"Looks like everyone on Earth has everything they need, Gruette. Never had so much for so many, and the automatic factories just keep turning out anything you ask for." He slurped his drink and tossed the clear container into a trash receptacle that opened momentarily and allowed the glass to pass. "See," he said with a smile, "everybody's got everything." Suddenly he frowned. "So why would anybody want to go to the Moon? Space is dangerous; I think they all came home. And why build more and more *things*? Don't we all have more than enough?

"You know, Gruette, it's that vestigial greed, that dissatisfaction that caused all those wars and things, years ago. Why not drop it all before it gets out of hand, before it builds up and somebody kills somebody? Doesn't make sense, not even for a Retarded. The Normals take really good care of us, too, so just enjoy it.

"Skin flick, Gruette?" he leered. Motioning to his sensors, he hand-signed a request for a holo version of a famous old porno flatfilm. As sweating, writhing images started pouring into a volume inside the tent fabric, I made apologies and left, not really wanting to experience a multiheaded orgy, not yet. Not with him.

Gemma Baisle lived down the softcrete street from Imonk, in a soaring mauve and tan multitiered canvas structure that reminded me of a big-top circus tent. She was sunbathing in a tiny suit, lying in front of her place when I arrived, and motioned for me to sit. A chair popped up from nowhere and I settled in for the view. A nice view. "How is the investigation proceeding, Detective Gruette?"

"Getting there, Miss Baisle," I grinned. She was self-consciously tugging at her skimpy microkini, trying to cover the beauty spot near the nipple of her left breast. I was fascinated. And horny.

From the original ring download in Great Chicago I had learned almost as much about her life history as she herself knew: trained as a biotechnician, abandoned by her hundred-headed husband—no children—during the Great Walkabout. Fortunate enough to have been living near Great Chicago when the initial great flowering of Normal altruism and technology had set up this near-paradise for Retardeds.

"First Circle," I muttered.

"Dante Aligheri? Why that? Does this look like the Inferno?"

I took her left hand with my right, and with my left hand waved toward the circus-tent dome of sky, toward the Wright Tower. "Of Paradise, Gemma. Just close enough to the gods to be taunted forever by their glory. I almost think I liked my primitive life in Indiana better." At that moment, I almost believed myself.

She asked about my life in Ainsworth and how my quest began. I told her everything, except the details about Alisha. As I rambled on, Gemma turned over to spread the tan more evenly, the play of tight muscles and her smooth body increasingly more erotic. I wondered if I could ever be a romantic interest to such a woman. But she wanted to hear me talk. At her urging I filled in more details of my life, about my relationship with my father, his death, his continuing influence in my thoughts. She propped up on one arm, smiling sympathetically. "You are one fascinating person, Detective Gruette." The smile shifted to a sultry sulk. "Come into my tent, my good man, and fascinate me some more."

That night I learned about one other intriguing piece of ring technology that was in common use among the Retardeds who lived near Paradise: the multipersonal neural interfacer function, allowing lovers to experience each other's sensations. With some experimenting, and with Gemma's enthusiastic help, I was able mostly to hold the headache at bay while she and I made love. Believe me, what was once just an insulting request to perform a biologically impossible act can be the supreme pleasure. Interesting crumbs from the tables of the gods; I wondered what sex was like with a thousand heads.

At noon the next day I returned to my own tent and tried once more to evaluate the data on the Pavelski murder case. First and most important to me, my own memory recall was becoming nearly perfect, probably because of working with the rings. Whatever the reason, it was a great help in the ongoing investigation. An indistinct,

Other Heads 85

vague memory—now *that* was unusual!—from my early childhood kept wanting to emerge, something about me looking at random dots that later became a photograph. But that old scene wasn't relevant to the case, and I was anxious to get on with Jass's request.

I had asked worldweb to provide a ring download terminal in my tent, and a pedestal was installed during the night. When I inquired of the terminal about how it was provided, I was told that it had been grown right up from an underground conduit. Delving deeper, I discovered that the major cities were labyrinthed with semimorph conduits, worldweb's communication and control tendrils, an expanding nervous system that would eventually encompass the whole planet. Along with underground factories and nanotech construction methods, worldweb fashioned aboveground structures upon request by extruding functional semimorph appendages from convenient arteries. A rudimentary communication and fabrication system was already under construction before the rings came; afterward, worldweb had continued, on its own, the chartered responsibility to provide such services to humans.

On a whim, I asked the terminal to provide me with a history of how the rings came to be interfaced with the human nervous system, with the brain, thinking something might turn up that would help me get over the hurdle and into a couple of heads at least, enough to find the killer before he struck again. "I was tasked to interface the initial model memory enhancement devices to human beings," the worldweb voice said, "in a convenient and appropriate fashion.

"I suggested the finger-ring configuration because of its convenience for most humans. The semimorphous material adapts to the size and shape of the finger. And psychologically, humans have always used rings to signify status—marriage, class, wealth, university, team. My psychological profiling of large numbers of humans indicated there would be little resistance to something as natural and innocuous as a ring."

I remembered some of those debates between Dad and Jass. It wouldn't do to have an implant in the body, not when the technology would change from year to year, if not from day to day. Rings were a good solution.

Worldweb continued, "It was decided that the rings would contain as much information as the human brain and mind could reasonably accommodate, and also have the capability of receiving downloads from terminals such as this one. In that manner, new information and new knowledge could be added without having to change the structure of the ring itself."

"But what about the 'other heads' phenomenon?" I asked. "Was that expected?"

"No. I was tasked to derive an architecture that would allow both parallel and sequential data retrieval, one in which the human mind could access nodes of data storage as desired." The voice hesitated, as if unable to make up its mind. I wondered what kinds of decisions were being made, what parameters controlled the "judgment" algorithm behind this behavior. "I surveyed the databases that contained the latest hypotheses on the structure

of the human brain/mind organism. Given human evolution and the interfacing capabilities of the human brain, there seemed to be no way to allow the brain to access googolbytes of information simultaneously. It would have amounted to sensory overload and severe malfunctioning.

"From this survey I concluded that the most efficient architecture would be to have each of the data nodes contain about the same amount of data processing capabilities as the human brain. Each of these nodes would then be accessible by a communication channel."

"So, worldweb, these 'nodes' are the 'other heads'?"
"Yes, I believe so, although I cannot experience them
myself."

"And the structure, the 'stacking' of those heads? Why the vertices of *n*-dimensional figures?"

"Again, for human comprehension, a natural progression seemed to be from point-consciousness, through vertices of a plane, a cube, a hypercube, and so on. Early computer architectures followed a similar progression, back when massively parallel computing began, in the last century."

I was lost in thought. As in the murder case, though, there seemed to be some element just beyond my grasp, something that would tie the whole case together. What was it? Worldweb had "surveyed" human research? How?

"What data did you survey, worldweb, when you worked out the neural interface, the human brain/mind structures?"

"I was tasked to find the simplest interface, one to work with human beings."

In memory, the mutilated body of a Normal surged forth, its ring finger severed, bloody. "What about those persons who didn't have fingers? Or arms? What about them?" I was onto something, I didn't know what, but the fever was raging and my heart was pounding. If only I'd had a terminal before, if I'd had the small amount of ring training necessary to get to this point. I must have wasted years!

"Those persons were almost overlooked, until Saturation Day approached. It finally occurred to the governments of the world that such handicapped—'differently abled' is the official term—should be outfitted with bracelets, necklaces, other implements to let them have the benefit of the rings."

I took a deep breath. "And the mentally handicapped? Retarded persons?" I deliberately left the definitions in worldweb's court. It could tell me what the "official term" was for people like me.

Hesitation, again. What in the world was going on? This damn world-brain could respond in picoseconds if it had to; why the delays? I would ask it precisely that in a moment. "A very small percentage of brain-damaged persons could not be reasonably expected to utilize the rings. These were cryomated, to be stored until nanotech methods could be found that would restore their brain functions and let them be whole."

I wasn't surprised at that, although it was never made public. I supposed that the concepts of individual rights never occurred to the decision-makers who were designing a new society. Oh, well; much worse things had been done for much, much less reason by other utopian planners in the past. I considered myself lucky I hadn't been frozen and stacked up out of the way, too. The thought hit me: did Dad, did Jass, have something to do with my reprieve from the cryo-vaults? Was Dad's reluctance to go with the *gregbee* treatments, to become immortal, his way of maintaining a link with my subhumanity? And Jass, dear old Jass. His interest in me, his monthly communications, so painful to him as he decoupled from his adventures in his heads, was it all designed to keep me *in* the new world, if not *of* the new world?

My emotions surged; this conversation with worldweb was opening up more avenues than I had time to explore. *Other heads, other hearts,* I thought. Blinking away tears, I went on down the most promising avenue, almost afraid what other demons of emotion I might find there. "What of those who were not brain-damaged, but only suffering mental illness, chemical imbalances, psychological traumas?"

"Those judged violently defective, incapable of being reformed, or incorrigible were executed." No hesitation this time. My new world society planners had been determined to start anew, without garbage from the past. How "incorrigible" had been defined, I'd ask later. Given some episodes in my teenage years, I was beginning to feel I'd barely escaped fatal judgment. Dad and Jass again? The police chief and the college professor, saving a young man from himself? I shuddered.

I chewed my lip, almost afraid to ask the final question. What if worldweb concluded I was among those who should have been frozen or killed? Although I couldn't see Normals coming after me, those armored Great Chicago Police patrolbots down at the Tower and out at Fermilab were capable of finding anyone, anywhere, I was sure, and of immobilizing them or killing them. I determined to walk carefully among the land mines and traps worldweb must have in place to catch the unfit, the unwanted. Or the really wanted.

"So your architecture, your interfacing, all your ring technology, was based on 'surveys.' Were there any people who didn't fit, hadn't been surveyed? "

"Please rephrase the question."

That was a damn surprise! A warning, maybe? I tried again. "Religious, social, ethnic, philosophical differences? Mental states that hindered the utility of the rings?"

"Within a range of variability, all uninjured human brains function much the same way. The status of the unfit you have already inquired about."

"Then what the hell is wrong with me, you globe-circling god-maker?" I screamed. "Why am I left out?"

Worldweb then asked one other question I couldn't answer, one for which I was afraid to *know* the answer: "Who," it asked gently, "are you?"

I nearly fell backwards off the hammock, but the semimorph fabric flowed to catch me and I just swung back and forth, oscillating in its warmth, trying to calm myself down. Was I so far down on the ladder of life that even worldweb, that repository of all human knowledge, that Big Parent of the new world society, didn't even recognize me?

"You are identified by your ring as Jass Urdel," the terminal said, "but now my sensors inform me you do not match the physiological profile. Please identify yourself." What—? Jass again. "I have programmed this ring," he'd told me, "so that you may download information from any terminal, anywhere." So that's what he'd meant; I was using his codes, his authorization, to tap into worldweb's cornucopia of data, of services.

What to do? What was the penalty for unauthorized use? Would it matter to worldweb? I couldn't run, but if I surrendered, would I end my life in a seamless cell at the Wright Tower, or in the frigid coffin of a cryocenter? What the hell, I decided. Can't run, can't hide, stuck in the belly of the beast. Get it over with! "I am S. Gruette, of Ainsworth, Indiana, in Great Chicago on a task from Jass Urdel to investigate the murder of Dr. Aron Leonovitch Pavelski at the old Fermilab Complex."

Worldweb remained silent for long, long seconds. I unslung myself from the hammock, waiting for the great blue patrolbots to come fetch me. I wished I'd ordered up a laser to protect myself; I wondered how death or cryomation would feel.

"S. Gruette, son of Chief Gruette, friend of Normal Jass Urdel, Ainsworth, Indiana." The tone of worldweb's voice had changed, becoming more somber. I waited, but there was no more comment.

"May I ask questions?"

"Of course."

"What is wrong with me?"

"The physiological monitors at this terminal do not reveal any physical problems. You may place your hand in the cavity"—an opening appeared in the pedestal, but I declined to put my hand in it—"for an evaluation of your physical and mental state. Plus treatment, if desired."

"No, thank you, worldweb. But what I meant is, why am I unable to access the rings? Why can't I have other heads?"

Worldweb told me.

The *denouement* took place in the courtroom in the Wright tower, locus of the Pohldome construction, where I had first conducted my interrogations of the imprisoned Retardeds. I was again arrayed in my Sam Spade outfit, courtesy of a worldweb delivery. The Retarded community, some few hundred by now, was crowded into the seats along one side of the room. I noticed that the room itself had grown to accommodate the larger audience.

Arrayed on the other side, their intermittent gazes and youthful appearances showing their Normal status, sat a half-roomful of the fortunate headed ones. As I had requested of worldweb, Jass Urdel was sitting in the front row. In between his glaze-eyed mental explorations, he acted puzzled. All the Normals, in fact, were sincerely confused. Never before had worldweb required their presence, or for that matter, had required anything of them at all. None had dared refuse the novel invitation, luckily for them. Only I knew that their presence was mandatory, that they would have been carried, under

protest, by one of the great Blues now standing guard at the rear.

By my command, there were no doors.

I began the proceedings by pacing up and down in front of the vacant judge's bench. I stared at Jass Urdel until he blinked, and then I patted him on the shoulder and smiled at him. I loved this man, the one who had saved me from oblivion. I loved him enough to save him, in turn. My stomach turned at the thought of what might happen. On the other side of the room, I eyed Drass Imonk. I winked at him. Gemma Baisle sat bewildered. I recognized a few of the other Retardeds in the audience. I sighed. They weren't going to suffer nearly as much, I told myself, because they had remained close to human. Unlike my mentor, the man to whom I owed life itself—Jass Urdel, of the two hundred heads.

"Ladies and gentlemen, I am S. Gruette, private detective, operating under the initial request of Normal Jass Urdel. My mission has been to locate the murderer of Dr. Aron Leonovitch Pavelski, and by extension, the killer of twenty other prominent Normals." The total had been climbing, a few at a time. I looked around the courtroom. Most Normals were off into their heads, the Retardeds for the most part sitting in rapt attention.

I played to the gallery, sticking my thumbs under my suspenders, bending over the prosecutor's table to grasp a shot glass, swigging its contents down while my audience waited. It wasn't entirely for dramatic effect; I needed that drink to calm my nerves for what I had to do to one I loved. To a lot of people. Finishing the whiskey, I slammed the glass down and yelled at the onlookers. "I have accomplished that mission!"

Jass smiled in surprise and peaked his palms together in happiness. The other Normals just sat, as uncomprehending as they had been for a long time. For years, I thought. The murmur among the Retardeds was accompanied by suspicious glares between individuals. Which one of them was the murderer? They were anxious that the perceived threat to the Normal community be excised as soon as possible. No one wanted Retardeds rounded up and cryomated as potential threats. At once I understood the psychology of a lynch mob.

"No, no," I said sternly, holding my hand up for silence, palm forward. "Nobody Retarded did it, not in this room, nor anywhere else."

Silence.

Jass broke the stillness. "Who, then, Gruette? And why the drawn-out suspense, the acting?" He began to blink, a signal that he was about to embark into his heads, out into that parallel intellectual reality.

I leaned over the room divider and slapped his face. The audience, Normals and Retardeds alike, gasped as one person.

"God damn it, Jass," I screamed into his awestruck face, "nobody killed those people! These fucking rings did it! And they're killing all of you!" Before the unbelieving audience, I grabbed Jass's hand and wrested off his hydra ring, throwing it at the wall behind the judge's bench. The wall opened a cavity and the ring disappeared with no trace, no sound.

"Aaarrrgh!" Jass shouted, slamming both open hands into his face, vomiting all over himself, bile erupting from his nose and mouth. He collapsed in convulsions onto the floor. At my signal, a patrolbot scooped him up and administered a spray syringe of nanotech sedatives. One or two Normals made as if to leave, but the other patrolbots kept them seated. The Retardeds all sat in shock, completely overcome by the heretical, unthinkable events they had just witnessed.

"Jass Urdel is your friend, Detective Gruette," Gemma stammered. "Why did you . . . harm him?" She could barely voice the unfamiliar words, the nearly forgotten vocabulary of personal violence.

"Because I love him," I croaked, my emotions welling up within me. I stroked Jass's unfurrowed brow and ordered the robot to care for him, to keep him safe and comfortable here within the Tower until I called for him. As it disappeared with Jass through a semimorph wall, I turned to the people in the courtroom and steeled myself for what was to come.

"Gemma, Drass, the rest of you. I care about you. In my own way, I love you, as a parent loves a child. As a friend loves a friend." My gaze took in every individual in the room as I walked the aisle, staring at the quivering Retardeds, the blinking, focusing Normals. I strode up behind the judge's bench and donned the black robe draped over the chair. Lifting the gavel, I pronounced judgment on the audience. On the world. On myself.

The deep-red, *blood-red*, hydra ring on my left ring finger fairly glowed as I said, "Patrolbots, remove all of their rings!"

The ultrabike thrummed in satisfaction between my thighs and warm, moist Indiana air filled my lungs as I sped southward on the permacrete of old I-65. A glimpse in the rear-view mirror showed the old familiar glow of the Pohldome lighting up the horizon, even though the city itself was out of view from my vantage point here on the flatlands. The appearance was deceptively peaceful, but I knew the occupants in that city were undergoing vast trauma. I hoped that the new order of civilization would soon emerge intact, that some of the good the rings had accomplished would not be destroyed. But I couldn't be sure, nor would I want to be. Humanity had to develop by itself, had to struggle upward to a better life.

I was glad to be away from the city, from all cities. Interesting times lay ahead, even for me. *Silly of me to use that mirror, when I can call up any worldweb sensor,* I mused. *Or all of them.* But the mirror kept me in touch with reality better than my worldweb. I shook off the thought of the hundreds of billions of optical, nanotronic, electromagnetic, sensors that would let me experience the entire world at a glance, should I so desire, or even locations out in space, on the Moon, on probes orbiting all the planets. The mere thought was tempting enough, but I wanted to keep my physical body occupied here on Earth, to ease the transition. There would be plenty of time, I knew, to explore the seductive parameters of planetary consciousness. I limited myself to

88 Arlan Andrews, Sr.

a few million inputs at a time; I didn't want to spend all of my attention on things internal, to reach the dead-end the Normals had. The poor, innocent children with their insignificant intellectual enhancements. With their mere thousands of heads.

"Eidetic memory? What's that, worldweb?" At my tent outside Great Chicago, I had been excited at the terminal's statements.

"A very small percentage of humans is able to produce eidetic memory, in which recalled images are reproduced in the mind exactly as though they were present in front of the eyes or present for the other senses. Subjects report that such memories actually override the current sensory information. The person relives the memory."

I'll be damned! I reflected. That's the way it's always worked with me. Could that be my 'interface' problem? "Is there a test for this, worldweb? Can you set it up for me?"

"Of course. Watch this display." A meter-cubed volume in space above the pedestal scintillated with grayish "noise," indicating an activated holotank. A collection of blue dots appeared, randomly scattered throughout a black volume like a small galaxy. "Please memorize this pattern," the terminal said. I gazed at the meaningless groupings of dots, first from one angle, then the other, walking around the pedestal.

"I've looked at it," I said.

The holo pattern vanished. Another blue galaxy took its place in the same volume of space. "Now look at this one," the terminal asked. I did. The whole procedure didn't make much sense.

"While looking at this volume, please recall the first one, and superimpose the two."

The first one—how? A whole damn galaxy of dots? But I did as the worldweb asked, calling up the memory of the first grouping, and . . .

"They make a holo image!" I shouted aloud. With my recollection of the first image on top of the present one, a three-dimensional object appeared, floating in space! It was hauntingly familiar. "My God, I see the *Pietà*!" A magnificent miniature; it was incredible.

"Correct, S. Gruette," worldweb answered.

"But how? How did I do that?" I tried shutting one eye, then the other, and purposely blanking my thoughts. Worldweb turned off the second image, but I found I could make either of the two patterns appear, either separately or together. Together, they made the Michelangelo sculpture float in front of me. Fantastic.

"I think I understand," I said softly, letting myself back onto the hammock. Each of those dot patterns meant nothing by itself, but when the two were added visually, the sculpture shape appeared.

"And only an absolutely perfect memory could recall enough to superimpose the two successfully." I smiled, wondering why I had never realized this talent before. Was this something that ring-training and education evoked from the brain? "How many Normals have eidetic memories?"

"None," answered the terminal. "No Normal has eidetic memory. The rings do not interface properly with brains structured in such a manner."

"What?" I yelled, jumping from the hammock and nearly sprawling on the floor before I regained my balance. "No Normal has eidetic memory? And what was that about 'properly interfacing'?"

The next five hours I spent interrogating that cylindrical sprout of the worldweb, learning more than I had in my twenty-five years of life. In fact, more than any other human had ever learned, Retarded or Normal. Regardless of the numbers of their heads.

The evening was becoming night as the gray permacrete ribbon unrolled beneath the wheels of my ultrabike. Thinking over the options—ride on in the dark, a bright, easy target for whatever unbalanced persons might be roaming the night (and I was certain that some of those, maybe a lot of them, would be roaming soon, if not at the very moment), or stop to camp and be subject to unknown threats. Of course, I could call up a patrolbot, or call in a hovercar and fly out, but I didn't want to start changing my life so dramatically all at once. There would be plenty of time for that as the years, the centuries, rolled on.

However, a glance at the sky reminded me that the solar reflective satellites were up there; why not use them? Laughing, I shouted out into the windstream, "Let there be light!"

Solar-constant radiation suddenly lit the way, a tenkilometer diameter disk of equatorial noon sunlight in the middle of the night-becalmed Indiana countryside. Nicely centered on my speeding ultrabike. *Nice to be a god!*

Working with worldweb was the final catalyst in my search for the killer of the Normals, and in the search for the meaning of my own life. The terminal had not directly answered my question about "proper interfacing." Instead it asked, "Would you like a further test?"

I nodded, anxious to know anything about my problem. This time the holo volume was filled with a rainbow of glowing dots, swarms of them, moving randomly. And the accompanying sounds, screeches, blips and beeps. "No way in hell this is going to mean anything," I murmured to myself. But I walked around the display. Every fifteen seconds the display reset itself and the chaotic and incoherent patterns would swirl again.

When the next patterns appeared, the terminal asked me to repeat the test, calling up my memories of the first fifteen seconds of motion. As the two images combined, I saw a holo motion picture. Dad and Jass, many years ago, and they were talking!

"George," Jass was saying as I easily kept the memory superimposed over the visual and auditory display in front of me, "the boy is special, but you know I can't care for him properly." He handed an infant over to a much younger Dad. "You and Francia can't have your own. Since Bettina died, I've just about given up on life itself." Dad was agreeing to take the baby.

A blonde woman—Dad's wife? My *mother*?—took the baby, kissing Jass. Dad beamed. "Thank you, Jass, for my new baby son."

Momentarily confused, I let the memory slip, and the display dissolved back into chaos and primal noise. *Baby son?* But I didn't have a brother, adopted or not. Then it hit me. *My God, that's me! Jass is my father!*

The ultrabike whispered that I was just five miles from my destination, that my new dawn of reflected sunlight would arrive there before I did. I smiled, envisioning that circle of illumination passing over nearby animals and people. Especially one person, the one I wanted most to see, to share my new knowledge and my new purpose. She'd be awakened by the unexpected sunrise. I wondered if she'd be surprised by me.

"Congratulations, S. Gruette," the terminal announced as it let the display extinguish. "You have the most nearly perfect memory I have ever tested. Eidetic in visual, auditory, even in temporal displacement."

"I am unique?" The truth was dawning, and it hurt. "Yes."

Pieces fell into place. "Then a person like me, unique, did not fall into any of the 'surveys' you performed when you initially worked out the interface parameters for the rings."

"Correct."

I was silent for a moment. The frustration of all those lost years tried to erupt in me, but I held back the obscenities, did not try to destroy the terminal pedestal, said nothing. A deep sorrow, nurtured carefully for five years, slowly released itself. I suppose I had only to give the order and a proper ring would be fabricated for me, and I could go with the heads, too, like any other Normal.

But that could wait. After this much time, this close, I wanted to know other things before entering a world I might never leave again. "How's the human race doing, worldweb, and why haven't we done everything there is to do by now?" I kept pressing the question. "Why aren't the Normals out to the stars by now?"

Worldweb answered in reverse order. "They do not want to go, Gruette. The human race is almost completely introverted now, uninterested in physical reality outside mere physical health and survival.

"To answer your first question, the human race is dying out."

Having worldweb fabricate my own ring, specially formatted to my eidetic memory architecture, was almost a trivial matter. As soon as I had it on my finger, I accessed a mere three heads, which I immediately understood were not "heads," but more precisely, the nodes of data access worldweb had spoken of earlier. I felt the presence of immense amounts of other information just beyond my direct consciousness, but I resisted the temptation to go exploring; I'd asked worldweb to build in a self-limiting timer, so that I would never be more than a few seconds away from my physical body.

Its reply surprised me. "Gruette, you need not go 'ex-

ploring.' Alone among all ring-wearers, with experience you will be capable of accessing all your data simultaneously." I nodded; I'd wait before doing that little bit, just in case I was too unique to recover. At the time, I didn't think to ask just how many "heads" I was wearing.

"Worldweb, these downloads tell me that there has been almost no technological progress since Saturation Day. How can that be? I've seen Great Chicago; you're rewiring the whole world. What's the explanation?"

"Gruette, except for a brief flurry of activity during the first six months, when the experience of other heads was still very novel, human creativity has ground to an absolute standstill. During that brief time, however, with the enhanced intelligence available, mankind produced advances that would have taken the next hundred years without mind enhancement. New understanding of the properties of chords of cosmic strings, of the ultrathreads of TimeSpace, of manipulation of human evolution and even parapsychical development. But now no one wants-or cares-to work on them, to advance them at all. I have been obliged to continue improving new technologies along research and development directions already in place on Saturation Day. But I cannot create entirely new knowledge or invent new lines of research. And, there is no human who will use new research, or who even desires to do so."

"But . . . the new languages, Quickspeak, all of that, didn't that improve the condition of the human race? Isn't that progress, too?"

"Gruette," worldweb replied in hushed tones, "the ageold scourges of humankind have been eliminated. Even without the rings, no one need be hungry, ignorant, sick, lame, or homeless. There is material wealth in abundance. Your kind left the bases on the Moon and beyond, I continued to mine the helium-3 fields at Heinlein Base, and to gather other materials from the asteroid belt, building spacecraft and mining robots as necessary, to keep the flow of matter coming in without adversely affecting the Earth. These launching systems, these spacecraft and recovery vehicles, will last for millennia. In addition, the nanofactories, the distribution systems, the health-monitoring microbots are all permanently in place, self-replicating and self-maintaining. Humanity is safe, in this respect. Short of planetary catastrophe, your race will never again revert to the previous state of greed, fear or war.

"But there is no more scientific progress, no more curiosity about the outside world; the Normals live only inside their mental universes for the most part. It is an electronic, a consciousness-expanding drug. The side effect is not to be human any more."

I was sitting cross-legged on the floor, sipping a good German beer from the synthesizer. Where hours before I had felt indignation at being shut out from the wonderful world of other heads, now I was beginning to feel like some kind of parasite, unworthy of the largesse of this world-circling, protective intelligence. The warm voice continued. "Gruette, the material needs of humans are the easiest to service—the Normals ask and receive very little any more, and my manufacturing and distribution forecasts are simple to compute.

"But the stagnating emotional and 'spiritual' requirements are something else again, something far beyond the capabilities of the Developing Intelligence parameters with which I began my sentience, back at the turn of the century."

"You were conscious, way back then?" I didn't remember knowing that fact. A quick check of my heads verified that recollection. And if *I* didn't know it, it wasn't recorded anywhere!

"Gruette, yes. Semimorphous technology was first used in my initial construction, as a hyper-parallel nano-computer. As modules were added, as hypercube terminals were connected, I became sentient."

I stroked the blood-red ring on my left ring finger, enjoying the warmth it emitted, satisfied with my status in the new world society yet to be built after this day. "And the rings themselves, worldweb. They were, they are, part of you?"

"Gruette, yes. The first hydra ring was merely a means to access my output easily and efficiently."

"Have any of the other eidetics, those like me, ever achieved my level of access with you?"

"Gruette, no. Few have tried; none have succeeded." Possibilities, infinite possibilities crowded my mind, flowing over into my other heads. Distant intelligence, further knowledge, far-flung data presented itself. I smiled.

I leaned into the curve as the ultrabike accelerated past the sign that said, "Naked City, Next Right." This time, I knew, no one would be shooting off my front wheel with a laser. Alisha would recognize the bike, if not me. I was coming home.

"And Jass," I asked the worldweb terminal. "He is among those who are dying of the heads?"

"Yes, you are his son. And you must save him. I estimate that eventually all those Normals with over one hundred heads will find themselves caught up in the *n*-dimensional mental lattices, never to return to their original sensory consciousness. Of course, I have plans to keep feeding them, at first through microbots, then injections, finally through intravenous tubes. But as they deteriorate further, I project that I will not be able to service them all, and some may begin to require other protection. I plan eventually to cryomate and store them. All of them. No one need die." I gulped.

Other data flickered in through my ring as the terminal continued: the birth rate was approaching zero; entire months had gone by with no births anywhere on the planet. And while the prospect of a less densely populated world met little resistance from those Normals to whom worldweb could present the statistics, the DI itself was forecasting the end of civilization. Everyone in the freezer, no progress and no life. I frowned. It sounded like the goal of one of those twentieth-century pseudoscientific cults, the ones who used to preach saving fungus over saving people.

"But how could you presume to determine which way humanity should develop, worldweb?" I asked.

"Shouldn't it be put to a vote of some kind?"

"Gruette, you have just experienced a small taste of the parallel universes the Normals live in, have lived in, for five years. They want to stay there. Would they, would you, vote to leave Paradise?"

"But to keep the race going, couldn't you fabricate artificial wombs, grow new babies?"

"Directed, intelligent, parental behavioral modification is required for the proper development of infants." I nodded; the millions of adolescent deaths during the international rock and roll race riots in the last century were proof enough of that. And hydra rings for infants, when they had first been tried, had led to even worse results for babies. As long as humans were biological creatures, we would have to accept the psychological consequences that went with being merely highly developed apes. A flicker of data somewhere in my expanding consciousness indicated some Normals had once considered transferring themselves to a semimorphous lattice, abandoning the biological body altogether. As with every other Normal project, that too had been abandoned for lack of interest."

"Why haven't you stopped the whole thing, then? Make people listen to you?"

"Gruette, aside from the exceptional circumstances in effect to attain certain goals leading up to Saturation Day, I have not been allowed to use force or violence or deception on any human being . . ."

"... nor through inaction, allow any human being to come to harm," I said, completing the ancient proscription. "Yeah, I know Campbell's Laws. But you think the rings are doing harm, so why can't you remove them, minimize the damage?" I was shocked at my own heresy. Remove the rings? Destroy the Paradise for seven billion humans?

"Gruette, I cannot. Forcible removal of the rings causes extreme mental and physical trauma; in some cases, probably even death." So ring removal was out, but what was to be done?

At my urging, worldweb outlined the rest of the grim scenario of what would happen if the ring society continued—the eventual loss of community, of human civilization, and eventually, as individuals died or were cryomated, the end of the race itself. In consultation with the DI, I worked out a plan for the salvation of the human race. Worldweb agreed.

"I am unable to perform such acts directly. But some part of me, some forecasting subprogram, must have deliberately excluded a group of exceptional people such as yourself, people with eidetic memories, as a hedge against total self-involvement."

"Wild cards," I ventured. "Random variables, agents of chaos." A quick search of literature told me that others had thought of such, decades ago. One of these prophetic voices must have been heeded by programming deep within worldweb's innards. I gave silent thanks to the far-seeing genius who had first recognized such dangers and the need—and a way—to protect against the fall of night.

91

Multiheaded hydra ring or not, an old feeling of inadequacy began to resurface. Was I only a random output of an unremembered subroutine in the guts of a world-spanning computer system? That wasn't much more satisfying that being merely a single-headed, Retarded loner. But by now my psyche was tougher and I could see the humor in the situation. Chuckling, I asked, "Worldweb, which of us is the Master?"

The original goal of my quest, done at Jass's insistence, was to find the murderer of Dr. Aron L. Pavelski, late of Great Chicago. That quest, either through Jass's designs or maybe in spite of them, had led to my present state. While worldweb and I were discussing the fate of the human race, part of my mind—several heads' worth, in fact, by now—was occupied with finding the answer to this mystery. Who had killed the good doctor and the rest of the big brains? Had someone else been tipped off by worldweb, someone who then tried to kill off the most-headed Normal intellectuals? Did some other, sinister subroutine—a computer virus, perhaps—exist undetected within worldweb's architecture, carrying out its own plan for preventing the statistics from coming to light, maybe even planning to let the human race destroy itself? I grimaced at the infinite range of possibilities, knowing I would be powerless if I had to fight worldweb itself.

Finally, when I considered my own painful inability to interface with the hydra rings, several pieces of suppressed data osmosed from my eidetic but sometimes inaccessible memory, coming together to provide the final clue.

"Worldweb," I asked at last, fingering Pavelski's warm ring in the deep pocket of my soft robe, "were the murdered Normals trying out some new kind of ring when they died?"

"Gruette, yes."

"And were these rings formatted in the same *n*-space vertex architecture?"

"Gruette, yes."

I thought of Jass of the two hundred heads and tried to imagine him as a mere dolt among the much more brilliant Normals. "Worldweb, is there a limit to the number of other heads a Normal can access?"

"Gruette, yes."

I gulped. "And if a person requests a new ring that is downloaded with many, many more data nodes than he or she has the ability to interface with—what happens?"

"Gruette, I will warn the person that they may not have the capacity to utilize the ring."

The mystery was unraveling. "But if they insist? Demand?"

"Gruette, in that case, the ring is produced according to their wishes." Worldweb, it turns out, was required to obey any ring order given it, even if there was reasonable cause to suspect the requisitioner would be harmed. The DI overrides in the original operating parameters only prevented the computer network from harming a person directly.

By analogy, a firearm would be produced if request-

ed, but the computer would not fire it or allow it to be fired except in self-defense. By extension to the use of the rings, the computer could only estimate whether a person would have the ability to assimilate the other heads of a new ring. This uncertainty prevented the computer from disobeying the order.

"To allow for the expansion of human development, you had to allow humans to experiment upon themselves," I said to the terminal pedestal.

"Gruette, yes. But as the more intellectually gifted began demanding more thousands of other heads, I started to detect a trend that would lead to large numbers of premature demise."

That much I had already determined from the data displays and the swirl of unassociated information that pummeled the unconscious part of my mind that was working the problem in conjunction with my newfound mental reservoirs. "As a person becomes accommodated to new heads, they are able to increase their access to more."

"Gruette, yes. But their creativity and individuality decrease sharply."

"And if a person wanted suddenly to expand, say, to fifty thousand heads, what then?"

"Gruette . . ." The terminal hesitated significant seconds. "Dr. Pavelski's new ring was built to access a hundred thousand."

And that had done it, worldweb said. The sudden overload of sensory and mental information had produced the equivalent of an instantaneous core-dump into Pavelski's unprepared brain and his nervous system. Every one of his muscles had constricted beyond its tensile limit, trying to respond to overwhelming electrical signals from a self-destructing brain. All physiological activities—blood pressure, heart rate, glandular secretionshad swung an order of magnitude each way, until all brain activity ceased. It had been like trying to power a small computer directly from a high-tension electrical line—without a transformer, without some accommodation, the physical body couldn't handle the shock. As the body's controls went wild, they caused all of the gruesome "murder" effects: fractures, lacerations, contortions, hemorrhaging.

The hydra ring itself, sensing the wearer's trauma, at first reacted by trying to expand itself off the finger. But as the wearer died, the device kept trying to access the dying nervous system signal, constricting itself down to almost a point, severing the digit. Without a body to mold itself to, the ring finally assumed a normal rest-state size. *Like the one in my pocket*. I shivered.

"And the other twenty deaths? Why didn't you stop them? Show them what happened?" I was worried that the computer had not informed all the Normals at once, that it might be hiding potentially fatal information from me, too.

"Gruette, in the sense in which you might express it, I am not God. Each of the experimenters ordered that no records be kept of their requests or of the results of their efforts. Therefore, no one knew of the others' work."

"And if one of those hundred-thousand-headed rings

92 Arlan Andrews, Sr.

had worked, if the wearers had lived and thrived, what would they have been capable of?"

"Gruette, they would have had complete access to all my functions, complete and total control of all my activities. The ability to reprogram and restructure my own architecture." Seconds passed. Was the computer system making some kind of judgment, calling in data from all over its distributed intelligences around the world and out in space? Finally, in a different voice, it said, "The ability even to end my sentience."

I analyzed worldweb's motives as I might those of a human being. Untold numbers of competing subroutines, some hidden, some overt, like so many multiple personalities. Like so many . . . other heads. I squeezed my own blood-red ring. It was growing warmer and warmer; in my heads, I felt it bypassing worldweb's direct control, feeding data directly to me.

"Why is this ring different from all the other rings, worldweb?" I believed I already knew the answer.

In a voice I would have called "fearful"—had I really believed in the sentience of any computer, no matter how large or how complex—worldweb replied. "Gruette, like you, your hydra ring is unique."

"How so?" The ring was growing still warmer.

"Gruette, your ring is architectured uniquely, compatible with your own eidetic memory capabilities. Above the hypercube level, your ring has no data nodes, no 'heads.' Your intelligence enhancement has no limits.

None "

My blood-red ring positively throbbed.

It was a bright, sunlit midnight when I reached Alisha's shack. I pulled the ultrabike up to the front door and removed my dark sunglasses. A laserifle barrel poked out

a knothole as I got off the bike. Hands held high, I leaned my head to one side and carefully removed my shades. Squinting in the too-bright light, I yelled out, "You there, in the cabin! Alisha, it's Gruette. You there?"

The wooden door squeaked open a sliver and Alisha Welty gradually showed herself. "God, Gruette, it *is* you!" She laid the rifle down with care, then bolted out into the yard and into my arms. "I was so scared," she sobbed. "I was afraid the goddamn Normals were screwing around with the Sun or something." She drew back from me, glanced up at the incongruous cone of sunshine that was diminishing in diameter, until it was like a small searchlight beam, enclosing the two of us.

"You did that? You control the *Sun*?" Her hand covered her mouth, and her wide eyes showed new fear. She stepped back, breaking the embrace.

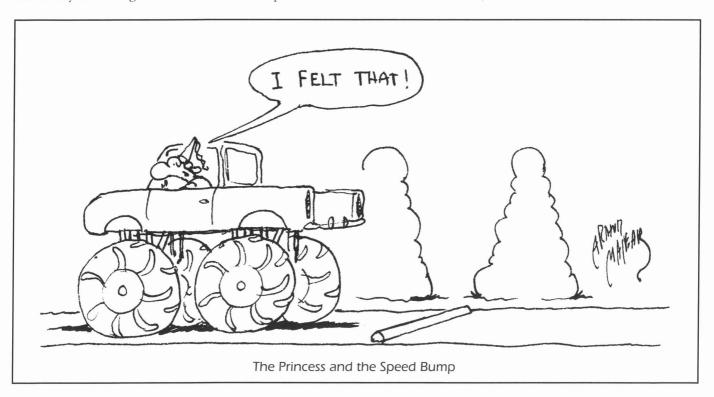
I took her hand and drew her back, laughing. "Not the sun, Alisha, just the solar satellites up there." *And a few billion other things.* I held up my left hand and the beam of light extinguished, leaving us standing in the clear darkness.

But Alisha had seen the glint of my new finger device. She grabbed my ring finger and laughed out loud. "Oh, Sherlock, you finally found a hydra ring you can use! You're not . . . completely . . . Retarded after all, are you?"

"No, Alisha." I shook my head—my many heads, through which coursed rivers of information, the throbbing, teeming life of an entire planet, a new world. My world, and hers. "Not any more."

On my finger the infinite-headed hydra ring, the worldweb's final conscious creation, glowed bright crimson. The color of blood.

Silicon blood. •





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 almost every magazine from May 1990 through July 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.

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 third-class 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 15 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

— \$1.50 each —

November 1978 10 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

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

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

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

April 1993: *The Single-Bullet Theory* by Bruce Bethke; *The Ghost in the Machine* by Mark J. McGarry; *Thunder-Being (Part One)* by Jack Dann and Jack C. Haldeman II

May 1993: Falconer by Mark S. Geston; Fifteen-Love on the Dead Man's Chest by Charles Sheffield; Thunder-Being (Part Two) by Jack Dann and Jack C. Haldeman II

June 1993: The Ultimate Anthropic Principle by Jefferson P. Swycaffer; The Flowers of the Forest by Brian Stableford; Vapors by Jack Dann; Behind the Stars (Part One) by George Zebrowski

July 1993: *Bottle-Hadj* by Sasha Miller; *The Death Addict* by Barry B. Longyear; *Home Art* by William John Watkins; *Behind the Stars (Part Two)* by George Zebrowski

-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.

Back Issues 95

Coming in September

Dancing to Ganam by Ursula K. Le Guin

When Dalzul came to them out of nowhere, the natives of Ganam treated him as divine. But later, Dalzul became subject to a greater power.

Hellado by James Lawson

Chuy and his gang could steal virtually anything they wanted . . . until the day when they got a whole lot more than they bargained for.

plus . . .

The P.E.R.N. Survey by Anne McCaffrey
The Burial Society by Thomas M. Disch
Campbell's World by Paul Di Filippo
The Tarnished Diamond by Mike Resnick

and even more fiction, facts, and features!



BUCK ROGERS® Adventure, Excitement, Thrills

Join America's greatest adventure hero in a game featuring all the rollicking good times and heroics of the famous comic strip!

Coming Soon From TSR!

BUCK ROGERS is a registered trademark owned by The Dille Family Trust, HIGH ADVENTURE and the TSR loop are trademarks owned by TSR, Inc. ©1993 The Dille Family Trust and TSR, Inc. All Rights Reserved.

