192 PAGES

ISAAC ASIMOV'S

MID-DECEMBER 1985
$2.00 U.S. / $2.25 CAN.

SCIENCE · FICTION · MAGAZINE

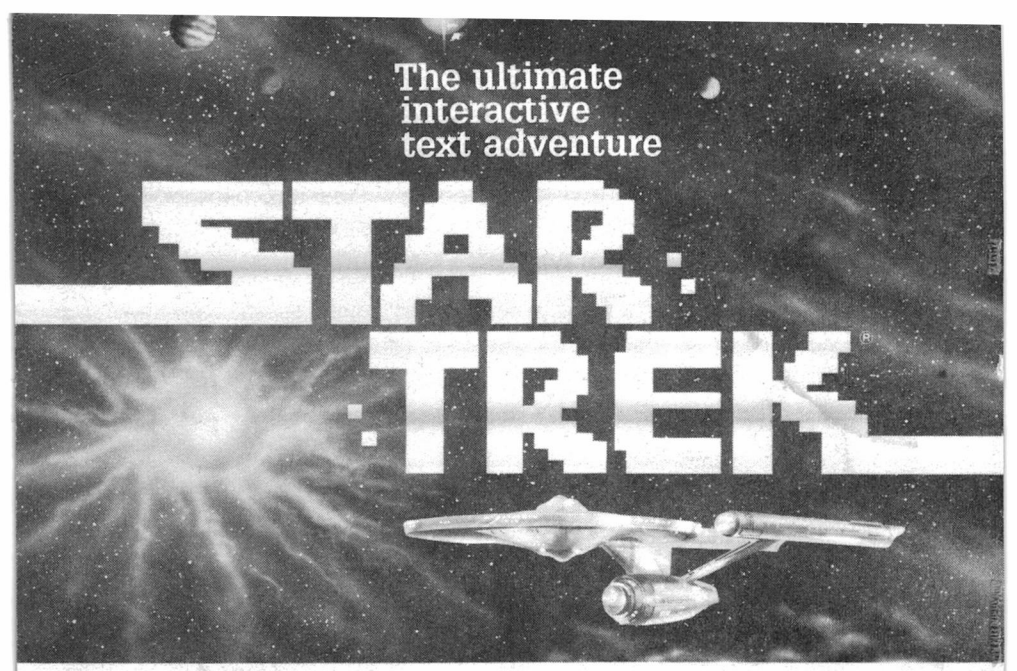
RUDY RUCKER AND BRUCE STERLING STORMING THE COSMOS

JAMES TIPTREE JR.

IAN WATSON

GARDNER DOZOIS AND SUSAN CASPER

0 02648 55
387167



THE KOBAYASHI ALTERNATIVE

Software for you, your Apple, IBM, and Commodore 64.

The Kobayashi Alternative is the first Star Trek® text adventure program. It tests your powers of observation, evaluation, and multi-level "synthesis"–not to mention sheer endurance, empathy and sense of humor. Now you are Capt. James T. Kirk and all of the resources and crew members of the Enterprise are there for you as you confront aliens and battle the Klingons in search of answers to this mystery of mysteries.

AVAILABLE FOR:

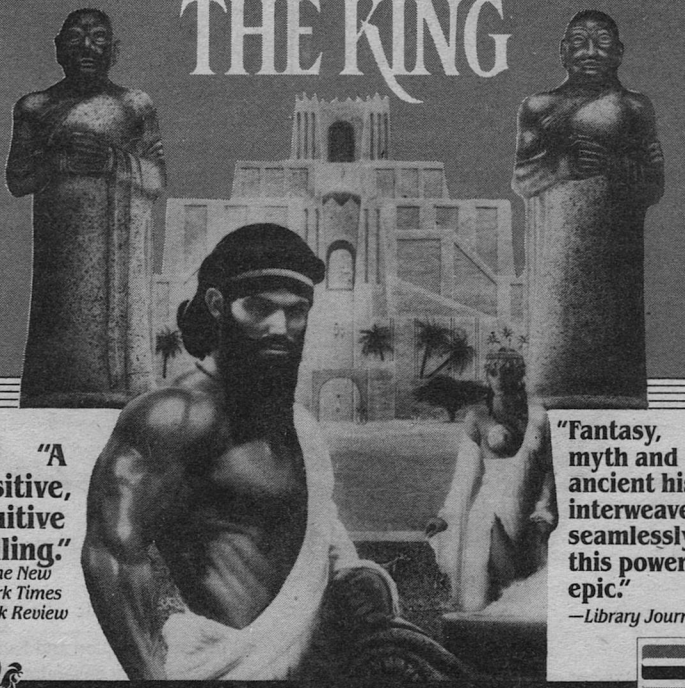
Apple, IBM, and Commodore 64
at your local computer/software retailer or bookstore.

Simon&Schuster
COMPUTER SOFTWARE
1230 Avenue of the Americas New York, NY 10020

THE FABULOUS EPIC OF A MAN WHO BECAME A GOD.
BY THE BESTSELLING AUTHOR OF *VALENTINE PONTIFEX.*

ROBERT SILVERBERG

GILGAMESH THE KING



"A sensitive, intuitive retelling."
—The New York Times Book Review

"Fantasy, myth and ancient history interweave seamlessly in this powerful epic."
—Library Journal

NOW AVAILABLE IN PAPERBACK

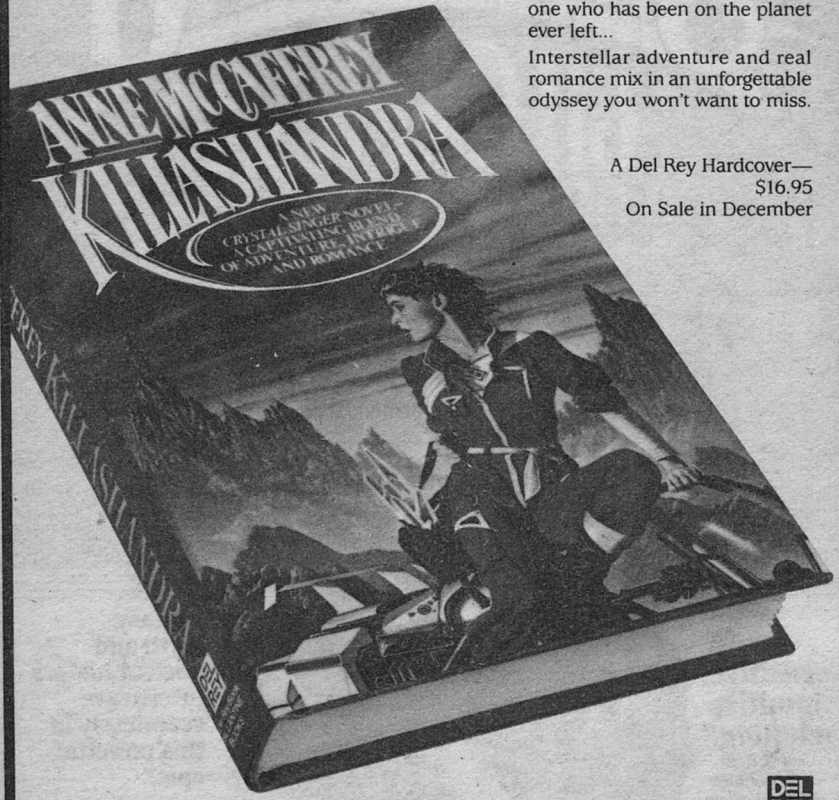
A BANTAM SPECTRA BOOK

The exciting *new* adventure from the bestselling author of *Moreta*!

In the superb sequel to her bestselling *Crystal Singer*, Anne McCaffrey hits another high note.

A year after she fled to the planet of Ballybran, Killashandra Ree accepted a mission to the closed world of Opthera. Her mission was to investigate why no one who has been on the planet ever left...

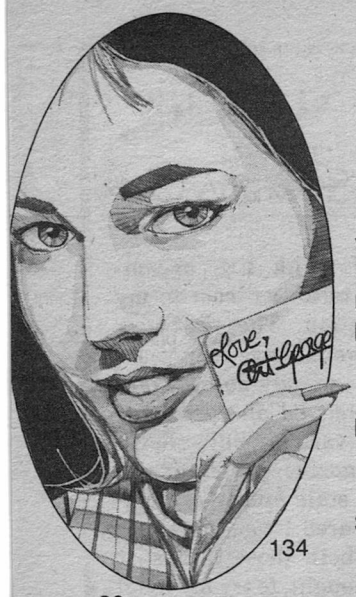
Interstellar adventure and real romance mix in an unforgettable odyssey you won't want to miss.



A Del Rey Hardcover—
$16.95
On Sale in December

DEL REY

#1 in Science Fiction and Fantasy
Published by Ballantine Books



134

80

126

ISAAC ASIMOV'S SCIENCE FICTION MAGAZINE

Vol. 9 No. 13 (whole no. 99)
Mid-December 1985
Next issue on sale
December 17, 1985

Novella

Novelettes

Short Stories

Departments

Poems by Robert Frazier and J.J. Hunt

Cover art for "Storming the Cosmos" by J.K. Potter

Published 13 times a year by Davis Publications, Inc. at $2.00 per copy ($2.25 per copy in Canada). Annual subscription of thirteen issues $19.50 in the United States and U.S. possessions. In all other countries $24.20, payable in advance in U.S. funds. Address for subscriptions and all other correspondence about them, P.O. Box 1933, Marion, OH 43305. **If you have questions regarding your subscription call (614) 383-3141.** Address for all editorial matters: Davis Publications, Inc., 380 Lexington Avenue, NY, NY 10017. Isaac Asimov's Science Fiction Magazine® is the registered trademark of Davis Publications, Inc. Second class postage paid at New York, NY, and at additional mailing offices. Canadian third class postage paid at Windsor, Ontario. POSTMASTER, send form 3579 to IAsfm, Box 1933, Marion OH 43306. In Canada return to 625 Monmouth Rd., Windsor, Ontario N8Y3L1. ISSN 0162-2188.

UP FRONT

by Shawna McCarthy

It's been a long time since I've appeared in this space, since as you may recall, I promised you when I took over the editorship that I wouldn't waste the magazine's space merely to be chatty. I promised to bother you with only important matters, and so far, I've kept that promise. Thus, listen up, guys, *this is important.*

As of next issue I will no longer be the editor of this magazine. No, I haven't been fired, and I'm not running off to the South Seas. I'm leaving to become Senior Editor of Bantam Books' Spectra science fiction line.

You may wonder why I've done this. Here at the magazine I got to—not to mince words—impose my personal style and philosophy on the magazine and shape it as an entity. One doesn't get that same sort of personal satisfaction out of editing novels. How many of you, for instance, have ever said, "Oh, a ——— book. (Fill in the book publisher of your choice.) I really like their editor's taste—I think I'll buy it." Not very many, I'll wager. So, why the change? Quite frankly, I felt that my job with *IAsfm* had been done. I set out to change the magazine in rather a radical fashion, yet still make it enjoyable and acessable. I think I've accomplished that task—as least to my own satisfaction. The next few years, then, would have been years of repetition—merely doing again and again what I'd already done. This would invariably have shown up in the magazine. No editor can afford to get stale and/or complacent, and I feared I was in danger of becoming both those things. It was time, I thought, to try my hand at something new.

I will miss the magazine desperately, of course—I *have* spent seven happy and fruitful years here. In a very real way, this magazine is my baby, my love, and I don't ever want anything bad to happen to it. To this end, I have helped Isaac and Joel Davis in their selection of a new editor. I nominated the well-known writer, editor, and anthologist Gardner Dozois for the position. Many of you know Gardner's work quite well. In 1984 he won the Nebula award for Best Short Story for "The Peacemaker," published right here in these pages. This year he repeated that feat by taking the same award for a short story, "Morning Child," which appeared in *Omni*. Those of you un-

(continued on page 124)

EDITORIAL
IRRITATIONS

by Isaac Asimov

Back in the December 1983 issue, just two years ago, my editorial entitled "Autographs" appeared. In it, I explained how anyone who wants an autograph can make life a little easier for an aging, hard-working writer.

On the whole, the effect was good. To be sure, the number of people writing for autographs increased markedly, since a number of readers who had never thought of asking me for an autograph were inspired to do so by the editorial. (This made the beauteous but heartless Shawna laugh, for she had predicted that would happen.) However, almost all the new autograph-seekers sent along specific objects for me to sign and (as I had gently suggested) included a stamped, self-addressed envelope. After all, if I just sign what they send me, stick it into the envelope, lick it, seal it, and put it on the pile to mail, that's really very little trouble, and I don't mind at all.

It is time, then, for me to get a few more irritations off my chest in the hope that it will help ease my life in other ways. Even if it doesn't, I know I will feel better for having aired the matter, for if I go about with my bosom surcharged with repressed annoyance over little things, it tends to make me snap at my loved ones whose soft eyes then fill with unshed tears, and I don't want to do that.

What currently annoys me the most is what is going on in grade schools the country over. There are, apparently, teachers of sixth-grade students who, in their anxiety to stimulate the kids into reading worthwhile material, come up with what seems to each to be a novel idea. What they actually say, I don't know, but in my fevered and over-stimulated imagination, this is what I hear them say:

"Now, children, I want each one of you to choose something you've read that you liked. Write down the name of the author and I will get his address out of 'Who's Who.' I then want each of you to write a nice letter to that author. Tell him the name of the story you read and how you liked it. Then ask him some questions about his writing, and ask him please to answer your letter because it is a school assignment."

One of the kids is bound to raise his hand at this point and say,

ISAAC ASIMOV:
Editorial Director
SHAWNA McCARTHY:
Editor
SHEILA WILLIAMS:
Managing Editor
TINA LEE:
Editorial Assistant
WILLIAM F. BATTISTA:
Associate Publisher
RALPH RUBINO:
Corporate Art Director
GERRY HAWKINS:
Associate Art Director
TERRI CZECZKO:
Art Editor
MARIANNE WELDON:
Associate Designer
CARL BARTEE:
Director of Manufacturing
CAROLE DIXON:
Production Manager
LAUREN C. COUNCIL:
Production Assistant
CYNTHIA MANSON:
Director Subsidiary Rights
MARY ANN GOLDSTONE:
Permissions & Contracts Manager
LOUISE MUGAR:
Circulation Director Retail Marketing
PRISCILLA GARSTON:
Circulation Director Subscriptions
JAMIE FILLON:
Advertising Manager
IRENE BOZOKI:
Classified Advertising Manager

ADVERTISING OFFICES
NEW YORK
(212) 557-9100

JOEL DAVIS
President and Publisher

LEONARD F. PINTO
Vice President
&
General Manager

PAULA COLLINS
Vice President
Circulation

FRED EDINGER
Vice President
Finance

Please do not send us your manuscript until you've gotten a copy of our manuscript guidelines. To obtain this, send us a self-addressed, stamped business-size envelope (what stationery stores call a number 10 envelope), and a note requesting this information. Please write "manuscript guidelines" on the bottom left-hand corner of the outside envelope. The address for this and for all editorial correspondence is *IAsfm*, Davis Publications, Inc. 380 Lexington Avenue, NY, NY 10017. While we're always looking for new writers, please, in the interest of time-saving, find out what we're looking for, and how to prepare it, before submitting your story.

"Miss Schnellenhammer, what kind of questions are we supposed to ask?"

The teacher says, "Well, why don't you ask him how he got started writing, and if he likes writing, and what made him write whatever story or book you mentioned, and if he is writing another book, and things like that."

The teacher then sits back and thinks what a marvelous idea she has dreamed up, for everyone knows that writers have practically nothing to do and would welcome the chance to take a break from the boredom of just sitting around all day long by answering questions about how they started writing and so on. Not only do the kids get to do a little homework, but the writers get to do a little homework, too. What fun!

Most of the kids, perhaps, write to the estates of Franz Kafka and James Joyce, but some do write to me.

The letters all sound the same. This is a very typical (imaginary) example:

"Dear Mr. Azminav, I am a sixth grade student at P.S. 1728 of Rock River, Rhode Island, and I am doing this for a class assignment. I have read a book of yours about Lucky Starr and I liked his name very much. I would like to ask you how you got to think of the name Lucky Starr. How did you start writing about Lucky Starr and why are there two r's in the last name? Did his parents really name him Lucky? Are you writing another


ONE.
UNKNOWN
AUG. 1939
20¢
THE GHOUL
by
L. Ron Hubbard
SCIENCE FICTION
MICROBOOKS (See page 11)

book about Lucky Starr? Is his name going to be on the new book, too? Could you send me something about your life and please answer right away as Miss Schnellenhammer is in a hurry." (signed) Jeremy Indecipherable.

It is clear to me that all the kid read was the word Lucky Starr in the title of the book, and with great ingenuity made a school assignment out of that. Pleased with his cleverness (and remembering some episodes in my own grade-school career in which I successfully met the requirements of a school assignment with a minimum of real work) I answered the letter as best I could.

Along about the 722nd letter of this sort, however, I grew tired of sweating away at all those school assignments even though it was now well over a half century since I got out of grade school, and I let myself be goaded into the following answer.

"Dear Jeremy, Thank you very much for your nice letter. If you will ask Miss Schnellenhammer to write me a letter telling me how she got started in teaching, and how she likes teaching, and if she expects to continue teaching next year, and all about her life, I will then answer your questions."

I did not expect an answer, but, rather to my surprise, I got one. Miss Schnellenhammer wrote me two pages telling me how many siblings she had and how much she weighed and a few other intimate facts and asking me what was so hard about answering in that fashion.

My conscience hurt me and I was considering a letter of apology when I got a second letter from the head of the library of the school. Miss Schnellenhammer must have showed the correspondence to the library head—clearly an older and more muscular specimen and she must have said (if my imagination is to be trusted):

"Why, that unmitigated brute. Why did you write such a milk and water letter to him? Here, now, you leave it to me. I will take the hide off him."

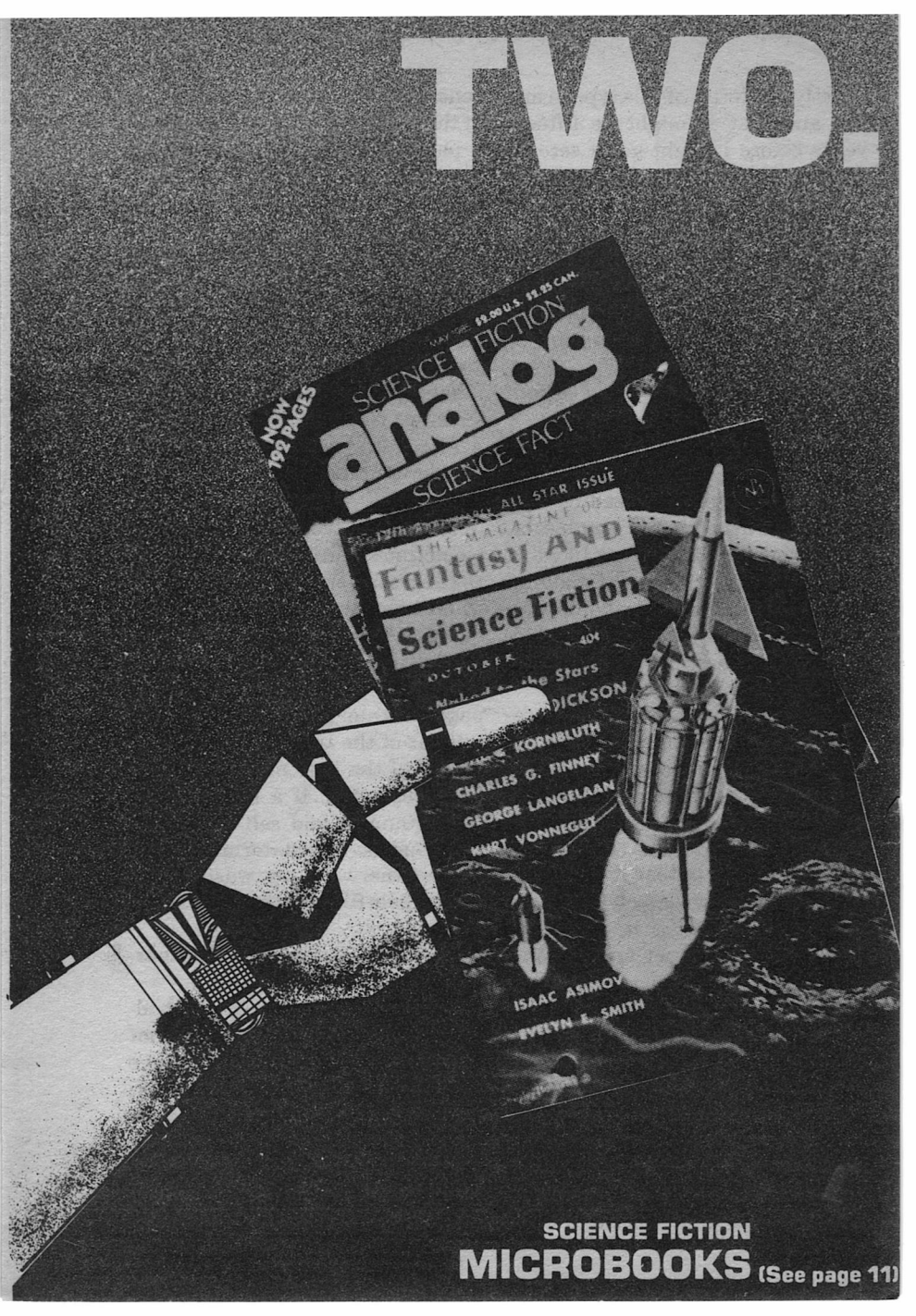
And she promptly wrote me a letter telling me how far I had fallen in the esteem of all right-thinking people and how some of the gloss had been rubbed off me because of my treatment of hard-working students who read and loved my books and wrote to me with such hope in their hearts and were so bitterly disappointed at my unfeeling answer.

I took all these blows with philosophical stolidity and then came her concluding remark which went something like this: "If ever you should be in this position again, I hope you will behave more decently."

If *ever* I should be in this position *again*???

That was too much. I sent off a letter which was undoubtedly the most plain-spoken she ever got in her life from an infuriated and supremely articulate person.

Did she honestly think that I got


TWO.
NOW 192 PAGES
SCIENCE FICTION
analog
SCIENCE FACT
ALL STAR ISSUE
THE MAGAZINE OF
Fantasy AND
Science Fiction
OCTOBER
40¢
Marked for the Stars
DICKSON
KORNBLUTH
CHARLES G. FINNEY
GEORGE LANGELAAN
KURT VONNEGUT
ISAAC ASIMOV
EVELYN E. SMITH
SCIENCE FICTION
MICROBOOKS
(See page 11)

exactly one letter of this type in my life and that it might be fifteen years before I might get a second one? I let her know that I received no batch of mail without at least one letter of this type in it, and it was by no means an unusual week in which I received as many as twenty, all asking the same tedious questions, and all demanding a quick answer.

So let me make my position clear.

I get many letters from enthusiastic youngsters who have read some of my stuff and liked it, and who have gone to the trouble of writing me to tell me they liked it (giving clear evidence of having actually read it), and who do not hesitate to point out flaws, and who then ask me questions out of honest interest and curiosity.

I answer *all* such letters, if there is a return address I can read, and I answer the questions, too.

However, any letter that starts "I am a sixth-grade student and my teacher has asked me to write to you—" I intend to tear it to pieces and toss into the waste-basket.

And, while I'm at it, here are other letters that get unceremoniously dumped—

Once long ago, I got a letter pleading with me to send a manuscript, or a signed book, or an unneeded article of clothing or anything personal to the undersigned. It would be used in a "celebrity auction" to be raffled off for money for some useful and worthy cause. I signed a paperback and sent it off. Then I got another letter of the same sort and again I signed a paperback and sent it off. With time, I realized that there were fifty celebrity auctions being carried on in various parts of these United States every single day, and that they all used the same computerized sucker-list and that my name was on it. They would clearly consume every paperback I have and I would have to start sending off all my old socks. So now every letter bearing the magic words "celebrity auction" gets thrown out.

This is also true of all letters and (sometimes) bulky packages containing someone's solutions to all so-far unanswered problems in science, detailed demonstrations of the invalidity of Einstein's theories, careful proofs—pages and pages of it—of Fermat's Last Theorem, or of the trisection of the angle, or of the true meaning of the Great Pyramid. If a return envelope, stamped and self-addressed, is included, the material is sent back. Otherwise, my waste-paper basket gets filled to the brim at one stroke.

If all this makes me sound curmudgeonly, consider—

My writing and speaking schedule is enormous and surely that should come first. The time I have left is short, and growing shorter, and I don't want to use it on grade-school assignments and on useless correspondence. Shouldn't I spend my time on my work, instead?

What do you think? ●

LETTERS

Dear Sir/Madam;

You are either a very shrewd editor or little green men in raincoats create for you grammatic coincidence. As a trial lawyer I am always suspicious of too much coincidence.

At least you did not put the candid article on "The Little Tin God of Characterization" by the Good Doctor in juxtaposition to the remarkable pure science fiction *character* story "The Woman who saved the World."

Beautiful! It turned an excellent edition into a great one.

Naturally, I cannot say I wildly enjoyed every article in the edition but then I am not every person–only one person.

Many thanks for continuing to bring me one of my bright spots in the month.

Ed J. Brogden
Sarnia, Ontario,
Canada

I assure you that there was no intent or malice aforethought in this case. I plead not guilty.

—Isaac Asimov

Dear Dr. Asimov:

I have been a science fiction/fantasy reader for 57 years (since I was 10) and still enjoy this type of fiction. I have read all of the leading magazines published during this period and a lot of paperbacks and hardbacks. I currently subscribe to *IAsfm* and two other SF/F magazines and *Omni.*

With reference to your editorial in the April 1985 issue of *IAsfm,* I deplore the current use of vulgarisms and graphic description of sex in science fiction and fantasy stories. Most of the time these are not essential to the plot or for the sake of characterization. A notable exception is Philip José Farmer's story "Mother." In one book I read recently the author thought it was necessary to tell that the heroine relieved herself after arising from sleep. So what? Consider how boring it would be if all the great literature of the past contained full descriptions of all of the bodily functions of each character. It just isn't needed for the sake of realism.

Perhaps this too shall pass away, like the use of dialect in literature. At the time this was realism, but it becomes tiresome in large doses. Sincerely,

Edward C. Johnson
La Jolla, CA

It all depends on what use you make of the intimate detail. In my novel The Robots of Dawn, *I think I mention each time that my hero*

used the facilities. I did it, however, to bring out what I thought were interesting points about the strange society in which he was immersed.

—Isaac Asimov

Dear Dr. A,

Normally your non-fiction essays are well thought out, but your May Viewpoint, "The Little Tin God of Characterization," marks a misunderstanding of the elements of fiction.

Now, you're obviously doing something right; witness the scores of popular short stories and novels from your pen/typewriter/word processor. But like a rock star who plays by ear and scorns the musical theories of classical composers, you put down "characterization" and praise "ideas" without fully realizing their equal importance.

What are "ideas" except "plot" or "conflict"? And how are "plot" or "conflict" expressed except through the actions and words of the characters? If the characters aren't at least believably human, then no one will believe what they say or what they do. People don't read science fiction just for "ideas." If they did, they'd skip the crummy fiction part (especially the watered down versions of real scientific theories and philosophies) and read non-fiction exclusively.

(Incidentally, I'm certain you don't think all science fiction stories must be set against a future society background. Many excellent science fiction stories show contemporary people coming in conflict with an alien or scientific influence.)

You rightly cite Heinlein as one of (if not THE) greatest influences in science fiction, yet what is Heinlein really remembered for? His characters, of course! Lazarus Long, Rhysling, Wyoming Knott, Friday, Waldo, Podkayne, Thorby, Valentine Michael Smith, these are but a mere handful of the dozens — perhaps hundreds!—of vivid, distinct characters he created. Heinlein was the first major science fiction writer to consistently create believable, human characters.

(And what of his "ideas?" I challenge you to find an original one in the lot—which is not to say he doesn't wring some interesting variations out of them. But what is "Lifeline" but an updated version of Lord Dunsany's "The Jest of Hahalabra?")

One of the prize possessions in my library is a 1928 issue of Gernsback's *Amazing Stories*. It's prized only for historical value; the stories in it are typical of the worst of early science fiction. One "story" has a scientist lecturing for a dozen pages then throwing the switch to prove his theory is correct. Another featured three virtually identical characters who fly to Venus, battle dinosaurs, then come home. A third and fourth offered characterization only in the form of racial stereotypes. The remaining stories completely slip my mind.

Compare these with your first published story, "Marooned Off Vesta." You had an idea, an idea that was expressed through conflict, a conflict that resulted from the interaction of the characters in the story.

Granted, your characters were no Prince Hamlets or Huck Finns, but they at least had distinctive

personalities (something example number two above lacked) and through these personalities your central idea/plot/conflict was portrayed (something example number one above lacked).

While it's true you are not noted for your characterization, the fact is you are better at characterization than 90 percent of your contemporaries (which ain't saying much for science fiction). This, like it or not, is one of the main reasons of your success.

Yours,

Buzz Dixon
Northridge, CA

Honest, I put in all the characterization I can. All I say is if my total ideas and total characterization can't squeeze into the bounds of the story, I'd rather trim the latter a bit than the former. If I can get it all in, fine! I have no objections.

—Isaac Asimov

Dear Dr. Asimov:

In response, or, perhaps, in addition, to your remarks in the May Editorial entitled "Moonshine," in which you discussed the effect of the phases of the moon on human behavior:

You concluded the article by questioning the causal connection of the moon's phases to human behavior. Rather, you stated, "[t]here must be a fourteen-day rise and fall in hormone production, or hormone balance; or such a rise and fall in the activity of our immune system, or our cerebral drug receptors, or various aspects of our neurochemistry."

Not being of the same gender as yourself, I cannot speak from personal experience of male hormone production, immune systems, or neurochemistry. However, you might ask the women of your acquaintance about the relation of the cycles of the moon, hormone production, and human behavior. I believe even the term "menstrual cycle" is derived from the Latin word for "monthly."

Is it too incredible to contemplate that all human behavior fluctuates on a monthly cycle because 51 percent of all human behavior does? Or, at least, 51 percent of some human behavior?

Very truly yours,

Lynn G. Goldman
Chevy Chase, MD

The 28-day menstrual cycle has no connection with the Moon. In the first place, it is not 28-days; different women have cycles of slightly different length. Again, many women are irregular. And even among those women who have regular 28-day cycles, ovulation can come at any phase of the Moon, or in-between for any particular person. The fact that the Moon's revolution and the menstrual cycle have more or less the same length is strictly a matter of coincidence.

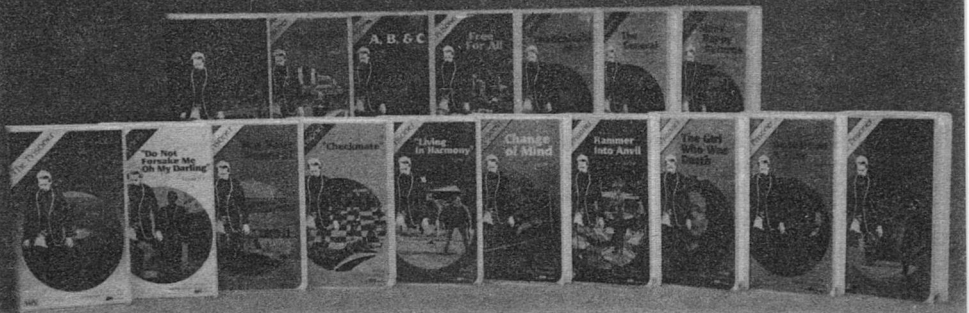
—Isaac Asimov

Dear Dr. Asmiov:

When you said your definition of science fiction was broad, you weren't kidding!

In June's *IAsfm*, "Tunicate, Tunicate, Wilt Thou Be Mine" brought a crazed Indiana Jones to mind. The fact that Master Tunicate came from space was the only dash of SF

The Prisoner
on video cassette



The Prisoner series is now available on video cassette. Hailed as the greatest science fiction/adventure series ever produced for television, **The Prisoner** series can be purchased individually or as an entire series. Each episode comes with collectible packaging and is reasonably priced at $39.95 per episode.

If you want to order the entire 17 episodes, you can receive a 10% discount.

#1 Arrival
#2 Chimes of Big Ben
#3 A, B, & C
#4 Free For All
#5 Schizoid Man
#6 The General
#7 Many Happy Returns
#8 Dance of the Dead
#9 Do Not Forsake Me Oh My Darling
#10 It's Your Funeral
#11 Check Mate
#12 Living in Harmony
#13 Change of Mind
#14 Hammer Into Anvil
#15 The Girl Who Was Death
#16 Once Upon A Time
#17 Fall Out

Enter the nightmarish world of **The Prisoner.**

Please Specify VHS *or* BETA

To order your Prisoner episodes send check or money order (no cash) to:

Promotions Plus
P.O. Box 151
Dept. P-1
Tinley Park, IL 60477

No. of Episodes Qty. _____

Total Amount Qty. x $39.95 $ _____

Postage & Handling
$3 first tape
$1.50 ea. additional tape
$ _____

Total Cost $ _____

Name _____

Address _____

City _____ State _____ Zip _____

If you order all 17 episodes, deduct 10% from the retail price of $39.95 per episode (total price $611.24).

Allow 3 to 4 weeks for delivery.

in the entire story. It would have been nice to at least know what the Tunicates did for a living.

"The Price" belongs somewhere in the Twilight Zone. This is voodoo, folks (at least as far as I can tell), not SF. And if you consider this fantasy—I give up.

Then of course there was "The Thunder of the Captains." A gypsy god-horse warning of death? While searching for the SF in this story I most likely missed its point. I'll just have to re-read it with the supernatural in mind. A gypsy god-horse warning of death? In an SF magazine?

Okay, so your definition of SF is broad, and you believe a good story should be published (and I won't deny the above stories were good —just out of place). But with all the stretches of SF definitions that have been published lately, I'd rather read a mediocre story about little green men in flying saucers than rip my hair out in frustration over the type of stories in your June *IAsfm*.

Is it really that tough to find well written science fiction that doesn't stretch any definitions?

Sincerely,

Diana Gramer
Colorado Springs, CO

It is *tough to find well-written science fiction that is bound by a narrow definition,* any *narrow definition. It is even tougher, much tougher to turn down a good story that stretches the definition. Good stories are not that easy to come by and letting them get away can do serious damage to an editor's internal workings.*

—Isaac Asimov

Dear Dr. Asimov,

The May, 1985 issue of *Omni* in the ARTS section, in referring to how people handle future language changes, states that you in the Foundation Series handled change by ignoring it. Somehow the writer leaves the impression that it is a cop out to do this. You may or may not feel put out by this assumption and if you want a rebuttal which you may not have thought of, I submit the following:

Stories are generally written in a language understandable by the expected reader. *One Thousand and one Nights, Sohrab and Rustum, Aesop's Fables,* the *Bible, The Way,* the *Book of the Dead, Don Quixote, Beowulf,* the *Upanshads, El Cid,* even *Hansel and Gretel* had to be translated into English before being enjoyed by English speakers. And Shakespeare, *Huckleberry Finn, 20 Years Before the mast, Innocents Abroad,* the US Declaration of Independence, and *Pilgrim's Progress* had to be translated to many languages other than the original. The same is true for stories of the future. A Centaurian or Lunite is not going to be aware of oddities in HIS language. He may wonder about those cretins from South Pole Saturn but not about his own language. So you have simply translated Foundation language into something your readers can understand!

Jim Weddington
Tustin, CA

As a matter of fact, I am always discussing the fact that there are different dialects among my population, but there's usually no point in presenting them. In a historical

novel would you have Julius Caesar speaking with an Italian accent, and D'Artagnan looking like a comic Frenchman? When I absolutely have to, I present an accent as I did in some of the Foundation novels, and this doesn't please everybody either.

—Isaac Asimov

Dear Isaac:

I read with interest your editorial "Moonshine" in the May 1985 issue of *IAsfm*. Being a scientist myself, I too would like a rational explanation for this phenomenon of strange behavior at the time of the full moon. You may be interested to know that I have come across one.

This past year I taught the descriptive physics course at California State University, Hayward, using *Conceptual Physics* by Paul G. Hewitt of the City College of San Francisco as a text. He suggests that the aberrant behavior of some individuals during the full moon might arise, not from the ocean tides, but from tides in the atmosphere. As with the ocean tides, the atmospheric tides exhibit their greatest fluctuation in level both at this time and at the time of the new moon. At low tide when the atmosphere is at its thinnest, more cosmic radiation will penetrate into the lower reaches of the atmosphere and alter the ionic composition of the air we breathe. Perhaps this increased ionization of the air has an effect on animal biochemistry. Being a physicist, I can't comment on this last part of the hypothesis. Perhaps you know a competent biochemist who can.

James T. MacMullen

Yes, but atmospheric pressure varies erratically, too, with fair-weather highs and stormy lows, and I have an idea that these changes swamp the regular changes that come about through atmospheric tides. I'd like to see someone try to correlate hormonal flow and other physiological measurements with barometric pressure. That might be more important than phases of the Moon.

—Isaac Asimov

Dear *IAsfm* Viewpoint Poll,

Norman Spinrad explained the characterization vs. idea problem in SF so well that further comments seem superfluous, but since you are holding a poll on the matter anyway, I will contribute my thoughts.

In any well written work of SF, the conceptual premises (or ideas) blend seamlessly with the characterization. The characters could not be who and what they are if they were not in that particular situation resulting from those premises, and the premises could not be developed into a meaningful story that reveals and elucidates their true implications and consequences, if we did not have those characters who are put into that situation and then have to deal with it in their own way—dealing with it not on an abstract or academic level (in the way that an essay discusses an idea) but actually living with it, bringing to bear all their individual strengths and weakness, their wisdom and folly, their generosity or selfishness, whatever is in them that makes them the unique individuals they

are, illuminating thereby both the central concept(s) of the story and also the famous human condition in all its nobility and tragedy. So closely intertwined and blended are the processes of idea and characterization in SF that they can never really be separated; they work together to make SF what it is. Even when (as is often the case) the characterization seems to be very briefly sketched in while the author devotes primary attention to ideas, that light characterization is still absolutely essential to the writing and must be done all the more deftly for its brevity; without it the story does not live, and reverts to being an essay instead.

Characterization covers a very wide range of possibilities. Characters can be endowed with huge, astonishing supplies of intelligence, or stupidity; malice or altruism, and so forth; being either superlative heroes or despicable villains; they can also be very ordinary people. They can deal forthrightly with the problems they face or can flounder in a morass of confusion. None of these approaches or the many other possible approaches constitutes necessarily good or bad characterization. Any of these will work if they are used to create real individuals. Essentially the portrait must be done in such a way that the reader can believe that such a being could exist and behave in the manner shown. And if this then leads to an interesting story, the author has succeeded.

After that point, any complaints that some character is too similar to other characters found elsewhere in SF, or is too heroic, insufficiently introverted, etc., are misguided criticisms. Arbitrary standards of characterization are useless and foolish. One need only ask, does the character live?

Anyway, your question (which I have been slow in getting around to) is whether I as a reader am more concerned with ideas or characterization in the fiction that I read. It's a trick question. Without at least adequate treatment in both departments, the fiction fails. And thinking back on the SF I have read, I fondly remember both the ideas and the characters. I can't choose between them.

Sincerely,

David Palter
1840 Garfield Pl.,#201
Hollywood, CA 90028

I needled a number of readers into thinking about the subject, which is good. Obviously, we can't print all the letters, but it seems to me as the letters come in that characterization has the better of it though many readers insist I'm not bad at it (as Spinrad did). Okay, I feel a lot better now.

—Isaac Asimov

Dear Good Doctor and Shawna,

On and off I have noticed that the letters-to-the-editor column, or rather those who write letters and subsequently have them printed in the letters-to-the-editor column, have oft-times expressed the wish and/or desire to see some sort of reference book for science fiction writers, and those who would be writers. I, for one, think that it would be an excellent idea, al-

SIX CENTURIES AFTER THE LAST WAR,
THE BATTLE FOR AMERICA HAS JUST BEGUN...

PAUL COOK

DUENDE MEADOW

A haunting, prophetic vision of the future by the author of THE ALEJANDRA VARIATIONS.

A BANTAM SPECTRA BOOK

though an admittedly hard one to carry out. As a writer who sticks with mostly nonfiction, I am seriously considering compiling the information for just such a book, and would like to hear from readers who would consider owning such a book, and what they think the book should include and/or exclude. This would give me a good idea as to whether there really is sufficient interest to warrant the effort it would take to write such a book, and if so, what should be in it to best serve the needs of those who would be using it.

I realize, obviously, that not everything a writer of science fiction could use could possibly be included, but it's my belief that coverage of major ideas and areas of science and technology *is* possible, along with a long list of selected sources for further, in-depth coverage of the subjects included in the book. What do you think?

Sincerely,

Vince O'Connor
4300 63rd Ave. N.
Brooklyn Center, MN 55429

P.S. Keep up the good work. *Asimov*'s is my *favorite* science fiction magazine!

Might I quietly suggest that one way of learning what one has to do is to read the collected (non-fiction) works of Isaac Asimov?

—Isaac Asimov

Dear Dr. Asimov,

I have just finished reading your Viewpoint in the May 1985 issue. BRAVO! This is something that needs saying. The emphasis of science fiction on ideas is something that we often tend to forget. This is especially true when we do read one of those writers who is able to successfully use other literary techniques in support of his or her ideas. We attribute their success, not to the idea, but to their characterization, some horrible new monster, a fancy machine, etc. Let us hope that all who will attempt writing science fiction (self included), will benefit from this Viewpoint.

Sincerely,

Michael E. Eckardt
11401B Thunderbrush Circle
Anchorage, AK 99516

I'm afraid you and I are possibly in the minority (at least among those who've troubled to write) but that doesn't bother me and I hope it doesn't bother you.

—Isaac Asimov

Dear Dr. Asimov:

I meant to write some time ago, registering my protest to Saundra Landis's criticism of your work, but I put it off on the assumption that you already know how good you are. After reading your May viewpoint on characterization, though, I'm not so sure. You give yourself too little credit! Your characters may be more cerebral than the typical Conan clone, but that doesn't make them any less memorable to those of us more interested in brains than brawn. Oftentimes, the use of the "ordinary Joe" type you do so well is far more effective for us (hopefully) normal people who wonder what it would be like to live in a galactic empire or on another planet. I can't believe that Ms.

Landis *really* imagines that the Foundation Trilogy would be unmarketable today. Down south, at least, us fans are starving for hard science fiction books.

You guessed it: all this is leading up to a plea for a fifth Foundation. Everyone I know lives in fear that a meteorite or something will fall on you before you get around to it.

As long as I'm writing, I should tell you the magazine has been wonderful lately. April was especially good, with two absolutely incredible stories side by side, Effinger's "The Beast From One-Quarter Fathom" and Jablokov's "Beneath the Shadow of Her Smile." I can't wait to see what the mysterious Mr. Jablokov comes up with next. And Michael Swanwick and Lucius Shepard just keep getting better . . .

Sincerely,

Elaine Radford
New Orleans, LA

I'm working on a fifth Foundation novel. Wish me luck.

—Isaac Asimov

Dear Sirs:

In your May 1985, issue, you published a story by Scott Russell Sanders called "The Tree of Dreams," which would have been better titled "How to Ruin an Interesting Idea by Overwriting," and which, as you may have guessed by now, I did not enjoy. Much. On the other hand, or perhaps on the other page, we find "Dinner in Audoghast," by Bruce Sterling, an arresting piece which I found myself reading three times in succession.

In the May Viewpoint, according to Asimov, characterization is juxtaposed with idea. The author declares himself quite willing to sacrifice the former for the latter, but he is being, if one may criticize Dr. A at all, inaccurate. In the first place, it is not idea that is often neglected for rich characterization, it is plot. More importantly, however, as is evident even in the works of the good Doctor himself, plot and idea alone cannot produce a good read. Characterization is a fine addition, but the single most important element of style is *confidence*. Nowhere is this need more acute than in science fiction. If the Author doesn't believe in it, then how can the reader?

Mr. Sanders, for example, is a very insecure writer. He has an idea (an Idea?), but doesn't quite know what to do with it: dreams roosting in trees during the day. Very good. Obviously, there are going to be problems when the forests are cut down. Might make a nice little Science Fiction story one of these days. Mr. Sanders hasn't done it, however. What he gives us is twelve pages of poor, unconfident characterization. Consider his main character, Veronica. For no apparent reason, she is beautiful. And not merely beautiful, but with "a face and a physique that stopped men dead in their tracks." Why is this necessary? Does it advance the plot? Nope. Well then, is it somehow tangled up in the central Idea? No again. It is a completely superfluous bit of characterization. By the third or so such reference, one begins to suspect that the author lacks any confidence in his ability to convince the reader; otherwise, why try so hard? If he has no con-

fidence in himself, then we will have none in him, and so the whole story is lost. There are other flaws in "The Tree of Dreams," but this one so stands out, especially in contrast with the preceding story, that it seems unnecessary to mention them here.

"Dinner in Audoghast" is, to the contrary, a supremely confident work. Set in medieval North Africa, it contains less of an idea than "The Tree of Dreams." Furthermore, this Idea, the accurate seer, has been done to death elsewhere. On top of it all, there is no plot. None. True, there is a dinner party, from hors d'ouevres to dessert, but the actual plot elements, such as they are (i.e., the realization of the fortune-teller's predictions), take place after the story ends. And yet the thing works. It is even beautiful. A gem. A classic, etc. But why?

Here we have four characters, and some attention is paid to distinguishing them, one from the other. But not too much; thus, the Poet doesn't always spout verse, the Caravan Master is knowledgeable only about things that lie on his route, the Doctor gets silly at times, and the Merchant flaunts his wealth only very occasionally. The richness of detail about each is unending, and unrepeated. Even the fortune-teller is described in the same manner, lending an air of truth to everything he says, whether actually historical or not (and no, I haven't bothered to look it up and find out when Timbuktu was sacked; there's no need).

But the line that pulls it all together, that pushes all the right buttons, that positively sends shivers up mine spine for the *rightness* of it, occurs on page 52, while the seer is describing the manner of the Doctor's death. He will be killed, we are told, attempting to assasinate the Crown Prince of Ghana. "You idiot, there is no Crown Prince," says the Doctor. How easy it would have been for the fortune-teller to have replied: "There will be, by that time." And how ordinary. Instead, Bruce Sterling has him answer: "He was conceived yesterday." Yesterday! Now *that* is confidence: confidence in the material, in the character, in his abilities as a story teller. Not once are we told that the seer is accurate. There is no need. That one line says all we have to know about that character, and all we have to know to put all the rest of the story, the descriptions and the characterizations, into place. And for that one line, Mr. Sterling, I thank you.

Yours,

Kevin Cadloff
Montréal, Québec
Canada

See what happens when you set up the ideas-vs.-characterization argument? You've got to admit it's more interesting than arguments over the nature of rejection slips.

—Isaac Asimov

GAMING

by Dana Lombardy

Two powerful alien races are expanding their stellar empires. The Gwynhyfarr roam the stars in faster-than-light spaceships while their adversaries, the Pereen, use a trans-dimensional "web" which enables almost instantaneous movement from one star system to another. These two aggressive advanced civilizations are now in contact and conflict—and Earth is directly between them.

This is the premise of *Web and Starship*, an award-winning SF boardgame from West End Games Inc. ($16.00 at your local store or direct from 251 W. 30th St., New York, NY 10001.) *Web and Starship* is unusual in that, while it can be played by two people, it's designed to best be played by three, with one player representing the leader of the Terrans of Earth.

The Pereen, descendants of a race of burrowing animals, want to use Earth as a technologically advanced base from which to launch probes. The Gwynhyfarr, however, who are descended from an aerial race, want Earth as an industrial world where their starships can be constructed and based. To maintain their freedom and independence, the Terrans of Earth must utilize the technologies of both the Pereen and Gwynhyfarr. These are the goals of each of the three players.

In the two player game, there is no Terran player. One of the other players makes all decisions for the Terrans, with certain restrictions.

The game includes a 24-page rule booklet, 320 die-cut cardboard counters for representing weapons, probes, and markers for "bookkeeping," a 22-by-34-inch map of "a small portion of the Carina arm of the Milky Way Galaxy," a counter storage box, two 6-sided dice, and one cardboard "True Distance Measure" (a range finder divided into seventeen 3/4-inch rectangles).

The True Distance Measure device is used to find lateral distances between stars on the game board since no hexes, squares, or other movement grid are printed on the map. Each 3/4-inch division represents two light years in distance and requires one movement point to traverse.

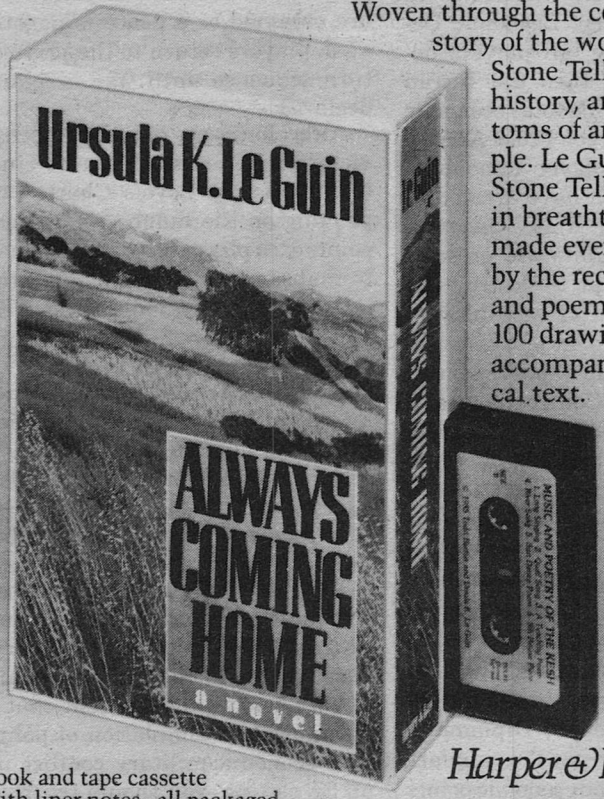
A number printed on each star of the map refers to that star's "elevation" above or below the eliptic, expressed in movement points. To determine differences in height between two stars, subtract the lower number from the higher one. For example, a star with a height of

"In scope and ambition... a *magnum opus.*"

—*Publishers Weekly*

Ursula K. Le Guin's long-awaited new novel creates a haunting world of the future—complete with its own language, its own artifacts, and its own music.

Woven through the compelling story of the woman called Stone Telling are the history, art and customs of an entire people. Le Guin creates Stone Telling's world in breathtaking detail, made even more vivid by the recorded songs and poems, and the 100 drawings which accompany her magical text.



Book and tape cassette with liner notes—all packaged in a handsome full-color case.

Harper & Row

1817

At bookstores or call toll-free (800) 638-3030. Major credit cards accepted.

"5" is eight movement points from one with a height of "−3." By using elevation as well as lateral measurements, *Web and Starship* manages something of a three-dimensional effect on a flat playing surface.

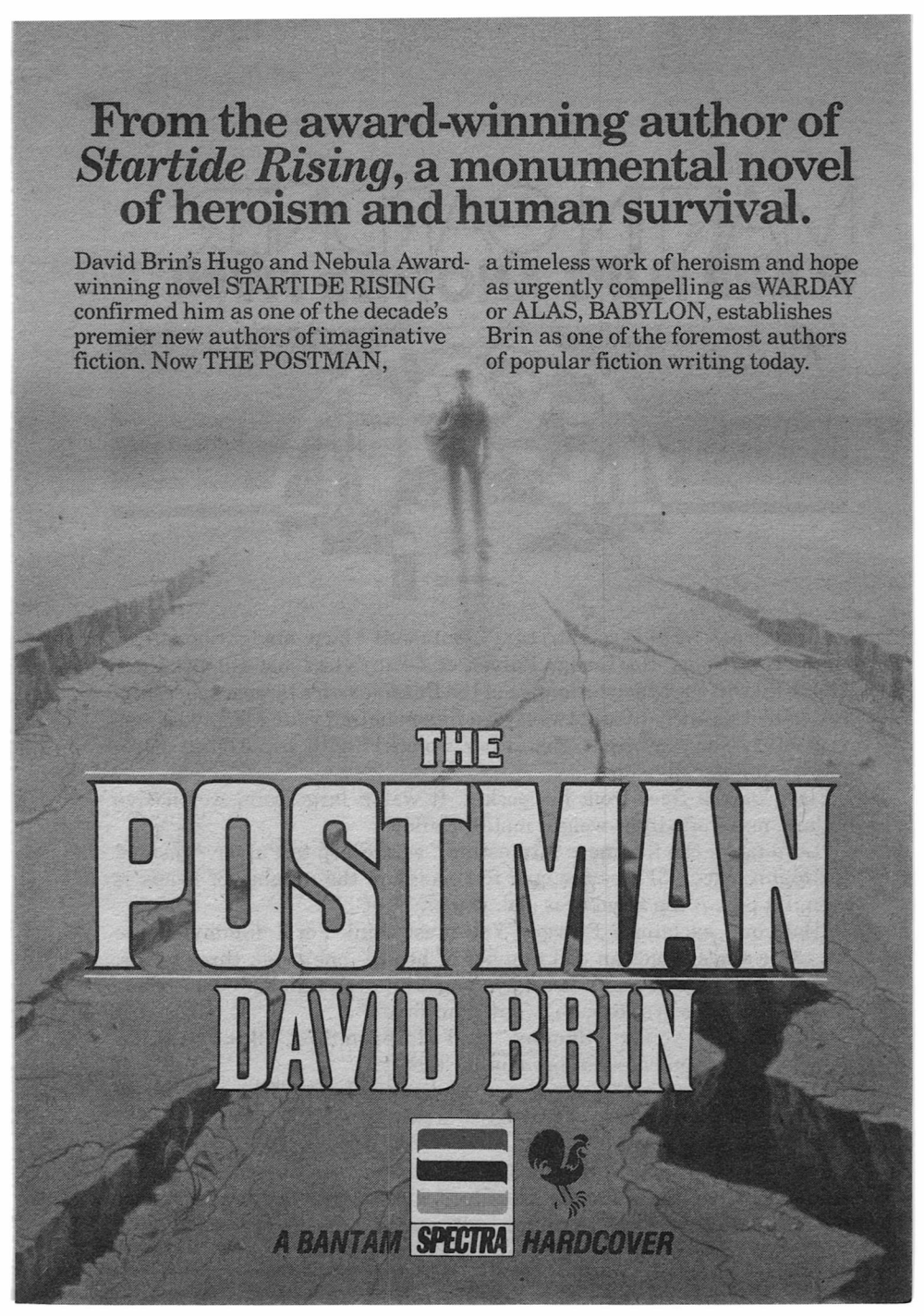
A game turn consists of: Event Chit Phase (each player draws one Event Chit at random—possible results include Off Map War, a Terran Boom or Bust, or Accelerated Military Progress); Economic Development Phase (all players determine income, then the Terran player increases his total economic value by 5%); Pereen Probe Arrival Phase (Pereen player announces any probes which have arrived at their destination. If any Gwynhyfarr or Terran units are present, they may attempt to destroy the probes); Settlement Phase (players place new settlement markers and increase the value of previous settlements); Unit Construction and Maintenance Phase (players expend economic points to increase and maintain units); Terran Technological Development Phase (Terran player may spend economic points to improve his technology levels); Pereen Probe Notation Phase (Pereen player launches new probes); Unit Reassignment Phase (each player moves his units between star systems); Diplomatic Phase (the Pereen and Gwynhyfarr players may expend economic points on improving diplomatic relations with the Terrans); and, if any player declares war, the Mobilization Phase comes into effect.

The first nine phases are repeated for each turn sequence until one player declares war. Then a War Sequence involving movement, supply, combat, and engineering is used. Since wars in this game are fought for specific objectives (such as a small group of planets), as soon as the objectives are obtained or a peace is negotiated, players return to the orginal turn sequence until war is again declared.

After fourteen complete turns, victory is determined by referring to the Victory Levels Chart. Depending on the number of victory points each player has earned (equal to that player's economic point total after modifications), a level of victory is derived. Two or three way ties are possible.

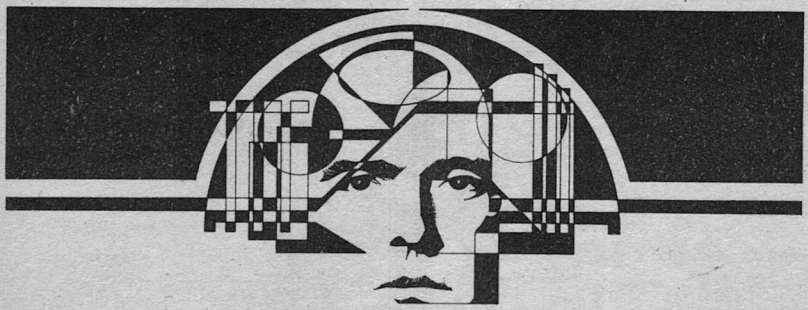
Web and Starship offers several interesting ideas in a science fiction game of economics, military action, and diplomacy. Its best design feature is the concept of peacetime maneuvering, interrupted by limited wars for specific objectives.

This is not a game for novices, although its sequence of play is not difficult to grasp (introductory scenarios are included). If you want to play something different that's an innovative simulation of political/ economic/military conflict in an SF setting, you should try *Web and Starship*. ●


From the award-winning author of *Startide Rising*, a monumental novel of heroism and human survival.
David Brin's Hugo and Nebula Award-winning novel STARTIDE RISING confirmed him as one of the decade's premier new authors of imaginative fiction. Now THE POSTMAN, a timeless work of heroism and hope as urgently compelling as WARDAY or ALAS, BABYLON, establishes Brin as one of the foremost authors of popular fiction writing today.
THE
POSTMAN
DAVID BRIN
A BANTAM SPECTRA HARDCOVER

MARTIN GARDNER

FLARP FLIPS ANOTHER FIVER



"Let *me* pay for this round," said Lieutenant Flarp, navigation officer on the *USS Bagel*. He, Ensign Pulver, and Tanya had just finished their first drinks in the spacious lounge of the *Bagel*, earth's largest spaceship. Tanya had recently turned twenty—a flaxen haired young lady who was as pretty as she was bright. Her father, Colonel Couth, headed the spaceship's computer division.

Flarp took a fiver from his pocket. It was a large coin, worth five dollars, made of a light-weight metallic alloy.

"Let's make the flip more interesting," said Flarp to Pulver. "Instead of flipping once, I'll toss the coin five times. If the number of heads is even, I'll pay. If the number is odd, you pay."

"Hold on!" exclaimed Pulver. "You must think I'm a dummy. There are three ways to get an odd number of heads—one head, three heads, or five. But there are only *two* ways to get an even number—two heads or four. The odds are three to two in your favor."

"I don't think you're a dummy," said Flarp, smiling. "But I do think you don't know much about probability theory."

Flarp turned over the paper mat under his drink. "The number of equally possible outcomes of five tosses is two to the fifth power, or thirty-two. I'll list all of them."

Flarp quickly wrote down the 32 combinations. He was able to do this rapidly by adopting a simple procedure. He alternated *H*s and *T*s (for heads and tails) in the fifth column, alternated pairs of *H*s and *T*s in the

fourth column, quadruplets in the third column, sets of eight in the second column, and two sets of 16 in the first column. Then he checked off all the combinations with an even number of heads, as shown in the illustration, including of course the *TTTTT* case with the even number 0.

1.	H	H	H	H	H
✓ 2.	H	H	H	H	T
✓ 3.	H	H	H	T	H
4.	H	H	H	T	T
✓ 5.	H	H	T	H	H
6.	H	H	T	H	T
7.	H	H	T	T	H
✓ 8.	H	H	T	T	T
✓ 9.	H	T	H	H	H
10.	H	T	H	H	T
11.	H	T	H	T	H
✓12.	H	T	H	T	T
13.	H	T	T	H	H
✓14.	H	T	T	H	T
✓15.	H	T	T	T	H
16.	H	T	T	T	T
✓17.	T	H	H	H	H
18.	T	H	H	H	T
19.	T	H	H	T	H
✓20.	T	H	H	T	T
21.	T	H	T	H	H
✓22.	T	H	T	H	T
✓23.	T	H	T	T	H
24.	T	H	T	T	T
25.	T	T	H	H	H
✓26.	T	T	H	H	T
✓27.	T	T	H	T	H
28.	T	T	H	T	T
✓29.	T	T	T	H	H
30.	T	T	T	H	T
31.	T	T	T	T	H
✓32.	T	T	T	T	T

Flarp's Chart

Pulver counted the checks. There were 16, exactly half of 32. While Pulver was studying the chart with a mystified look on his face, Tanya burst out laughing.

"You didn't have to go to all that trouble," she said to Flarp. "There's a ridiculously easy way to prove that the bet's fair without writing down a single combination."

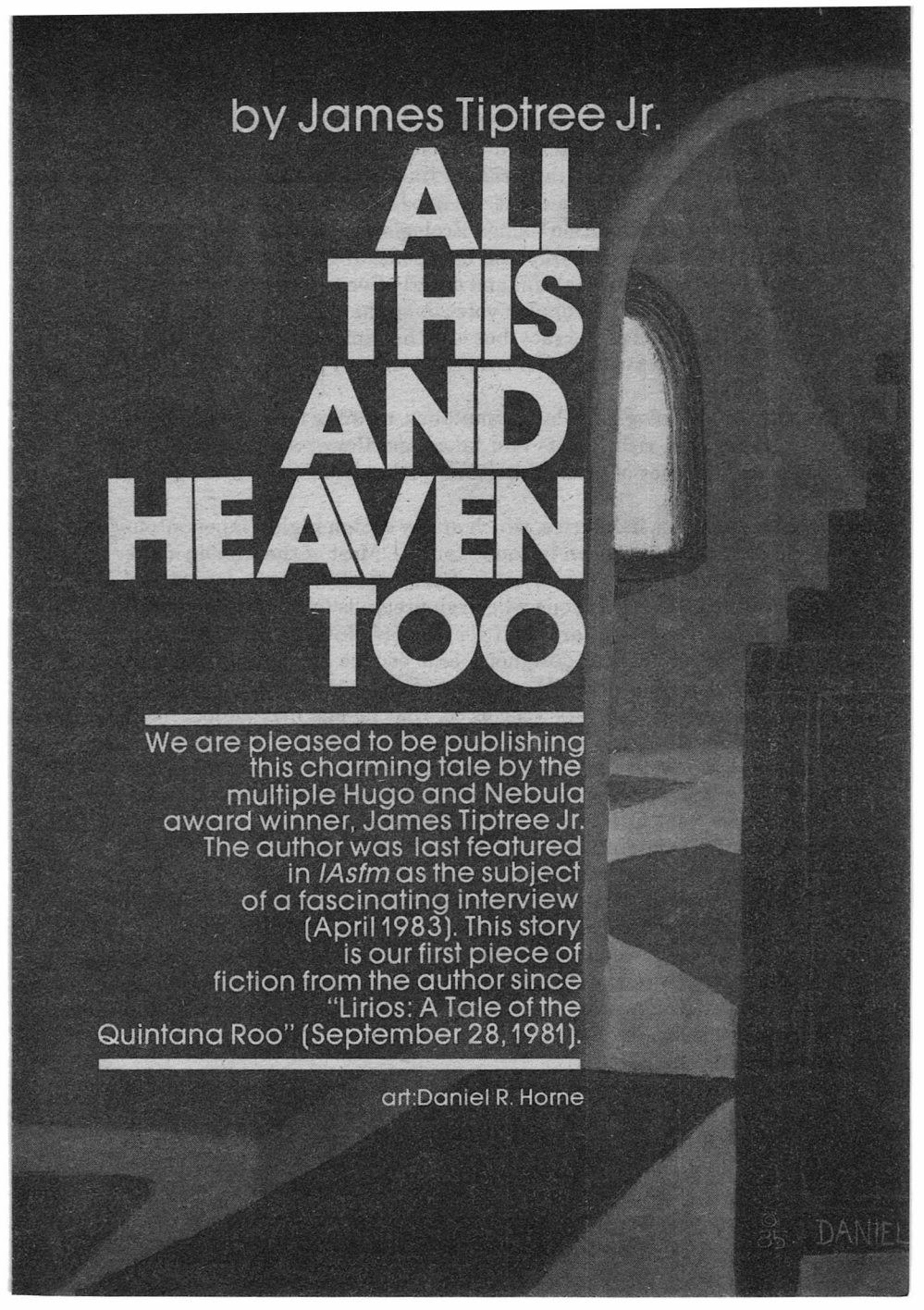
Can you guess what Tanya has in mind? If not, turn to page 90.

by James Tiptree Jr.

ALL THIS AND HEAVEN TOO

We are pleased to be publishing this charming tale by the multiple Hugo and Nebula award winner, James Tiptree Jr. The author was last featured in *IAsfm* as the subject of a fascinating interview (April 1983). This story is our first piece of fiction from the author since "Lirios: A Tale of the Quintana Roo" (September 28, 1981).

art:Daniel R. Horne



There is a tale that is recounted to young children, as the family gathers round the Heat-O'Stat on a chilly night. When one of the boys has displayed too firm an intention to have his cake and eat it too, he is apt to be told: "Remember the Crown Prince's wedding night!"

Here is the story. To appreciate it, we need to set the stage.

We have first a small nation named Ecologia-Bella, which is perfectly charming. All the men are hardy and handsome and considerate, all the women are talented and delightful and exactly five feet three inches tall, which was determined (by popular vote) to be the ideal height for love. This populace is not all of one race, but is of the same culture; a satisfying place has been made available for everyone, and all preventable misfortune is disallowed.

The scenery of Ecologia-Bella is sumptuous, running from snow-capped mountains through rich forests and lakes and flower-strewn meadows to long tropic beaches of pink-white sand with a wondrous coral reef to play in.

Ecologia-Bella has industries, which are by design highly labor-intensive (which is why places can be found for all). Most of the women make exquisite embroidered gossamer wool cloths, which are so much valued in other countries that everyone who even pretends to be rich or tasteful must have one. And they are paid for in gold. International fashion-setters have their favorite designers, and pounce on everything that comes from their looms. And the women of Ecologia prudently change the colorings and styles every year or so, that no one may collect them all.

The men of Ecologia-Bella grow woodlots, which they cut in rotation to make the finest, acid-resistant, beautifully watermarked paper, much sought after by wealthy letter-writers, and primarily used for documents of state and the recorded sayings of titled nonentities so cherished by other governments. For this paper, payment is in pure silver. And when a woodlot is to be cut, rattlers and clappers are installed in it to discourage birds and small animals from nesting there until all is safe again.

For those men and women who don't choose to weave or make paper, a wealth of other occupations is open, such as making music in the streets, sweeping chimneys, raising sheep, composting the trash, and running the government. For these tasks they are paid in fresh nutritious food and small change.

All this requires energy, which Ecologia-Bella has in plenty. Its rivers cascade from the heights, and the less scenic of these falls have been harnessed for clean electric power. Some of the electricity is used to extract hydrogen from the sea-water; the hydrogen is then mixed with a finely-powdered metal, which forms a non-explosive hydride. The hydride flows, so it can be pumped through pipelines or canned and trucked

to filling stations all over the country, much as we do with petroleum products. When a traveler has exhausted the hydrogen from his container of hydride, he returns the spent metal powder for a new box and drives away, emitting only pure water-vapor from his hydrogen-powered vehicle, while the metal powder is returned to the plant for recharging.

The cost of this whole operation is very low, since the chief ingredients—sea-water and electricity—are in bountiful supply; and hydrogen power is used for every need. All the plumes of white smoke puffing from factories or locomotives are composed, like summer clouds, of clean water particles, since the burning, or oxidation, of hydrogen has water as its sole by-product. A traffic snarl in Ecologia-Bella smells like a sweet Spring day, and flowers and shade-trees grow lushly on the highway verges. Children playing in the cities' streets absorb no carbon monoxide or lead, but only moisture which makes their hair curl and keeps down various viruses.

Turning now to the darker side, Ecologia-Bella has of course an Integrated Armed Force, which wears white-and-gold uniforms with plumes on Sundays. On work-days they wear highly efficient camouflage, and practice maneuvers with their violently lethal equipment, which they have purchased with the silver and gold. Typically, they buy only a prototype or two of each item, which they promptly copy with improvements. Every soldier knows not only how to read the instructions on his gunship or whatever, but how to write them if necessary. As a fighting force they are formidable beyond all proportion to their numbers; their individual strength is as the strength of ten because their heads are well-furnished and their hearts are pure.

There is an aspect of interest in Ecologia-Bella's method of manufacturing some of their war machines and other mechanical devices. It is well known that many teen-age youths love nothing better than to take apart and reassemble some form of locomotion. Thus, at highschool age, instead of allowing this enegy to go to waste in the restructuring of jeeps, vans, and motorcycles, all the boys and girls who wish to are introduced to the task of assembling, say, an attack plane or a tank, after classes. And great is the pride of the young artisans when their own bomber rolls out of the hangar and takes to the air.

This does of course result in some rather odd names for deadly machinery, but the sight of "Wildflower Junior High" painted on his rocket-launcher serves to remind the operator what he is preparing to fight for.

This same youthful interest is also harnessed in the fabrication of the I.A.F.'s computers and telecommunications equipment. And many are the youngsters' innovations that are judged worthy of incorporation in standard models.

All this unwelcome military activity is forced upon Ecologia-Bella by

the character of its neighboring nations, in particular the large state beyond its mountainous side, Pluvio-Acida.

Pluvio-Acida's landscape is said to be low and hilly, but no one has seen it for many generations because of the peculiar opacity of the air. It is also rumored to have once had top-soil and live trees, but the ground is now so eroded and churned up by people digging holes to mine whatever the previous hole-diggers didn't find, that, except for stretches of pavement cracked by subsidence, to step upon open ground is to fall into a kind of dry sludge scented with hydrogen sulphide.

The Pluvio-Acidans, like all sensible people, use fossil fuels, i.e., petroleum, for energy, with the usual results. They have a rich but limited fauna consisting of brown rats, cockroaches, and two kinds of house-fly, and a species of crabgrass still grows wild.

The very rich, of which Pluvio-Acida has many, landscape their sludgy holdings with cleverly-made plastic trees and grass, producing a mildly pleasing effect. The other class, the poor, or proletariat, of whom the nation has far more, look at the landscapes of the rich on state TV, which also tells them what to spend their wages on.

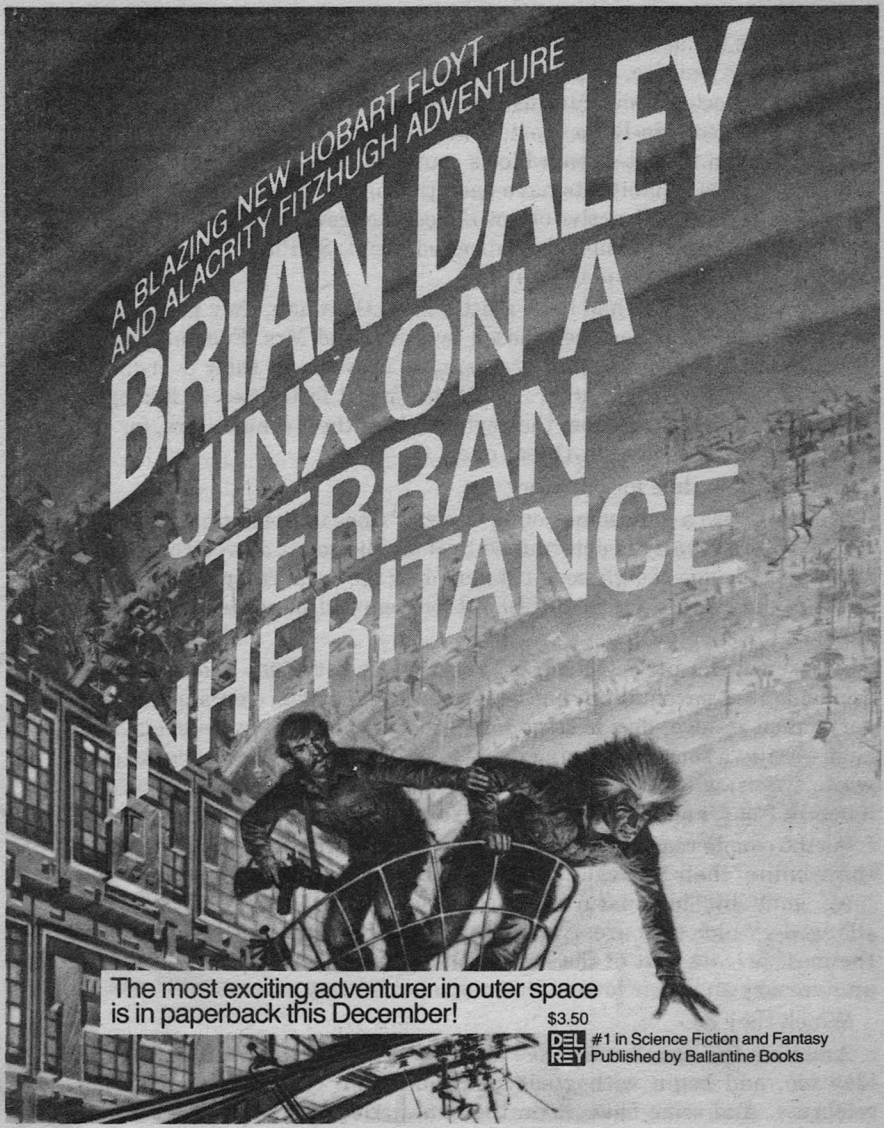
Pluvio-Acida enjoys a very high rate of employment of able-bodied males between twenty and thirty-five; the current figure is 105 percent. (The extra percentage points were caused by some census takers' failing to distinguish certain workers from robots.) The unemployed cause no problem, since on the average day they cannot be seen. All these workers toil like mad in smelters, machine-shops, mines, forges, rolling-mills, chemical plants, and so on, and the national product is extremely gross.

The typical breakfast of a Pluvio-Acida worker consists of a sugar do-nut dunked in raw alcohol; for lunch they omit the do-nut. The birth-rate is high, but over-population is kept down by a series of unavoidable industrial accidents, called Oops, which are believed to be totally unrelated to the births of a great many children with three legs, six fingers, spina bifida, or open-skull.

Pluvio-Acida has a heavy schedule of exports. Its smelters and forges etc., export melts, ingots, pig-iron, chunks, groockers, and slurp; these are paid for in diamond tiaras, blood, and organs for transplant to those who can afford them.

Its armed forces are strong, if unorthodox; there is a small cadre of technicians who can operate the complex war-machines and a large mass of those who can't, who are issued Kalashnikovs. Their hearts not being very pure, their individual strength is not that of ten. But unfortunately there are eleven of them for every Ecologia-Bella soldier.

Pluvio-Acida has a flourishing nuclear industry, despite its having occasioned a good many Oops. And in the most desolate corner of the


A BLAZING NEW HOBART FLOYT AND ALACRITY FITZHUGH ADVENTURE
BRIAN DALEY
JINX ON A TERRAN INHERITANCE
The most exciting adventurer in outer space is in paperback this December!
$3.50
DEL REY
#1 in Science Fiction and Fantasy
Published by Ballantine Books

least-enlightened province, mushroom-shaped clouds can occasionally be seen to arise.

That is as far as it goes, however, for the Pluvio-Acidan Information Transmission Service, or P.I.T.S., which is as ubiquitous as the houseflies, has reported some curious cloud formations rising from a barren islet off the Ecologia-Bella coast, always under strict security and particularly when the jet-stream blows south. (To the south is the land of Numbia, whose inhabitants have been through so much they don't care whether they are radioactive or not.) These clouds are studied by experts, and the dread word "fusion" is whispered about. So Pluvio-Acida's Deep Strategic Thinkers are playing it safe.

However, if P.I.T.S. had been a little more thorough, they might have found that the islet has been leased by a Mr. and Mrs. Fusion, makers of ceremonial fireworks, who are using it to work up their ever-more-splendid secret surprise programs for the royal festivities of Ecologia-Bella; the island is safe from the prying eyes of their competitors, for the fireworks business is a cut-throat one.

But it is now time for our story.

We start with a handsome young Crown Prince in the nation of Pluvio-Acida, where royalty is determined by a simple count of wealth. And as he attains the age of eighteen, just next door the royal rulers of Ecologia-Bella perish, and their beautiful fifteen-year-old daughter is crowned Queen.

Amoretta, the little Queen, is orphaned by a typical Ecologia-Bella accident. Her parents, having been married fourteen years and being very much in love, decide to go for a ride in the royal swan-boat. This boat—really a sort of sea-going double bed—is drawn by seventeen tame white swans, who put their necks in gold harnesses to obtain corn from a pan in front, and thus propel the royal barge.

As the couple reach the far end of the lake they are fondly talking over the events of their life together, and wondering how fourteen years could have gone by, and assuring each other that they are totally unchanged—which they are. And presently, noting that they have reached the most private part of the lagoon, it comes to them to celebrate their anniversary and their love in the most natural way.

Which they do.

And then the swans, who have always wondered about people, get the idea too, and begin with great splashings and chasing to help them celebrate. And some beavers on the bank, affected by the general outbreak of love, join in with even more rocking and tail-whacks. And somehow, in the midst of this riot of love, the boat is pushed, or pulled, over the low falls at the end of the lake, and overturned. And alas, when the

royal couple go under, they are so warmly embraced that they neglect to swim.

When Amoretta is told of the tragedy she is overcome with grief, for she loves her parents, as does all the population of Ecologia-Bella; even her infant brother Truhart, who is as yet incommunicado, begins to weep.

The grounds-keeper, in a fit of tearful revenge, determines that no such thing will ever occur again; he carts all the cobs, or male swans—save one—to the veterinary's. From whence they return honking soprano. The solitary intact cob he encloses in a golden pen so built that lady swans may go in, but he can not go out.

The grounds-keeper's wife says that this is cruel because swans mate for life; but after a little observation she is compelled to admit that so long as the ladies are allowed regular visits to the golden pen, they seem perfectly happy with their soprano spouses. And they raise fine cygnets without the usual territorial strife.

The deaths of Queen Rhapsodia and King Uxor come in due course to the ears of the rulers of Pluvio-Acida, who are of course the richest couple in that land. They have two sons. The eldest, Crown Prince Adolesco, is a throwback to some nobler stock—a handsome, blue-eyed, virile young man with a face as open as springtime, and—which is what panics his parents—a heart full of lofty ideals. He is often heard to utter the most unthinkable criticisms of the land he is to rule, and to intimate that there might come a time when changes would be made. The Pluvio-Acida Stock Exchange average falls fifteen points when Adolesco's father catches a head-cold.

The younger brother, Prince Slimoldi, is quite a different cut of sludge; squat and vaguely fungoid, with a face like a ferret and a mind to match. He stands in Pluvio-Acidan eyes for a fine young man, and much the better of the two. It is not, however, clear what should or could be done about this; the elder brother seems to bear a charmed life, and none of the irresolute efforts at changing the succession have worked. His horse sees and jumps trip-wires; he gives the cyanide-laced soup to a beggar; and the hired sharp-shooter has an off week.

As our story opens, we find the young Crown Prince in a traveling mood. Two points motivate him to travel to Ecologia-Bella.

Firstly, he became aware of a steadily increasing traffic of eligible—or self-declared eligible—royal bachelors in that direction. News of a beautiful virgin heiress to an attractive throne is getting about. Dowager queens escort their immature male offspring across Pluvio-Acida, heading for Ecologia-Bella. Doddering noblemen tighten their corset-stays and set out upon the matrimonial road. Among the throng Adolesco notes several apparently suitable candidates: the bold young king of a rich, if frozen northern country; the handsome heir to a tropical paradise in the

south; and the suave, fatherly monarch of an eastern empire, who knows how to make his harem sound attractive to western ears. . . . Adolesco frowns, currying his best cross-country hack, a great snow-white gelding. What do these suitors have that he doesn't? How dare they come courting one who is his—*his*—own neighbor?

The second factor impelling him is parental. Our young Prince has reached the age where the converse pressure is impinging on him. Holographs of stunning heiresses appear mysteriously upon his bureau. His parents give a grand party for the second and third richest couples, with their charming daughters. Scented letters, enclosing miniatures, float in from far-away courts. It begins to dawn on Adolesco that if he doesn't take a hand in this, his parents will have somehow got him committed to he knows not whom . . . And is it only by chance that no image of a maiden queen, said to be a darling vision, in her toy kingdom, has been produced?

He asks. And discovers that Ecologia not only is not taken seriously, it is positively disliked.

"That's where our people get all those communist ideas," his father growls. "Dreadfully ignorant people," his mother adds. "Why, they don't even understand capital gains." She rolls up her protruding eyes, a daunting sight.

Two weeks later, preceded by a courtly letter requesting to be received, young Adolesco sets off alone for Ecologia-Bella. (His horse is shipped by oxygenated container to the mountain border.)

Here he books passage for himself and his horse on the Ecologia-Bella Overnight Express through the mountain passes and tunnels, not unobserved by the Ecologia-Bella Observation Service, and disembarks to ride down through the fantastic forests and other charms, where he meets many mild but pleasing adventures.

He arrives at the palace on a beautiful and chilly spring evening, the white horse picking his way along the lakeside path. The sunset is casting a golden nimbus around horse and golden-haired rider—and seated at his pommel is the palace cook's littlest daughter, whom he had found trudging home through the chill.

At a grove of scarlet maples by the barge-landing his mount suddenly halts and stands stock-still; there is a silver figure among the rosy maple blooms. It is a young girl, so absorbed in feeding the baby swans that she doesn't hear his approach. He has a moment to observe her perfections—then she turns, startled, as the child calls her royal name.

"Oh," she cries, "I wanted to be alone! So many *people* have come."

He wheels to leave instanter, but in the business of setting the child down it seems he must dismount, and she has time to notice that he

L. RON HUBBARD'S THE INVADERS PLAN

Unknown...unrecognized...
the aliens already walk among us...

From the remote reaches of space, secret invaders are now here to add Earth to their 110-planet empire.

L. Ron Hubbard, master of the epic adventure, delivers his newest and biggest bestseller yet.

Packed with adventure... action... excitement, and told with a unique twist... through the eyes of the Voltarian invaders themselves.

$18.95 U.S.
$24.95 Canadian
Hardcover, 576 pages

A LITERARY GUILD SELECTION

THE INVADERS PLAN

"An incredibly good story, lushly written, vibrating with action and excitement. A gem."
A. E. VAN VOGT

"Remember how you felt the first time you saw Star Wars? This book will do it to you again."
ORSON SCOTT CARD

"L. Ron Hubbard's latest is full of action and adventure... the action does not stop... The Invader's Plan reads like an intergalactic Raiders of the Lost Ark. Once you start you'll be hard-pressed to put the book down... On our scale of 1-10 with 10 being excellent, The Invader's Plan comes out at a 10. It's fabulous!"
PAUL THOMAS HUGHES
United Press International

"...a big humorous tale of interstellar intrigue in the classical mold. I fully enjoyed it!"
ROGER ZELAZNY

THE INVADERS PLAN
VOLUME 1
MISSION EARTH
THE BIGGEST SCIENCE FICTION DEKALOGY* EVER WRITTEN
BY
L. RON HUBBARD

BUY YOURS TODAY!

Available wherever fine books are sold.
RELEASE DATE OCTOBER 6TH.
Bridge Publications, Inc., 1414 North Catalina Street, Los Angeles, Ca. 90027. Tel. (213) 382-0382

*10 volume work.

wears no spurs, unlike the prince of Paradisio, and uses only a snaffle, not the cruel curb of the north.

So presently, with the cygnets full-fed, two golden-haired figures set out for the stables leading the great horse. The sunset intensifies its mellow splendor around them both.

. . . There really is no need for us to follow in detail the ensuing course of events. So let us briefly drop the curtain . . .

When it rises again, a few months later, there are revealed two beautiful young persons who are deliriously, enchantedly, calamitously, in love.

"He is different," says the young Queen to her advisors. "He really wants to change things, and make peace and do good."

"She is intoxicating," the young Prince writes to his best friend. "And the country is really a revelation. Why, if we were one nation, you could buy an estate here." (Ecologia-Bella prohibits the sale of land to other than third-generation nationals.) The Prince is so taken with Ecologia-Bella, which embodies many of his more impractical ideals, that his first thought is to save it intact as a sort of Disneyland annex to Pluvio-Acida, changing nothing except perhaps some laws relating to outdoor advertising.

We have mentioned the Queen's advisors. These constitute the Council of Ecologia-Bella, a small, poorly-paid, self-instituted group of older men and women, who come together now and then when some new factor or emergency threatens the stability of the country. It is clear that the present situation calls not only for watching, but perhaps for action.

So a lady whom the Queen likes very much points out to her, "If you wed Prince Adolesco, our nation will become a part of Pluvio-Acida and subject to its laws. They will start mining and clear-cutting and dredging and drilling for oil all over Ecologia-Bella."

"Oh, no," replies Amoretta, dreamily but positively. "He swears he would change nothing. It will be mine to rule."

The lady looks at her and sees that there is no use discussing the changes that may take place in a man's resolves between eighteen and thirty.

"He will be your lawful King," she only observes. "How will you like being told what to do or not do?"

"Oh, I thought of that." Amoretta is braiding a flower into her yellow hair. "I wouldn't like it at all from King Boris or Prince Raoul. But my dear Adolesco is different. He truly loves me. I am sure he would never go against my wishes."

The lady sighs, and retires to report to the others that nothing can be done with sweet reason. The Queen has been infected with a sweeter poison.

At the same time, Adolesco is having his troubles with his own parents and advisors. But they are not so severe. The idea of peacefully annexing their old irritant, Ecologia-Bella, has charms. And as the King's advisors point out, if this marriage is forbidden, only Mammon knows what wild idea the Prince will have next. At least this may be expected to settle him down while keeping him near home—and occupy him with something other than tinkering with Pluvio-Acida's economy. And some of the nobility look out at their plastic trees and think that it might be pleasant to have an estate in Ecologia-Bella.

The advisors of the younger brother, Prince Slimoldi, draft up a cunning document which has the effect of giving Slimoldi certain powers over Pluvio-Acida—when Adolesco shall have inherited the kingdom—in the event that the new King devotes more than a certain percentage of time to the affairs of Ecologia-Bella. Such is the Crown Prince's bedazzlement with love, and so dense is this prose, that he signs it without demur.

Thus the way is clear for the grand Ecologia-Bella-cum-Pluvio-Acida nuptials. Out on their rocky islet, the Fusions envision a rocketry display unparalleled in history. And the people of Ecologia-Bella, seeing only the handsome, young, idealistic Crown Prince, and the radiant joy of their young Queen, rejoice in the match.

But the Ecologia-Bella Council are not so easily contravened.

A plainly-dressed older man, of whom the Queen has always been just a little in awe, comes to see her, bearing a large volume in which the laws of Ecologia-Bella are inscribed on the finest and most durable of that country's parchment.

"My dear," he begins, after accepting a cup of scented wine, "it may have escaped your notice that there are certain legal aspects to the marriage of our sovereign—namely, you."

She looks up with a face that would melt a stone lion; he hardens his heart.

"Oh, I know about that," she tells him. "The people must approve. Do you want me to call a referendum?"

"No need, no need." He waves the referendum away. "I am satisfied that the people, particularly the younger ones, have taken your plans to their hearts. But there is another consideration, which must be invoked in view of your youth."

"What's that? Do you wish me to wait till I'm old and wrinkled?"

"You may be only slightly wrinkled at, say, sixteen," smiles the councilor.

"*Sixteen?* That's a whole year away."

"Precisely." He opens the volume. " 'In the event that the ruler is less than sixteen years of age, the Council is empowered to defer his or her

nuptials to that date, unless some emergency dictate otherwise.' . . . There is no, ah, emergency, is there, my dear?"

"Emergency—?"

"No, ah, royal heir in view?"

Little Queen Amoretta draws herself up to her full five-feet-three. "The Queen of Ecologia-Bella is not an animal!"

"Splendid," the Councilor approves. But to himself he wonders; a royal bastard would of course create difficulties, but if that could be avoided, his experiences have indicated that there is nothing like a spell of unchecked intimacy to cool love's first ardors.

He clears his throat. "There is another point in our laws, my child. I'm sorry to have to tell you this. But our ancestors, who devised the code that has served us so well, were familiar with the course of love. They laid it down that if and when the marriage-match of a monarch would imperil the independence of Ecologia-Bella, the assent of the full Council is required before it can take place. Moreover, the determination that the independence of Ecologia-Bella is in jeopardy is to be made, not by the monarch, or by popular vote, but by the full Council itself.

"And it is my sad duty to tell you that the Council has determined that this match of yours would indeed imperil the independence of your nation, and our recommendation is that it not take place."

"You mean that you can—you will—forbid my marrying Adolesco? Forbid me the joy of my life?" Her eyes blazing, the little Queen actually stamps. "Never! Who passed this law? I'll change it!"

"Not so fast, my dear." The old councilor remains seated, waving his hand soothingly. "Not so fast. I have not said we *will* forbid it. But you must accept the idea that we *can*. You are Queen, but you may not change basic law."

Amoretta is pacing.

"I know!" she flings out. "I'll abdicate! That's it, I'll just abdicate. Then you can't forbid me doing anything!"

"Ah, my dear, assuming that the Prince would still find himself able to wed a commoner—"

"He would! I'm sure of it," she declares, and then adds, for she is an honest girl, "I'm pretty sure." Her face is a trifle thoughtful.

"Yes. Assuming that, my dear, would the people of Ecologia-Bella let you? And we couldn't let you do anything which would cause such convulsions. Think. They have just lost your beloved parents. Your brother is but an infant. Will *you* now desert them—and for purely selfish ends?"

"Well . . . N-no."

"Spoken like a Queen."

"Oh!" Amoretta collapses into her chair, suddenly more child than Queen. "If I can't marry Adel—I'll die! . . . I'd *rather* die!"

TWILIGHT: 2000

A Major New Role-Playing Challenge: *Survival in a War-Torn World*

Welcome to 2000 AD. World War III began five years ago. It's still going on, but that's the least of your problems. A few days ago, you were soldiers in the U.S. 5th Division. Now you're just fighting to survive.

Your equipment was brand new in 1995; now it's wearing out. Gasoline is rare, so your vehicles run on alcohol you distill yourself. And 5th Division's cavalry—when there was a 5th Division—rode horses. There's not much government left, just warlords, marauders, and free cities. Even the major powers are collapsing; whole divisions are refusing orders and heading home.

Your division is gone, and you're hundreds of kilometers inside enemy territory; fortunately, the Soviets aren't in much better shape than you are.

Your job is to stay alive, find enough fuel and spare parts to keep moving, get home (wherever that is), and maybe even strike at the enemy.

Twilight: 2000 is a major new roleplaying game, with new systems covering combat (from hands to tanks), skills and tasks, survival, encounters and NPC motives, and a great variety of equipment. It also contains extensive background information on the war and the current state of central Europe.

$18 at your local hobby shop or direct from GDW. (Add $1 for handling.) Send $1 for our catalog.

GDW

Game Designers' Workshop
P.O. Box 1646
Bloomington, Illinois 61702-1646

"Do you mean that? Come, think."

She does think for a moment. Then, "Yes," she says slowly, surprising him a little. "I think I *would* rather die than never marry my love. There'd be nothing to live for, then . . . Are you 'empowered' to kill your Queen?" she asks bitterly.

He doesn't take the bait, but merely says gently, "Very well, my dear. But first let us see what time can do. You will agree to set your nuptials for one year hence, when you will be sixteen?"

"On my birthday," she says firmly. "If I must."

. . . That next year passes in a whirl of pleasures—all pleasures save one, that is, for the little Queen is serious. Adolesco, who has other resources, submits.

But to the Council's dismayed eyes, the passage of time seems to do nothing to abate their monarch's virgin passion. Now and again the elderly Councilor drops by to inquire formally.

"You still feel that you could not endure a life without young Adolesco, my dear?"

"I still do," she replies; and sometimes she smiles.

However, the year does accomplish something.

Various Council members find occasion to consult with their Queen on diverse problems, economic and social, of Ecologia-Bella; they are small, soluble problems, to be sure, but enlightening to Amoretta, who had always assumed that her state somehow ran itself. Now she perceives that there is a subtle ongoing process whereby a quiet push here, a tug-back there, a plan within a plan, are required to keep her nation on course. She is impressed by the length of foresight employed, the keen eye for socio-demographic changes, the seriousness with which any unusual manifestation—for instance, an outbreak of minimalist art among the weavers of a province—is viewed.

And, most enlighteningof all, she is taken, heavily but inconspicuously guarded, on a state visit to Pluvio-Acida.

"Your brother is very . . . different from you," she says lovingly to Adolesco.

"Slimie's a nerd."

"I think he is worse than that. He is cruel. I see it in his eyes."

Then she sees something new in the eyes of her young lover—a flash of anger, gone as soon as perceived, but unmistakably there. It's all right for him to call his brother a nerd, but it's something else to have his family criticised by outsiders.

Amoretta says no more, but soothes the kitten-scratch with a kiss.

"I love you so!"

"And I you. Oh god—let's run away."

"Queens do not run away—nor kings," she adds hastily. "Besides, it's only a month now, my darling. Thirty little days!"

"Thirty eternities." His eyes devour her.

. . . And so at last the great day dawns, fair and explosive.

It is fair because Amoretta had been born on Midsummer's Eve. The explosions, heard faintly through the mountain passes, are caused by the Pluvio-Acida border guards on the far side, attempting to halt the hordes of their fellow citizens who have been encamped nearby, waiting for the moment when Pluvio-Acida and Ecologia-Bella would become one. In the vanguard is a cortège of Pluvio-Acidan nobility, checkbooks clasped, determined to have first choice of Ecologia-Bellan real estate.

The sunrise detonations are also augmented by the popping of an air gun in the palace park (air guns being the only ballistic weapon allowed out of Armed Force hands). Prince Adolesco, dressed for the chase, is popping away at a congregation of fat stags and several plump pheasants, who are crowding about him in expectation of treats. The air-gun pellets, being of local manufacture, annoy them only slightly.

"Damn and bedevil them!" the Prince cries out in anger to the sky, and follows this with far stronger imprecations at a particularly obese deer who is trying to get its nose in his pocket. Then he hastily modulates down again as Amoretta and a group of special friends come in sight, taking a farewell sunrise stroll. The Prince had hoped to work off far stronger tensions by stronger means.

The Queen runs to him. "What's wrong, my darling? Are you hurt?"

"Why in—why won't they run? Move, you godlost bird! Fly away! These animals, they're hopeless cowards, Amy, that's what they are! Why *won't* they run?"

"Never mind, darling Adel—we'll train one to run! Fast as lightning!"

The Prince utters a groan of complex frustration and flings the air gun far. Recovering himself, he salutes the company, kisses his beloved's hand and stalks away.

Amoretta gazes after him, smiling fondly. A senior lady among her friends observes that smile, and feels her heart chill, for it seals Amoretta's fate. It is not the mere open radiance of an infatuated girl; there is in it a new element which the year past has developed—the undauntable spark of the maternal drive. Amoretta knows her lover now; she is aware of much that many think her heedless. But instead of dimming her passion, this has done just the opposite. Adolesco has become in part her son, to whom all is forgiven. She sees his faults and counts them as nothing, with a mother's unshakable conviction that he will outgrow them under her care.

The Lady sighs at the dilemma: this misdirection of the flooding drive

to mother things might have been aborted had Amoretta had a real babe to coddle; but it is too late now.

Yes, alas; we see that even in Ecologia-Bella a girl may take to her too-motherly heart some scapegrace, who will usurp the place of her later, rightful children. Not that Adolesco is a scapegrace; he is only very young and formless, and the shape into which he will later crystallize may not be so attractive.

But we must return to his wedding day.

The noon-hours are occupied by a more-or-less ceremonial brunch, attended by Prince Adolesco's parents, the rulers of Pluvio-Acida. They arrive in the morning in their royal jet-liner, which is of course conventionally fueled. A respectable crowd is assembled to view the arrival of King Puerco Volante, Queen Porcellana, and Prince Slimoldi, although there is a good deal of discreet sneezing and holding of noses.

Queen Porcellana reciprocates.

"What is this terrible smell?" she demands of Adolesco, who has bounded up the ramp to meet them. "It's like poison gas. My God! Do you suppose—?"

"Cool it, mother dear. It's only fresh air. Affects some people like that at first."

The Queen sniffs. "No wonder I see people wearing nose-masks. It's those dreadful trees. The first thing you must do is have them all cut down. I've been told they cause pollution."

And by the time King Puerco Volante and his family reach the Palace where little Queen Amoretta is awaiting them, they are so overcome by oxygen fumes that they say nothing worth relating.

Their participation at the brunch is cut short by Queen Porcellana's feeling faint, and they gratefully retire to the royal guest suite.

Shortly the rest of the party retires too, to rest and prepare for the festivities ahead. The wedding is scheduled for the early evening, that having been the hour of Amoretta's birth, but the summer sun is still high.

And now the elder councilor pays his last visits.

He finds the little Queen *en déshabillé,* dreamily perfecting a bridesmaid's wreath of flowers.

"My dear." He says with great solemnity, "Are you ready for the hour when your wishes—all of them—come true?"

She starts to reply gaily, then checks; this is no ordinary conversation. "Yes . . . I mean, yes."

"Then you will come with me. That hour is very near." He unfolds a great gauzy veiling cloak he has carried on his arm.

She stares at him for a moment, then snatches up her mirror and brush and begins to work feverishly. "Oh, but my—and my nose—wait!"

"No need for that. It will all be attended to." He nods toward an elder lady and the ladies' maid, who have silently entered behind him and started to select things from her closets and dressing-table, and place them in a great plain bag. "You will meet all these again shortly. Now put this on—that's right, it must cover your face—and come with me. Speak to no one. We must hope that you pass unrecognised."

She follows him out and through the back ways of the palace, which she knows well, but where so many strangers have been coming and going on unexplained errands that one more is scarcely remarked. In a small courtyard is a long, low, inconspicuous auto with a driver in mufti, into which he hands her. When they are settled and moving, he clears his throat and speaks:

"Now, my dear. You must learn that there is a certain hour, loosely speaking, which is out of history and is not timed on Ecologia-Bella's clocks. I put this metaphorically, to convey that actions taken or deeds done during this hour do not count. They have no official existence. And that hour is the time just before a royal ceremony of marriage, where we are now."

"But what—!" she asks, for during the past weeks she has become ever more puzzled. She has been told that she cannot, she will not marry Adolesco, yet every sign seems to say that she will. She has not been so foolish as to hope—and yet she has, a little. But what she has been vaguely expecting is something more official, or even catastrophic, not this strange speech.

"I know—I'm being kidnapped!"

The councilor holds up his hand.

"No. Permit me to continue. The reason for the existence of this absent hour is that Ecologia-Bella's scientists long ago determined that the parades, speeches, hours of formalities and convivialities, and the other turmoil of a long wedding day are not conducive to the happiest outcome, that night, for the newly wedded pair. Both will be exhausted, keyed up, over-fed, over-speechified, and who knows what, when they are finally left alone in a glare of public attention. Do you follow me?"

"Oh, yes! In fact—"

His hand goes up again.

"So it has been arranged for them to be alone, whilst they are fresh, in an hour which does not exist, in a place which is in no guide-book, to do whatever their hearts desire, in total privacy, as befits one of the most tender moments of their lives. Where I am taking you, the queenly and maidenly scruples which you have upheld so well may be relaxed, for this is an old tradition. All details have long been worked out. You have nothing to fret about, nothing whatever to do save what you wish, and trust us to place you before the altar in plenty of time. The populace will

have had their ceremonial parades and viewings, and all things proper done, as they were when your maiden mother took this path before you. Do you still follow me?"

"Oh, yes! Oh, yes indeed! How wonderful! But—"

"But in your case, my dear," he goes on firmly, "there is a difference. I have said that *all* your wishes will come true. You have seen how you will have your heart's desire, your Adolesco, at the best hour of his life. But you have also wished to die if you cannot marry him. That, my dear, is still true. You may not and will not. And therefore this will be not only the happiest hour of your life, but the last.

"When the time arrives you will be given two vials to drink, one bitter and one sweet. The first one will see to it that your time of happiness is indeed totally happy, without any of the little physical tensions and drawbacks that often minimize a maiden's first experience of physical love. That is the bitter cup. The sweet one will ensure that after your total mortal fulfillment, a slight and painless chill will come over your body. That will be all you feel before you faint away. But that faint is fatal; you, Queen Amoretta, will never awaken. To put it bluntly, after yor love-tryst you will die. Are you still prepared?"

"Yes." The little Queen lifts her chin, her sweet lips set.

"Good. Then there is one small thing you must do. Your Prince, having seen you die in his arms, would naturally be inconsolable, distraught, and quite unready for certain things he must do. Therefore, at some point during the, ah, proceedings, you must tell him—and convince him!—that you are your own double. That the Queen found herself unable to overcome her scruples and sent you, her double, instead—as indeed, is both parties' right. You can see the need for this, and your ingenuity will know how to do it, I think?"

"Oh, yes—but will he never know? Will he marry someone else? Oh, that—no, no!"

"Calm yourself. The deception is just for an hour. And he will marry nobody—unless it be many years hence, back in Pluvio-Acida. And he will very soon know that the tale of a double is poppycock; that he spent this hour with the Queen herself."

"Very well. Is that all? Now I must think . . . Why, are we going to the cathedral?"

The wedding is to take place before the grand altar of the Goddess of Restrained Fertility, one of the great architectural ornaments of the capital.

"Yes, but to a part of it that few know of."

"I suppose my body will lie in state," the little Queen says bravely.

"Yes, for a day. In the Cathedral of the All."

"Then will you see, please, that Donna does my hair?"

"Certainly." The elder pulls out his jot-pad and carefully notes this. There was silence for a block or two.

"My poor people," the Queen muses at length. "I do think they liked me, don't you? And I tried to do little things . . . but I was so young."

"More than liked. They will have to get to know the sterling qualities of your brother before their grief abates. . . . And now it is my official injunction to you to think only of the joy immediately ahead. Think how you will soon feel when your Prince appears with open arms and you are free to respond."

"Ohhh. Yes." And she thinks of nothing else, until they draw up at the rear of the cathedral, beside an inconspicuous old service door. Getting out of the car behind them is the elder lady, and the maid, with the bag.

"This is Lady Verdant, my dear. I believe you know her. She will take care of everything, and be within sound of your call at every moment."

With that, the Councilor departs.

A suitable time later he knocks at the Prince's door.

"Oh, come in."

He enters to find the Prince drying off from his seventh shower of the day in a pair of shorts emblazoned with the arms of Pluvio-Acida. He is fretfully trying to sharpen the ceremonial sword which his parents brought him, along with the other necessary accoutrements of the wedding. He is also glancing frequently at an ormulu clock which he suspects of having stopped, so slowly does the afternoon pass for him.

"This thing will *not* take an edge," he exclaims. "Absolute tinware. That's another thing I love about Ecologia-Bella—all your stuff is such fine quality. I wish I knew what you do to your work-force."

"Perhaps it's what we don't do," the Councilor smiles. "And now, my dear young Prince, you are about to participate in an old Ecologia-Bella custom which I fancy will please you more than anything on earth."

"Oh, God, do I have to get dressed?"

"Absolutely not." The Councilor shakes out another great gauzy robe. "Oh perhaps you might take a nice-looking dressing gown—that gold one over there will do." He motions to the valet who is entering behind him. "And a pair of slippers. Old stones are cold."

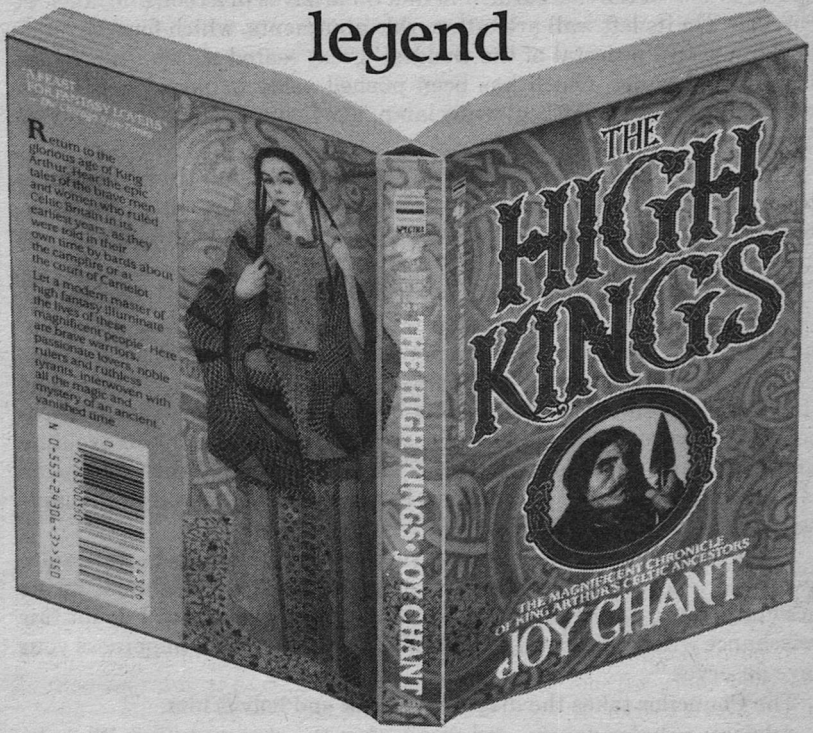
"And that's not the only thing that is," mutters the Prince. but his curiosity is roused, particularly when the valet selects a bottle of scent and a brush among the items he is putting in a bag.

"I think your complaints in that quarter will soon cease," beams the Councilor, helping him into the all-disguising cloak. "Now just come with me and try to look unnoticeable."

There follows a repetition of the backstairs journey, the auto, and the Councilor's explanation, omitting that part specific to Queen Amoretta.

NOW IN PAPERBACK

Joy Chant's dramatic chronicle of Celtic legend



"A feast for fantasy lovers"

—CHICAGO SUN-TIMES

A BANTAM SPECTRA BOOK

The Prince's response is everything the Councilor could wish.

"What a wonderful country!" Adolesco exclaims over and over, nervously crossing his legs. "What an enlightened land!—You really mean this? She'll be there? It's not some joke?"

"On my honor. Why, look—" he picks up a flower Amoretta had caught in her veiling. "She has just made this trip before you."

"Oh my God! What a country!" The Prince clutches the blossom as if it were the keys to Heaven, and recrosses his legs.

From the sunny afternoon in the parking area, they enter the inconspicuous door of the cathedral, and find themselves in a cool, dim, ancient corridor. On its left wall are tall marble abutments, which form the rear of the massive pedestal of the Goddess' great seated statue. In a recess is a sliding panel, which has been pushed aside to reveal a polished walnut door under a softly glowing lamp. The Councilor motions Adolesco to stop.

"Inside that door is an apartment, furnished with all things desirable to lovers. There are several rooms; your valet will be in a back chamber, ready to dress you later for the official ceremony, for which you will be called in ample time.

"In the first room you come to is a bed. And in the bed will be a young, virgin Queen, who has never seen the nude body of a living man. Nor has hers been seen by male eyes, nor touched by a male hand—not even a doctor's since her birth. And, mark well, she is also a Queen, of a long line of sovereign blood. Your behavior will require your utmost sensitivity. I know you have it; I have closely watched your talent for avoiding anger or alarm in a blooded horse. This is not to imply that the Queen is an animal, yet we all are animals in our basic emotions, and the same sensitivity runs through all, does it not?

"I leave you now. Compose yourself, and knock. If there be no answer—no answer—enter. But if the answer be 'No,' you must on no account dare to enter; call me and I will get you hence. But I doubt this mischance will occur. Now goodbye. May you have all the happiness your love deserves."

The Councilor takes the disguising cloak and leaves him.

Adolesco inhales deeply, and approaches the charmed door. When he knocks, it sounds to him like gunfire, though his hand had been as gentle as he could make it. Involuntarily he holds his breath, listening. No sound, certainly no voice, comes from behind the door.

His throat full of panic, he turns the latch and opens it.

The room that meets his gaze is a blur of soft light and color. He looks blindly round once till his gaze is stopped at a great silken bed.

The silk is pulled taut over what he can clearly trace as a young girl's

From the dunes of Frank Herbert to the chronicles of Thomas Convenant to the delights of Tolkien...

Experience ALL the best-selling hard-to-find Science Fiction and Fantasy you dare to imagine... in low-cost paperbacks.

If you crave the excitement and adventure of good science fiction and fantasy but hate waiting in line to buy your favorites...If you buy a lot but hate to pay expensive hardcover prices...If you want them all but don't want to join a book club ...It's time you discovered the **other** way to buy the bestsellers. A way that's quick, convenient and easy on your pocketbook—The Shop-At-Home Science Fiction and Fantasy Paperback Catalog!

Over 650 Titles to choose from!

If you shopped for months you'd never find the 100's of bestsellers you find in minutes in The Shop-At-Home Science Fiction and Fantasy Paperback Catalog. Robert Heinlein, Frank Herbert, Phillip Jose Farmer, Star Wars, Battlestar Gallactica...all the best science fiction and fantasy storytellers are here. Not just one or two of an author's titles, but everything in print! And the largest selection of popular adult science fiction and fantasy available. Over 650 titles in all, from hard-to-find to soon-to-be released. All in the most inexpensive paperback editions!

Having The Shop-At-Home Science Fiction and Fantasy Paperback Catalog is like having the bookstore come to you. Not just any bookstore. But one that specializes in out-of-this-world adventure! And unlike high pressure clubs there are no catches or rules. You buy any number of books when **you** want to buy them. No "automatic shipments" of books you never ordered but have to pay for!

Easy ordering, fast delivery!

Ordering from The Shop-At-Home Science Fiction and Fantasy Paperback Catalog is easy. You can charge books by mail or over the phone (for even speedier service). No waiting on out-of-stock titles...our giant inventory ensures prompt delivery. Right to your door, of course. And you pay only a minimum handling charge for the luxury of shopping at home—unhurried and hassle-free.

How to Order your Shop-At-Home Catalog Right Away.

To receive The Shop-At-Home Science Fiction and Fantasy Catalog, send $1.00 with the coupon below. Then sit back and prepare for excitement in the comfort of your armchair...at prices you can always afford. Shopping at home for bestsellers. Once you've tried it, you'll find there is no other way.

☐ I want to shop at home for best-selling sci-fi and fantasy at low paperback prices! Rush me The Shop-At-Home Science Fiction and Fantasy Paperback Catalog. I've enclosed $1.00 to cover postage and handling.

☐ Send me all five Shop-At-Home Paperback Catalogs —Science Fiction and Fantasy, Mystery, Western, Romance, and Fiction/Non-Fiction. I've enclosed $2.00 to cover postage and handling.

Name_____

Address_____

City_____ State_____ Zip_____

Mail coupon to:

BOOK MAILING SERVICE
Box 690 Dept A 4
Rockville Center, NY 11571

small body, and over the held-up top edge, under a mass of gold hair, are the two largest eyes he has ever seen in his life, seeking his.

Their eyes lock together. Tentatively he takes a step forward . . . then another . . . "Amy—?"

—But it is needless to follow in detail the drama that has played as long as the human race, though seldom at such intensity.

Enough to report that all goes well, very well—even the storm toward the end, when Amoretta confesses to being her own double.

"It all happened at the last minute—the poor little Queen was so torn up between her idea of propriety and her love for you that she got sick—I mean, really sick. And she knew she couldn't go through with it right, she wouldn't be any good for you. But she couldn't bear the idea of calling out 'No' and having you turn away all disappointed. So she called on me—in fact, maybe I suggested it. I'm not so strict on this virginity business as she is—I mean, I'm a virgin—I mean, I *was*—" She laughs enchantingly, so like a jollier Amoretta that his heart twinges.

(In fact, Amoretta, little mischief, is thoroughly enjoying her role.)

"But I kept on just for her, see, because we should be alike. I've always taken my job very seriously, I study her. You'd be surprised at some of the things I've done! Big long ceremonials of course—and some close work, too. Nobody's ever suspected. I went with her to your country in fact—did you ever suspect when I was with you on the stand reviewing the Pluvio-Acida Army, Navy, Air Force, and what-all?"

"That was *you*?" The storm has long since melted away.

"It certainly was. She knew it would take forever, see, and I like military shows much better than she does. My, you have a huge Armed Force. And oh, my, you were so handsome!"

"And you were very beautiful . . . But do you mean you've been around the Palace? Why haven't I met you?"

"Oh, you have. It was a tremendous thrill for me. But you never gave me another glance, no one does. I have different hair and eyes and all, and a piece of pink tape on my jaw that changes my whole face. Oh, and a bit of padding here and there. I call it my Uniform 'B.' When I'm being her it's Uniform 'A.' "

His eyes go over her, caressingly, astounded. "But you're so alike . . . it's unbelievable.— Look here, how do I know you two won't play more tricks on me?"

"Oh, we *couldn't*. Not now. But I'll tell you a secret—look!"

Unselfconsciously she rolls over to show him her peach-bloom bottom. "See that great brown spot on my left, uh—" Suddenly remembering who he is and what's been happening, she blushes rosy all over the peaches and makes to hide.

He holds her firmly, laughing and peering. "You mean this teeny little beauty-spot I can barely see?"

"Well, yes. But the Queen is *perfect*, see. That's my mark. So you can always tell."

"That might present a problem at an official function."

And between giggles and struggling they are soon entwined in the classic reconciliation. The whole thing now seems to the Prince rather more titillating than disappointing. What excessively healthy young man can be truly insulted by having a beautiful extra virgin to initiate on his wedding day? Nothing is amiss that a splendid Ecologia-Bella seafood salad won't cure, and that has thoughtfully been provided.

So he is asleep, and she nearly so, when she feels the final, fatal chill gently taking her. She has strength only to whisper a goodbye, but it is too faint to wake him. Not until the Councilor is standing over him with the dressing-gown does Adolesco come groggily to his feet—and he might have been hustled away without knowing anything is amiss did he not stoop to kiss her farewell.

Then the coolness of her flesh and the stillness of her body strikes him to full, frightened wakefulness.

"Oh my God—what—Help!"

"Help is here. We have always been afraid of this," the Councilor tells him, pulling him back so that two white-coated strangers may get at her.

"She has a heart condition. But these are our best cardiologists, they will do everything possible. Now you have other matters to concern you. Come, leave this charming lady to her doctors—you have a Queen to marry!"

So the Prince reluctantly finds himself in another chamber, being bathed and dressed in his most beautiful crimson uniform, and when he would have returned to the bedroom he finds it locked against him. But a long mirror that shows him splendid in scarlet and gold lightens his mood, and since, after all, he can do nothing, and this is a different story, he turns his rising spirits to his duties immediately ahead.

He is, it seems, a trifle late.

"You must hurry now," says the Councilor, guiding him to a winding passageway. "Just follow this, quickly—there will be people at the end to tell you what to do."

And now our single tale becomes complex, for it takes place in three arenas at once. Let us look first at what has been happening outside the cathedral:

The wedding parade from the palace is splendid beyond compare. Leading off is the first band, and never has music been gayer or more stimulating, never have uniforms glittered and instruments gleamed so brightly in a summer's sinking sun.

Behind their marching band comes a phalanx of the people of Ecologia-Bella, all in their national dress, which runs heavily to snowy ruffles and bright silks and braid, and is wonderfully becoming to everyone. These are the winners of the contests which have been held all year—contests of tree-felling, tapestry-broidering, chess-matches, gymnastics, welding, flower-growing, chimney-sweeping, computer-building, and everything-imaginable-contest winners, all prancing gaily along tossing flowers, together with some that have won no contests at all, but are merely beloved.

And then comes a splendid float, signifying everything noble and free and delightful, in a wondrous confection of so many flowers that their perfume pervades the whole air.

After it begins the long line of carriages, all beflagged, each drawn by matched teams of different breeds of horses, shining sorrel and ivory and ebony and spotted and red. The first carriages convey parties of visiting notables, and elder folk—and never have horses strode so stirringly, never have harness and head-plumes so sparkled and tossed. At this point comes a steam-calliope drawn by ponies, to keep up the beat, and right behind is the royal marching band from Pluvio-Acida, braying out their country's anthem—which is mercifully no more than briefly audible, by reason of the steam-calliope.

Following their band come two coaches of the royal family of Pluvio-Acida, nervously clutching the handholds of this unfamiliar vehicle, between perfunctory waves at the crowds.

And then comes—Ahh!—the first of the bridal party's carriages, in scarlet and gold, carrying the young nobles who will serve as Prince Adolesco's ushers. And behind them, in pastel colors, come three open victorias like huge floral bouquets of Queen Amoretta's bridesmaids and special friends. And finally, finally, passes a great white-and-gold landau like a wedding-cake, in which, totally veiled in gossamer and flowers, sits the Queen. (Or so it is believed, for Amoretta really does have a double.) She is accompanied only by her senior maid of honor and a beribboned nurse holding an equally beribboned Prince Truhart, and she waves warmly, but not frivolously to the adoring crowd, since this is a solemn day.

And behind her comes the cause of it all, a magnificently handsome Prince upon a tall snow-white horse, who curvets and prances like Bucephalus. The Prince's handsomeness is sensed rather than seen, because the plumes of his dress-uniform casquette are so gorgeous that only glimpses of his face can be seen. But his heroic figure and horsemanship are ample proofs of royalty.

Behind him comes a mounted contingent of the Palace Guard in gold and white and more plumes, their magnificent horses keeping step. After

Looking for a big one-of-a-kind gift? How about the infinite riches of the Universe...delivered in 13 bright, fascinating packages?

Why give knick-knacks for Christmas when for a stocking stuffer of a price, you can give your friends the sun, the moon and all the stars. Delivered thirteen times throughout the coming year in the pages of Isaac Asimov's Science Fiction Magazine.

Once-a-year holiday rates are now in effect. The first subscription to Isaac Asimov's Science Fiction Magazine costs only $15.97. Each additional subscription is even less—just $12.97.

And you can complete your Isaac Asimov's Science Fiction gift giving in a matter of minutes. Just fill out the form below or if you prefer, call us with your order toll free: 1-800-247-2160, Operator #300 (in Iowa, call 1-800-362-2860.)

Gift subscriptions received by December 1st will start at the holiday season. Orders that arrive subsequently will begin with the current issue. Greeting cards will be sent to announce your gift.

Mail To:
Isaac Asimov's Science Fiction Magazine
P.O. Box 1933
Marion, Ohio 43306

☐ Payment Enclosed

Gift For:

Name _____

Address _____

City _____ State _____ Zip _____

☐ Bill me after January 1.

Bill To:

Name _____

Address _____

City _____ State _____ Zip _____

Sign Gift Card _____

DSN5S

them follows a final band, whose tootling and boomings pace the horses. The last element is a large troop of the prize-winning animals raised this year, with their proud and largely juvenile owners, all led by a great black bull.

And the whole is followed by a melodious rabble of street-singers, jugglers, and stilt dancers; while the end is brought up by a highly functional squad of debris-collecting trucks in white-and-gold.

And from start to finish of the line of march, at the sides of the way are people releasing (and handing out) balloons, and white doves who have been trained to circle becomingly before heading for their cotes, and others passing out floral streamers and whistle-pipes and confetti—and also a sprinkling of dress-uniformed police men and women, whose main task is to retrieve mislaid children who have temporarily joined one of the bands.

And inasmuch as the Prince is from whence he unfortunately is, the crowd contains more than a sprinkling of emphatically non-uniformed Palace Guards, who happily have no cause that day to display their special talents.

The parade ends in front of the cathedral, where there is a fine grassy square onto which the popular elements of the parade disperse and find their places in a reasonably orderly way, while the carriage passengers draw up to disembark on the cathedral's main steps to enter the huge nave, which is already well filled.

The bridal party proper disappears around the corner to debouch at the official side door, which opens into a large corridor of antechambers and retiring rooms, where a procession may prepare and form up.

And here we leave them for a moment.

In the main hall, the organ, a famous beauty, has been softly playing various celebratory bits. Now it voices several grand chords, and all fall still. Into the silence rises the music of a single flute from overhead—a delicately enchanting yet solemn solo, symbolising the tenderness and depth of the impending event. The flautist is world-class; even the Pluvio-Acida contingent cease rustling and complaining to listen.

Following this, according to Ecologia-Bella custom, a veiled priestess of the Goddess of Restrained Fertility advances to the flower-flanked altar, and beautifully chants a prayer for all the appropriate blessings, and in only their appropriate number. As she completes her chant, the archbishop of all Ecologia-Bella advances to her place before the altar.

But at that moment the priestess notices that a certain small green light amid the flowers has not come on, signifying a delay. With long experience in ceremonial matters, she adds a prepared coda to the prayer proper, plus a moment of silent meditation, and the light is on. She turns

and is walking away—when there occurs an extraordinary event for whose inception we must return to the royal bridal party itself.

We left them entering the corridor of antechambers which are at the side separated from the nave by a heavy baize double door.

The various parties vanish into their respective retiring-rooms to effect those inevitable small repairs and recuperations required after a long, tiring ride. The royalty of Pluvio-Acida are offered light refreshments, which the Puerco Volantes have never been known to refuse, and restoratives are presented in the chambers of the gentlemen ushers and the bridesmaids and friends of the Queen.

But the figures of Queen Amoretta and Prince Adolesco quickly disappear into separate royal apartments where they may be alone. These are set in this side of the pedestal of the great goddess-statue, where, unknown to most, they communicate privately to the even more private apartment on the far side, which we have already met.

Thus, when the young lady who has ridden in the Queen's carriage enters the Queen's retiring-room, she is quickly relieved of the royal crown and robe and veiling, and turned loose to mingle and enjoy herself among the other bridesmaids, who are unaware of the substitution. And a secret door is opened, and a small, cold figure is carried in. Lady Verdant alone remains, to attire the recently so-vividly alive little body in the irony of her wedding clothes.

Next door, a happier exchange is being made. The temporary Prince enters, gratefully relieving himself of the overly plumose casque and Adolesco's sword and other accoutrements. He is in fact a handsome blond groom from the royal stables, who has thoroughly enjoyed himself—save for the feathers—on the Prince's splendid white horse.

As he reverts to groomhood, there enters in haste Adolesco himself from the secret corridor, who still has barely presence of mind to thank his impersonator, and they might have got into a discussion of the gelding's off rear pastern problem, but for an elderly man—whom neither the Prince nor many others have ever seen before, or since—who hurriedly enters and grasps the Prince's arm.

"Quick! You are late! Your Queen stands alone before the altar, the archbishop is waiting!"

The unknown functionary hustles the Prince into the main corridor, which to his eyes looks ominously deserted, and they rush to the great baize doors. The Prince's escort takes a peek out.

"Hurry! She is becoming impatient! Oh, Heaven—she is turning away. This is no time for explanations, young man—Are you strong enough to carry her?"

"Yes! But—"

"Then dash out there, pick her up and carry her back to the altar and *marry her*," the elder exhorts him. "Go!"

And such is the profound disorientation of the young Prince, after a day fraught with emotional events, in which he has obeyed strange commands with even stranger outcomes—that he dashes forthwith out the baize doors into the Cathdral aisle, where a veiled girl is walking away—picks her up bodily and carries her back to the altar, where the Archbishop, being a trifle near-sighted, automatically begins to intone the wedding service. And any remarks by the lady are drowned out by the choir overhead, who burst incontinently into song.

The congregation is frozen dumb with shock. But at the first moment of relative quiet from the choir, the priestess throws off her veil and cries, "Release me this instant, you imbecile! I am not your Queen!"

And indeed, all saw that she could not be, for she is as beautiful as Sheba, and as black.

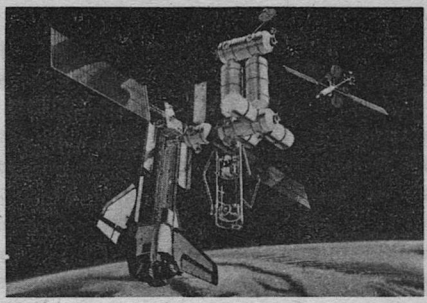
This moment of cosmic embarrassment is ended by the arrival of a posse headed by the Council and Prince Slimoldi, who between them manage to get Adolesco back behind the baize doors, having urged the audience to remain calm.

The antechamber events which then began to ensue can be imagined, for the discovery of the Queen's body is imminent, but we must pause a moment to inquire how this bit of what can only be called buffoonery comes about on tragedy's *eve*.

First, the identity of the elder who gave Adolesco the idiotic commands is never satisfactorily resolved, and he has disappeared. The more Machiavellian-minded suggest that he may have been one of Prince Slimoldi's advisors. Others take the view that he was simply an over-age cathedral retainer whose wits had been overcome by excitement so that he misinterpreted matters. The populace in general tend to believe that Adolesco was temporarily deranged by the news of his Queen's death, and, ignorant of the country's customs, saw what he thought was his lost love waiting.

Whatever the explanation, the episode effectively quenched the gathering glow of the young Prince's charisma in Ecologia-Bella. To have reacted to the death of his beloved by rushing out and attempting to wed the priestess, simply couldn't be seen in any very favorable light. The Ecologia-Bellans relate it with guffaws and giggles between their sighs.

But is this not an outcome which the more foresighted members of the Council may have wished? Is there not an element of danger to a small country whose people begin to sentimentalize the ruler of a neighboring, hostile state? And, finally, is not the removal of latent dangers the Council's business?



NEXT STOP:
SPACE STATION

". . . I am directing NASA to develop a permanently manned Space Station, and to do it within a decade." . . . President Ronald Reagan, State of the Union message, January 25, 1984.

Are you a person of vision? Are you excited about this next new stepping stone in mankind's future? Did you know that there is a magazine that covers these developments better than any other? Did you know that there is a non-profit public interest organization, founded by famed space pioneer Dr. Wernher von Braun, that actively supports all aspects of a strong U.S. space program? That organization is the NATIONAL SPACE INSTITUTE. If you're a member, here's what you'll get:

- 12 big issues of Space World magazine. Tops in the field. Follow the political, social and technological aspects of all Space Station developments—and all other space exploration and development too!
- VIP package tours to Kennedy Space Center to watch a Space Shuttle launch—the thrill of a lifetime!
- Regional meetings and workshops—get to meet an astronaut!
- Exclusive Space Hotline and Dial-A-Shuttle services.
- Discounts on valuable space merchandise and books.
- and much, much more!

So if you are that person of vision, your eyes upon the future, excited about the adventure of space exploration, let us send you more information on how to join the NSI. Just fill in your name and address and our packet will be on its way. AND, we'll send you a FREE Space Shuttle Launch Schedule which is yours to keep whatever you decide to do!

Name _____

Address _____

City, State, & Zip _____

NATIONAL SPACE INSTITUTE
West Wing Suite 203
600 Maryland Avenue, S.W.
Washington, D.C. 20024
(202) 484-1111

Thus there are those who surmise, on the rule of *Cui Bono*?* that the Council itself may not have been so *very* surprised by the Prince's actions; it simply went off better than their hopes. Even the kindest of Ecologia-Bellans agree that a youth who could behave so isn't ideally suited to be their King.

But we must return now to the antechambers of the cathedral, where word is starting to run that something dreadful has happened to the Queen. As the members of the procession emerge to form in line, a white-coated man stations himself beside the Queen's door, and from outside come the unmistakable sounds of an ambulance arriving.

"The Queen is gravely ill. The wedding is . . . postponed."

"Vehicles are coming to convey you back to the Palace, or wherever you may wish to go," the Councilor tells them. Attendants materialize, ready to help.

But the Prince pushes his way into the chamber where his Queen's body lies. One look at the idle equipment dismays him.

"Why aren't you *doing* something?" he demands of the doctors with Lady Verdant. "Revive her, damn you! Let me by—I will!"

He is restrained, but not before his fingers have brushed the stony coldness that convinces more than words. He stares down, heart-stricken.

But one wild hope remains. There has been too much confusion today.

"Leave me alone with her for five minutes! I demand it as my right."

"Very well, your Majesty," replies the Lady Verdant, motioning the others from the room. But as she turns to follow, she says to him quietly and sadly, "Do not concern yourself with moles, or beauty-spots or such, my poor young Prince. I removed the one you saw, as I put it on. You see, the Queen conceived her tale of a double to protect a little of her modesty. It was the Queen herself you were with."

He looks at her in silence, his last hope gone. He has, he realizes, loved Amoretta very much, and never more than now. . . .

Let us leave him to the few moments' privacy allowed to royalty and grief.

When they are over, the Councilor comes in. He has a proposal.

"I won't intrude on you with my condolences. Death has touched me too. But there remain practical matters. I imagine you would prefer to spend some time now in your homeland—you will appreciate that at the moment your, ah, image here is rather mixed."

When the Prince frowns at him uncomprehendingly, the old man adds, "Ms Victoria Ntutu."

"*Who*?"

"The priestess you, ah, partially wedded."

---

* *"Cui Bono?"* is the question of who profits by an event.

"Ohhh." He clasps his hand to his forehead. "What shall I *do*? I don't want the family—"

"Listen. The Ecologia-Bella International Overnight Express will be departing shortly. I remembered that you enjoyed your trip in her, and I have taken the liberty of having the royal coach attached to the first section. If you give the word, I will convey you privately to it. Your things will meet you there. By tomorrow noon you will be at your capital, having had a long night and morning of peace and calm. What do you say?"

The Prince's assent is never in doubt.

So that is where young Prince Adolesco spends his wedding night, and it is as soothing and pleasant as—under the circumstances—can be. And curiously, this is his last night as Prince.

By a chance which not even the Ecologia-Bella Council could have improved on, his mother, Queen Porcellana, is now actually quite ill from an excess of oxygen combined with the deprivation of certain food additives one can become quite dependent on. She demands to leave this dreadful place at once.

So King Puerco Volante orders up the royal jet, undeterred by the fact that the weather has broken at the Queen's death, and storms are in the mountains. Moreover, the pilot has been celebrating a little prematurely.

When the mountain passes turn out to be raging vortices of thunder and gales, the pilot retains the sense to rise high above the ranges. But when a massive cloud-to-cloud lightning bolt strikes the plane and takes out the electrical systems, he cannot recall in time which of the six hundred and eighty-five switches will solve matters—and orders the party to bail out.

And alas, it is discovered too late that the last surviving family of porcupines in Pluvio-Acida, escapees from the local zoo, have been nesting in the royal parachutes. The multiply-punctured silk ruptures above two thousand metres. And poor King Puerco Volante belies his name: he can in no way *volar*, nor can Queen Porcellana or Prince Slimoldi.

So Adolesco arrives refreshed in his Capital to find himself the King of Pluvio-Acida, and for the next years has a great deal to do.

Thus when a youngster grasps at too much, and is told to "Remember the Crown Prince's wedding," he may reply, "Yes—but he ended up King!"

To which may be given such answer as seems appropriate.

There is a coda to our story, which no man alive today in Ecologia-Bella may know:

A few days after the tragic death of Queen Amoretta, in an ancient, rambling, stone-and-mortar nunnery high up in the wooded mountains,

a brown-haired girl opens her brown eyes and speaks for the first time, slow and soft.

"Am . . . I . . . alive?"

The old man who is bending over her says, "You are. Queen Amoretta is not."

"How . . . sad."

"Yes and no. Would you take something to drink? You've been unconscious for several days."

"Yes. . . . An accident?" She is more alert.

"No. A rare new hypothermic drug we are testing for certain conditions. Including difficult rescues."

"Oh . . . " She smiles, and soon has soup to occupy her.

And we can fill in the tale from here on. Sister Inconnue, as she is called until she shall choose her name, gradually regains all her memories. Meanwhile she has been studying. They have started her on the knowledge of all the flora and fauna of Ecologia-Bella. The nuns are a teaching order, and its best pupils finish at universities all over the world, before returning to enrich their country.

"It all seems like a dream," she says to the Councilor on one of his periodic visits. "Very sad and rather silly. But why?" she asks earnestly, "Please tell me, just why? Couldn't you have done it, well, differently?"

"No way," says the Lady Verdant, and bites her embroidery-thread.

"You see, my dear," the Councilor explains, "after very earnest thought by the full Council, we came to two conclusions. "The first was that a small country as vulnerable as ours simply cannot afford a beautiful young virgin Queen. You saw what was already arriving at the Palace; there would have been no end to it. Jealousies, conflicts, all sorts of involvements. And sooner or later, the country's freedom would have been imperiled. That isn't true for your brother, he can't bring home a ruler. The international succession laws are archaic, of course; a crime. But we can't change that.

"One other—and equally important—discovery was that somewhere under those golden curls was a brain, which it would have been a sin to destroy, and a shame to waste upon the symbolic activities of Queenship. This way, if you study hard, you can make yourself perhaps into a Councilor of Ecologia-Bella, and that, as you may have noticed—"

"Is the real power in what I thought was my land," she says mischievously.

"Exactly. A dangerous system, but the best we have found."

"I see . . . " She looks away reflectively. "I wonder. Maybe, when I am old and very wise . . . would it surprise you if I proposed another?" ●

art: Sheila Smith

VARIATIONS ON AN ALIEN VISTA

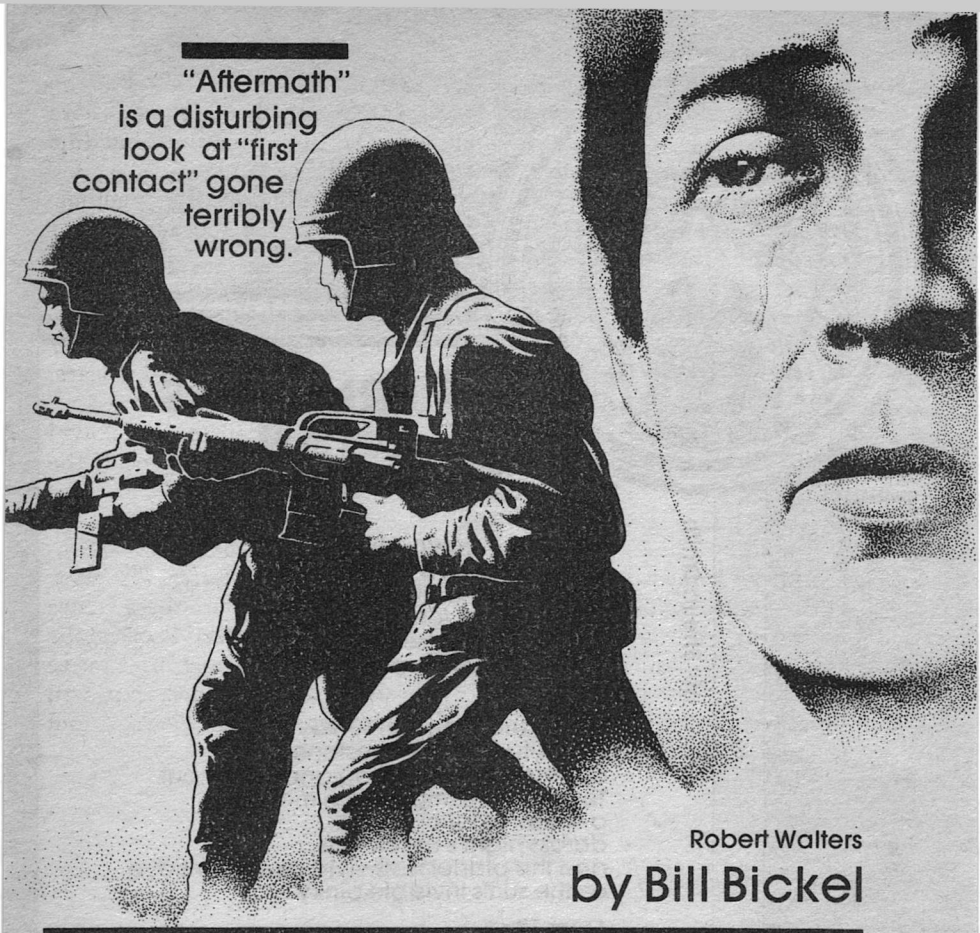
From Mimas.
Little but a snowball itself,
where a team is mass-driving
ices out to the Titan colony,
Saturn looms forever on stage,
costumed in a yellow chiffon
and sequined in particle fog.

From Dione.
The planetological survey favors
this solid little cobblestone,
cratered and cracked and further out.
The glowing ring system makes
a streak of tailor's chalk
across night's black tails,
and the planet rests vivid as a tiger's eye
on the sun's invisible pinky.

From Titan.
Above the terraformers that crawl
on Titan's surface like honey bees
along a bowl of sugar water,
Saturn now becomes a malachite bead
with gassy veins tinted by
Titan's thin cyanic atmosphere.
Columns of rock dust and snow
obscure only the finest details.

From Iapetus.
With abrupt orbital inclination, the rings
suddenly balloon out into a socket
skillfully eye-lined with silver
and the black of Cassini's divisions.
The aquamarine pole stares out,
a pupil fixed on the galactic core.

—Robert Frazier



Robert Walters

by Bill Bickel

AFTERMATH

I don't even remember giving the order—but I must have, and in less than three minutes, they were all dead.

I felt sick, checking the bodies of the five aliens. Most of my men had killed before, or at least had been trained with the possibility in mind, but I'd been too young for Viet Nam and then too old for Honduras, so I wasn't handling it well. The State Militia is supposed to mobilize in the event of a natural disaster, or a long-term postal strike, or a local riot—but I'd never expected to have to face hostile beings from space.

Their apparent leader—their own "Captain Russell Booth"—was the first killed, and had gotten the worst of it. Somebody from somewhere would no doubt want to perform autopsies on these creatures, but this one's vital organs probably wouldn't be of much use.

Their arms were short, club-like things, with big, box-like endings. Attached to each one were about a dozen tentacle-like appendages that presumably functioned as fingers.

Their uniforms were solid black, not the friendliest-looking things. I'm sure most of my men thought *Darth Vader* at first sight of them.

They seemed humanoid in most ways, until you looked through their faceplates and saw that more than anything else, they looked like bears.

Within an hour, the bodies had been taken away to Penderbrook Naval Hospital, Army scientists had removed for study everything inside the ship that wasn't bolted down and were examining the rest, and the governor had begun an on-site press conference.

"Gentlemen and ladies, as most of you know, a race of aliens—extra-terrestrial beings—have sent a ship of their soldiers to Earth. We knew nothing about this until approximately ten minutes before these troops landed, at 3:40 P.M. Central Standard Time. Captain Russell Booth of the State Militia was first on the scene, and it fell to him and his men to hold off the aliens until the Army could arrive. The alien soldiers initiated an attack, and Captain Booth's men defended both themselves . . . and the rest of us."

"Governor Whitson, were any of the Militia hurt?"

"No."

"Was this the only alien ship?"

"To our knowledge, yes."

"Is it true that the aliens are from Ursa Major?"

"Excuse me?"

"The star system. Ursa Major, the Big Bear. According to the photos, they look just like bears."

"Uh . . . we have no way of knowing where—"

"But they *could* be from Ursa Major, isn't that right?"

"I suppose they could be."

"Thank you, Mr. Governor."

I would just as soon have forgotten about it, but of course that wasn't likely to happen. Not only was our first contact a tremendous story, but our unique military victory caught the imagination of the American people, who had tasted victory with the liberation of Honduras, and were hungry for more.

ALIEN INVASION FOILED was the general headline, the variations

being E-DAY LANDING REPULSED and EARTH DEFEATS URSA MAJOR.

My wife Rachel nodded as she held the phone receiver to her ear. "Okay, okay, thank you for calling, Mrs. Laskin. I'm sorry if it was any inconven—okay, thank you. Goodbye."

"What was that all about?" I asked her.

"Johnny Laskin, a boy in my homeroom class. He's been interviewed by the *Herald*. Apparently, so have most of his classmates."

"What about?"

She looked at me in amazement. "Remember that little incident yesterday afternoon?"

"You're kidding. It's not enough they wanted my life story, they've been bothering you and Cliffie and the neighbors, but now they're talking to your *students?"*

"It does seem kind of silly, doesn't it? But remember, Russ, they've got nothing to write about those aliens from Ursa Major—"

"They're *not* from Ursa Major."

"They are now. Look, there are worse things that could have happened. You could have lost, right?"

"I guess so. I just wish I—remind me in the morning, will you, first thing, I want to call the governor. I want to find out a few things myself."

"Why not just call him tonight?"

"How can I do that?"

"You're a national hero, remember? You'll get through."

Governor Whitson was not as pleased to hear from me as he pretended to be. After listening to a few minutes of happy talk, I interrupted him to say, "Sir, reporters have been asking me certain things, such as what happened when they performed autopsies, and what was taken from the ship."

"All that is classified, Captain."

"Okay, then *I'd* like to know."

"I'm afraid you don't have the proper clearance."

"Governor, I would *really* like to know. And how would it look if the media found out you were keeping all the information from me?"

"It's not me, damn it."

"I know that. But you can clear it for me, can't you?"

He didn't say anything right away, but I knew he was going to do it. "Everything you'll see is classified, remember."

"I understand. This is for me."

I chose to examine the lone alien who had not been dissected, and its resemblance to an anthropomorphic bear was even more pronounced

without the uniform.

He was dead, but his face still bore the threatening expression it had two days earlier.

Threatening by our standards.

Of course by *our* standards, this was a relatively mindless carnivore who lived in the forests of North America.

Out of their gauntlets, the hands looked even stranger than they had before. They were indeed squared off, looking in silhouette as if they were human hands carrying a box-like object.

I realized, for the first time on a conscious level, that when the aliens came out of their ship, they hadn't been carrying weapons.

"Oh," Rachel said.

"Yeah. Oh."

"But that doesn't mean anything. That doesn't mean they weren't hostile."

"Some people have been saying all along that we shouldn't have killed them."

"And what, let them kill you? And go on to do God knows what else?"

"But how do we *know* they would have?"

"You don't know. It was a matter of judgment."

On the kitchen table were half a dozen drawings by kids in Cliffie's first-grade class. They all showed a group of soldiers fighting off evil-looking grizzlies.

The kids had sent them home with Cliffie, asking him to autograph them.

"That's not enough. Somehow I've got to find out."

"But—"

"Rachel, look at this. I'm the biggest hero since General d'Asina, or even Neil Armstrong. But I can't help feeling I did wrong. I did something terribly wrong."

If she'd assured me I'd acted properly, been certain I'd done the right thing, I might have believed her. But she just said, "Let it rest."

And of course I couldn't do that.

A series of photographs, taped to the laboratory wall, diagrammed the ship's insides. Jim Betancourt pointed out each section, explaining what either he or another of the scientists guessed its function to be. Later in the day, professors of sociology, psychology, physiology and various other ologies would be dropping by the Institute to add their opinions.

"Sleeping area over here," Betancourt said, indicating a room on the floorplan.

"How can you tell?"

He shrugged. "Separated from the control area, and there are five units. That's our best guess. You got a better one?"

"I guess not."

"Okay. Over here, the sanitary facilities. Apparently they didn't do it in the woods."

I managed to smile. He was telling jokes to the wrong person today; but I was being given a tour of a top-secret research facility, and getting my questions answered, so if this was the sort of humor making the round of the Institute, I could at least be tolerant of it.

"Over here was a shelf," he said, "and on it"—he walked over to a large table—"were these." He pointed to eleven boxes, shoebox-sized metal things, each with twenty or so buttons on its sides. "I was dissecting one of them when you came, but your guess is as good as mine."

"You mind?" I asked.

"Go ahead. It's been certified germ-free."

I picked one of them up. It was lighter than it looked, but clumsy to hold, and its slight vibration made my hands tingle a little.

"What else have we got?"

"Well," Betancourt said, going back to the map, "over here was the radio. We thought we'd be able to pull it out, but we couldn't without destroying it, so another team's in the ship studying it right now.

"Okay," he said pointing to another section, "here's where we found, each wrapped in something that acts like lead, a number of slightly-radioactive disks. My guess is data-storage, their system using radiation like ours uses magnetic impulses. Anderson over there is going to tell us if I'm right." Anderson overheard from the far side of the room, and gave us a long wave with a coronite-gloved hand without looking up.

"The rest of the booty is clothing and foodstuffs," Betancourt said. "Nothing too remarkable or interesting. What exactly are you looking for, Captain?"

"I don't know. I ordered five of these people dead Monday afternoon, and I don't know, I just wanted to know what they were about. If I did the right thing."

"I think you did. Most people do."

"Thank you. But I wish I knew."

He shook his head, not knowing what to say and probably wondering why I had doubts at all. Just like the doctors who'd dissected the aliens, he had no concept of them as having been living beings.

I walked slowly across the Institute's grounds, toward the guarded checkpoint and, beyond that, the government car waiting to drive me home.

I don't know whether I heard the explosion first, or felt it. Probably heard it, because I think I had a moment's realization before the force

of it threw me off my feet. Everything went blank, and I never felt myself hit the ground.

Everything around me seemed super-defined, a bit too colorful, and I lay paralyzed as five bears encircled me: Yogi, Smokey, Fozzie, Winnie the Pooh, and the bear from Disney's *Jungle Book*. They were all smiling at me except for Smokey, who gave me a disapproving frown that turned more and more menacing.

And then they began to fade. . . .

I woke up very slowly, relieved that everything had been a dream—though of course it wasn't. I tried with all my will to make it just a dream; to wake up for a second time, only this time the aliens wouldn't have landed.

I couldn't do it. I tried telling myself they'd come to conquer, and if we hadn't killed them, they'd have killed us, but I knew it was a lie. They hadn't been carrying weapons, but had left weapons in the ship that were capable of . . .

Of what, exactly?

"What happened?" I said. Or maybe I hadn't. I was still in a fog. "What happened?" I said again, and this time it must have been audible, because somebody said, "Lie back down. You'll be fine, but keep still."

"I can't see," I told him.

"It'll come back. You're lucky to be alive."

"What happened? Tell me."

"Somebody set off a bomb at the Institute," Governor Whitson said. "The entire building went."

"No," I said, "That's not what happened. It was one of the aliens' weapons. I saw it. Betancourt was examining it, and he must have set it off, like an unexploded bomb. They'd left the things behind, Governor. They came in peace, and we killed them. *I* killed them."

I waited.

"Can you hear me?" I asked. "Say something. I don't know if you heard me or not."

"I heard you. You're still under sedation, Captain, but you're wrong. It was a terrorist attack of some sort. There's no question about it."

I felt myself losing consciousness again, with no way of proving I'd ever regained it. "Doctor," I heard Governor Whitson say, "let me know when Captain Booth regai . . ."

"I think in light of the fact that their attack was so easily repulsed," the president's voice was saying in its familiar, slow, New England twang, "we have little to fear in the way of a second attempt."

I couldn't tell whether I was hearing a radio or a television. Probably

a radio, since the sound was coming from my right, and a television would probably have been closer to the foot of the bed.

The room still smelled like a hospital.

"Who's here?" I said.

"I am," Governor Whitson said. "To your right."

"I can tell. Where's Rachel? Why isn't she here?"

"Mr. President," a reporter was asking, "have the Army scientists found technology aboard the ship that might benefit us?"

"Well, as you know, Mr. Franklin, most of what had been on the ship was destroyed along with the Fallsburgh Institute. We have every reason to believe, by the way, that this bombing was instigated by a foreign power—one that was afraid of what we might learn."

"That's not what happened," I said. "One of their weapons exploded. And nobody could have gotten in there anyway."

"Maybe," Whitson said.

"Doesn't he know that?"

Whitson didn't say anything—he probably shrugged his shoulders.

"Where's Rachel?" I asked again.

"She hasn't been here. Russell, we didn't want you talking to anybody."

"About what?"

"You know the sort of hero you are, yes? Of course you do. Right now everybody regards what happened last week as a great victory. Nobody but you can say otherwise."

"And you just want me to accept the life of a hero. Ticker-tape parade, the works."

"Uh . . . yes."

"I can even do the lecture circuit. 'Yep, I killed them. Thank you.' "

"Captain—"

"What you don't want me to tell anyone is that we killed unarmed creatures."

"It's worse than that," Whitson said. "They were unarmed when you shot them, but they did possess weapons. They've apparently got a technology far surpassing ours, which presumably extends to their destructive capability."

I knew that. I wouldn't be a party to keeping it a secret, but I also didn't like hearing it.

I felt a sudden dizziness, and had a feeling this was my very last chance to make it all a dream.

I shook my head sharply.

"Are you all right?" Whitson asked me.

"Another ship's going to come, maybe a whole fleet, and wipe us out."

"I wouldn't go that far, but yes, it's possible. They've got the power,

and they've certainly got a reason."

"God."

"But it's very likely they won't," he said. "So that's not our chief worry. They could be above that, or they could not know where the ship landed, or what happened, or maybe they don't have any more ships capable of the trip. Or it could take centuries to get here from there."

"And if I keep my mouth shut, we'll avoid panic."

"Panic or worse."

"I don't think I can do that."

"I didn't think so."

"Then . . ." I wanted to choose my words carefully. "I'm surprised I 'survived' the explosion."

"What you're talking about goes beyond a governor's authority."

"Oh."

I wished I could see his facial expression as he said that.

"You'll be going home tomorrow morning," he told me.

"My eyes . . . ?"

"All we can do is wait."

"Oh."

"What will you do?"

I took a deep breath and let it out slowly. "Call for a press conference, I guess."

"We can't be sure how people will react, of course, but you know how it will affect you."

"I know."

I made my speech a few feet from the twelve-foot-high fence surrounding the spaceship. I was barely able to make out people's shapes, so Rachel stood by my side, calling on those reporters who had questions. She told me afterward that many of them seemed stunned by what I'd said.

Governor Whitson was not there.

When we got home, Rachel pulled up abruptly to the curb. She told me there was a small trash fire on our front lawn, and one of our picture windows had been broken. "Good news travels fast," I said.

She didn't answer me.

"Rachel? What's wrong? Is there something else?"

"Cliffie. He was supposed to be waiting here, with Mrs. O'Neill." She ran from the car, leaving me sitting on the passenger side, blind and feeling quite useless.

I found my own car key in my jacket pocket, turned the ignition to auxiliary, and put on the radio. ". . . more details on the massacre of the aliens from Ursa Major as they are released. And now, more music to—"

Massacre? Not exactly what I'd said.

I turned the dial. Another station was just beginning its report. It seems Whitson had announced, just minutes before my press conference, that I'd lied in my preliminary account, and that I'd ordered the "unwarranted massacre" of five unarmed aliens who'd clearly come in peace.

It took this a moment to sink in. I was being crucified. Whitson was covering himself, and every public official who'd praised me, by reinterpreting my actions in the worst possible light.

I opened the door and ran outside, ignoring the steady buzzing that told me I'd left the key in the ignition.

"Rachel!" I called out.

No answer.

I squinted, then rubbed my eyes. Could I make it to the house?

I could smell the smouldering fire. The car was parked along the curb, not in the driveway. But where in the yard was the fire?

I couldn't see anything discernible as a house. I crouched down, trying to feel for the flatstone footpath that cut across the lawn toward the front door.

I couldn't find it. It's amazing how much you think you've observed about your own home.

"Rachel! Cliffie!"

I followed the insistent buzzing back into the car, and sat there without putting on the radio.

Immediately after listening to Governor Whitson's speech, half the reporters in the county had descended upon my house for a comment; the right hand not knowing that the left hand was on its way to my own press conference.

The first two times Mrs. O'Neill answered the phone, it was A.P. and the New York *Times*; after that, until she stopped answering, it had been crank calls.

When the reporters got to the house, she'd told them I was being kept at Our Lady's Hospital for another day, and as soon as they left, she took Cliffie over to her own apartment.

"Daddy," he said after Rachel had brought him home, "why does everybody hate you?"

"Oh," I said, "I wouldn't say they *hate* me . . ."

"Uh huh," he said. "That's what they said on tv. They say you killed a lot of little bears."

Which is how a cartoon in the next morning's paper would depict the event, as Rachel described it to me: A dozen heavily-armed soldiers encircling and opening fire on a bunch of adorable little teddy bears.

"That's not exactly what happened, Cliffie."

"I knew that."

"All we saw were people—they looked like people to us—coming out of a spaceship. They were pretty big, and we didn't know whether they wanted to hurt us. It looked like they did."

"Did they?"

". . . No. But we didn't know that. We thought they did. I thought they did."

"But you were wrong," Cliffie said slowly.

There's something gut-wrenching about the first time a boy thinks that about his father.

"I was wrong," I told him.

I've known Private Rick Cooper since he joined the Militia over a year ago. And I could tell, even without seeing the tv picture, how he was being maneuvered by the evening news interviewer. And finally, out of his mouth came the phrase: ". . . only following orders."

"Bingo," the reporter must have thought, and the segment was abruptly clipped at that point, leaving Cooper no chance for clarification or explanation.

This made all the next morning's headlines, of course.

An emergency session of the U.N. General Assembly was called by Cuba and Guam, to condemn the U.S. and decide whether to declare me a war criminal.

All of which isn't to say I didn't have well-wishers, but for every one who called to give me moral support, understanding that I hadn't consciously done anything wrong, there were at least half a dozen who were on my side because killing aliens was the categorically correct thing to do.

The only good extra-terrestrial bear is a dead extra-terrestrial bear.

With supporters like these, I didn't need the other 90 percent of the calls, the ones damning me in no uncertain terms.

"It's not that everybody's so upset about five dead aliens," my lawyer pointed out, "no matter how much they go on about it. What they are is scared of what's going to happen next. That you've called down the wrath of God-knows-what upon them."

It seemed reasonable when he said it, which I suppose is why he's a lawyer.

Technically, I would be entitled to a government lawyer if I were actually charged with anything, and a military lawyer in the likely event of a court-martial, but I didn't want anybody whose loyalties might be divided, and I didn't want to wait; so I found myself a lawyer the way

most people probably do: through the recommendation of a friend of a friend.

He was a few inches taller than me, and when he shook my hand firmly, his hand seemed bone-dry.

He smelled like a lawyer; an observation that cannot be elaborated upon, but which seemed perfectly reasonable to me. When you can't see, you pick up your impressions in other ways.

"And I'm the harbinger of their destruction," I said.

"The cause, more likely," he said. "Sorry, but I'm just telling you what they're thinking."

"I understand. And you?"

"I think people shouldn't give press conferences without their lawyers present, that's what I think."

"So what do we do now?"

"Nothing. A libel suit is the worst thing you could possibly do. Trust me on this, Captain, because it's not the sort of thing lawyers say lightly."

He probably smiled at this, but I had no way of knowing, so I remained noncommittal.

"You were right to come to me, though," he said. "I've spoken to you, I know your case, and if anything does happen, you can direct any questions to me."

"Okay."

"You *will* direct any questions to me. Understood?"

I nodded my head. "Understood."

Cliffie was very quiet over dinner, and when he did talk, he sounded strange. "Are you okay?" I asked him.

He didn't answer.

"Cliffie? I know you're upset about—"

"Russ," Rachel said, "he was in a fight this afternoon."

"Oh?" I said, as if I didn't know why.

His secret out, Cliffie began to cry. "I was beat up," he said. A pause, then: "Because of you."

"Oh."

"They said we're all going to get killed by aliens because of you." I heard him getting up from the table. "Everybody hates you," he said, running from the dining room, "and especially I hate you too."

I tried very hard to smile. "I don't suppose this is just a normal phase he's going through."

"Russ, I'm sending him to Atlanta tomorrow morning, to stay with my mother. At least until things settle down."

"You're right," I said. "He'll be happier there." I'd have liked to have been consulted first.

"Safer," she said.

Cliffie didn't speak to me before he left. I tried to explain things to him, but I didn't even know if he was listening.

Soon after Rachel left to take him to the airport, and I was alone for the first time since the explosion, I received my second phone call from the Trumann Scott Agency.

I made it to the phone rather quickly, all things considered.

Rachel had wanted to disconnect the phone, or at least have our number changed, but the calls from the crazies were tapering off, and I refused to make this concession to the obscene callers of the world.

"Have you reconsidered our offer?" the agent asked me.

"I'd have thought *you* would," I said. "Last week, I was a hero. Today I'm notorious."

"So?"

Naive of me to think otherwise. "I fail to see the appeal," I told him. "It's not as if I'd ordered the aliens shot during a berserker rage and my life story would help illuminate why. I—"

"One million dollars," the agent interrupted. "That's your guarantee. Let us worry about sales. Listen, Senator Fleming is trying to push through a bill to make your killing the aliens a crime. You've heard that?"

"I have."

"Now sure you can choose from any number of hot-shot lawyers who'll take this case for free, but with money, you'll be able to hire a lawyer who's looking out for *your* interests."

"Ah. And the trial is great publicity for the book."

"You got it. Everybody comes out ahead. And here's your angle: As long as the public's still hysterical over all this, you call for the nations of the world to begin massive weapons build-up, to be ready if we're attacked."

"That's the worst thing we could do," I said.

"Most people disagree with you. You think about it and I'll get back to you later, okay? We can have a writer over there by the end of the day."

I told him I'd think about it, and after he hung up, I left the receiver off the hook.

Skylab intercepted a radio message, and relayed it back to Earth, where it was quickly decoded. Russia was transmitting a message in thousands of directions through space, explaining in Uzandi—the simplest Earth language with a sufficient vocabulary—that our planet was divided into two opposing super-power spheres of influence, and that the

aliens had been murdered by "the other one."

"My best advice to you," the military lawyer told me, "is to resign. Resign, and the court-martial will be dropped."

"Then all I'll be doing is admitting my guilt."

"Damn it, man, you've been screaming your guilt since March. Look, we haven't been invaded. There's other news on the front page now. Nobody cares anymore."

"They *should* care," I told him.

"Well, they don't."

"We can't just forget what happened."

He shut his book; more for the sound effect, it seemed to me, than anything else. "Mrs. Booth, may I speak to you in the next room?"

"Just because I'm blind," I said, "doesn't mean I can't handle my own affairs."

"This has nothing to do with being blind," Rachel said. "You don't know what you want, and Major Dorson doesn't know what to do for you."

"People should know why the five aliens were killed," I said. "We know nothing about them, don't you realize that? And now we might never know. Where they were from, what their lives were like, what they wanted . . ."

"Captain, a court-martial is not an open forum, and neither is it an opportunity for self-flagellation. All it's concerned with is whether or not you acted properly as an officer of the United States of America."

"Is killing five unarmed aliens a proper action?"

"Okay," Major Dorson said. "Okay. You've got my number, and if you want to call me, you can call me. If you want different counsel, that's fine too. The court-martial is set for this coming Monday, 0900. Mrs. Booth, good afternoon."

"Russell," Rachel said after he left, "what do you think you're accomplishing?"

"What?"

"What have you been trying to accomplish since this whole thing started? What good's it been? If you'd kept your mouth shut, who'd have been hurt? Not you, not your family. Nothing could be done about what had already happened, so all you did was panic people and polarize them. Make half the world paranoid, give every country an excuse to re-arm. And now you can just allow it to die, but you refuse. Why? Damn it, *why?*"

"You don't understand."

"You're right, I don't. I'm asking you for the last time: The Army offered you someone you could talk to—"

"Psychiatric help."

"Okay, psychiatric help."

"That's not what I need."

"Fine." She paused for a moment. "Russell, my mother thinks I should stay with her and Cliffie. What do you think?"

"Is that what you want?"

"It's not a question of what I want. I think I should."

"Then go."

"It isn't to punish you or anything."

"I understand that."

"Will you be okay?" she asked.

"Funny how things turn out. Don't you think?"

She didn't say anything. I imagine she shrugged her shoulders. You really never know what's going to happen in life, do you?

Momma told me I shouldn't play in Memorial Park anymore, just because that old blind guy chased me away. I just got scared, that's all, because he's always there and he never hurt anybody. He just doesn't like anybody playing around that old spaceship, he says it's not to climb all over, but that's what it's in Memorial Park for.

He says the ship's important, and people should remember why it's there. "But nobody understands," he says.

I guess maybe he's right. ●


by Susan Palwick
WAYS TO GET HOME
art: Terry Lee
This is the author's second fiction sale. She holds an A.B. in English and Creative Writing from Princeton, and lives in New Jersey. Ms. Palwick is also a 1985 graduate of Clarion West.
Lee
© '85

Kevin Mallern never knew what lured him to Cateberry & Nevel. He had already gotten gifts to bring Derek. Carefully avoiding anything with sharp edges or pieces which could be swallowed, he'd bought a cheerful patchwork teddy bear and a miniature catcher's mitt.

Perhaps it was only nervousness at the upcoming visit, the first he had been granted since the child had been away, which sent him into the Columbus Avenue shop that Janet had loved so much. He wandered about among the perfumes and teas and canned cookies, thinking, *If you were in my place you'd be able to handle this, Jan;* but she wasn't, and he couldn't undo the crash which had killed her any more than he could call Derek back from whatever private purgatory the boy inhabited.

He lingered a moment over some potpourri and turned to go, sighing; but then he noticed a group of small, gaily-colored boxes clustered together on a shelf. They were labeled "Alice in Wonderland Soap Collection" and decorated with drawings of Carroll's characters: Alice, the White Rabbit, the Queen of Hearts. Kevin picked up one of the boxes and sniffed it; it was pleasantly fragrant, comforting and homey.

Because he was lonely and the little boxes were charming, because the place reminded him of Janet and Janet had spent hours reading Alice's adventures to Derek, back when all of their lives were still whole and healthy, Kevin spent $3.00 plus tax on a Humpty Dumpty, made of lanolin and sweet almond oil, which weighed just over three ounces.

Stupid, he thought as he left the shop and made his way back to his Central Park West apartment—morbid, and it's a waste of money; don't you crack, too. But the soap pleased him as nothing had done in months, reminding him of how Derek had been afraid of water when he was one or so, of how Janet had solved the problem with a yellow soap duck. "I'm going to wash you with this," she'd said, "and when the little duck is all gone you'll be like him and won't be afraid of water anymore."

Kevin remembered those baths vividly now, Derek laughing as Janet scrubbed him and chanted "Quack quack quack, this duck likes water—when he's gone, then Derek oughter." It worked, and then Janet overcame his fear of the dark the same way, this time using a tiny soap bear for bedtime wash-ups:

> This little bear spends winter in a cave
> And never sees the light.
> When he disappears then you'll be brave
> And not get scared *all night*!

But all that was before the trip to Pennsylvania to visit Jan's parents, the car in the oncoming lane swerving out of control . . . since then it had been Kevin who dreaded closing his eyes at night.

The next morning he picked up the Avis rental for the drive upstate,

putting the three presents next to him in the front seat and firmly repressing his lingering fear of driving. Once he was out of the city his head cleared a little, the brilliant September sky and lush foliage subduing the nightmares which had dogged him nearly every night since Derek's retreat into chaos. At least Kevin no longer woke screaming, "He's only five!" to unjust and distant deities; the dreams were familiar terrain now, leaving him haggard but unshocked.

He wondered sometimes what kinds of dreams Derek had. He didn't think he wanted to know.

The drive to the Sunshine School took two hours, too long, much too long, allowing only weekend visits—and that horrible name!, but it was the closest facility he had been able to find that was humane: individual cottages, a staff which didn't believe in the use of medication. Parents were sent detailed progress reports every week and urged to attend a support group which Kevin abandoned after the first session; he was tired of being told not to feel guilty, angry at being asked to witness other people's pain, sick of stupid platitudes. "Derek can gain strength from illness," he was told; "the skills both of you learn now will help you with other things." He dismissed it as sugar-coating.

The attendant who greeted him now unwrapped the carefully prepared packages, which Kevin had expected, and sealed them neatly again once the gifts had been deemed safe.

Well, for what they charged they'd damn well better provide service! The cost of the place had staggered him at first, but there was no alternative. Soon Derek would be able to come home and Kevin could forget that he had ever been away at all. The cost would seem worth it then . . . and surely Derek was much better now, or they wouldn't have let Kevin visit. Yes, it would all be over soon.

The attendant's voice snapped him out of his reverie. "We discourage too many presents, Mr. Mallern."

"It's his birthday next week," Kevin said coldly, and the younger man had the good grace to blush. "May I see him now, please?"

"Yes, Mr. Mallern. This way."

"How is he?" Kevin demanded as he was led along a gravel pathway to one of the cottages.

The attendant glanced at him. "He's still very destructive, Mr. Mallern."

"I know that!" The first report had informed him that Derek's problem stemmed primarily from an inclination to extremes; the psychologist had written, "He is a bright child experiencing a normal grieving process made perilous, in this case, by the intensity of his moods and by his tendency toward physical mimicry." Yes, Derek had always imitated people; "What can you do with a kid who copies everything?" Janet had

said in despair when he was two and enjoying an eloquent hand movement he had seen someone use on the street.

Kevin, reading the report in an apartment gone to seed and dust, had needed to use conscious restraint not to glance at the new panes, glaring and intrusive, in the lower half of the living room windows. The angle at which the frame had been bent, outward in the direction of the broken glass, reappeared stubbornly in his nightmares—more stubbornly even than the crash which left him and Derek uninjured and killed Janet, her neck broken as her head smashed against the windshield.

And Derek, also remembering the accident, had sought to relive it and rejoin his mother every time he saw a pane of glass. *I want to go where Mommy is . . .* Kevin had thought of answering, "Mommy doesn't want you to be where she is. Mommy wants you to stay with me"; but that would have implied rejection, or that Janet was in some horrible place. "It's not time," he'd wound up saying, "it's not time for you to go there yet."

Finally, in desperation, he had sent the child away and endured a month without contact. "Your own grief may make it more difficult for him," they told him gently, and he cursed them and their precious school and their stupid support groups. What kind of sense did it make to rob the child of both parents? He was a good father, had always been a good father; it wasn't his fault that Janet was dead, that Derek was acting this way . . .

He swallowed now, trying to control his nerves. "Does he know I'm coming?"

"He was told, but it's difficult to assess the reaction. Here we are."

The cottage, surrounded by flowers and a neat lawn, would have seemed bucolic had it not been for the reinforced windows and locked door. Inside, everything was scaled down to child-level—like a doll house, Kevin thought, aching; you'd never know it was an isolation cell. There were no hard edges anywhere.

He was introduced to Sharon Walford, the psychologist who cared for Derek and wrote the weekly reports. She looked as if she could have been an Amazon, but called in a surprisingly gentle voice, "Derek, look, your daddy's here," to a small figure crouched, keening in a thin drone, in a pool of sunshine by the window. At least the panes were exposed now; that was some progress.

"Derek?" Kevin said, approaching cautiously. "Derek? It's me. It's Daddy." The keening stopped as if turned off by a switch; he saw a brown eye squinting at him from between covering fingers, and then the boy uncoiled and flung himself at Kevin with furious fists and kicking feet.

Unsure whether he was being attacked or welcomed, but grateful for any recognition, Kevin picked up the tiny figure and carried him to a

small cot with cushioned, rounded corners. Even as he mourned the tension in the fifty pounds of child he held, he was relieved to have proof that his decision had been the right one. He could not have handled this at home, this steel trap about to recoil. Not after that last time. He brushed clear a patch of the boy's forehead and kissed it, restraining a shudder when he felt the scar tissue beneath his lips.

"I've missed you so much," he told his son, stroking the straight black hair which was so much like Janet's. It took conscious effort to bite back all the manipulative questions he had been warned not to ask: *Do you still love me? Do you forgive me for sending you here?*

Derek twisted in response and bit his father's arm. With an exclamation of pain Kevin released the child, who ran around the room, ricocheting off walls. Walford scooped him up deftly and cradled him in her lap, holding him in place as the boy struggled, screaming.

"Is it always this bad?" Kevin asked, his mouth dry. He huddled on the cot, rubbing his arm. They had told him Derek was getting better, dammit! How long could this go on?

"Periodically," Walford answered calmly.

"You must not get a lot of sleep," he told her, remembering the nights when he had been afraid to close his eyes lest Derek harm himself.

"As much as he does, Mr. Mallern." Derek squirmed off her lap and ran to tackle his father again, emitting a banshee howl. Kevin restrained the boy in a clenched hug, repeating as soothingly as he could, "Daddy loves you. Daddy doesn't want you to hurt yourself any more. Daddy wants you to come home."

When the child had subsided into exhaustion Kevin said wearily, "I brought you some presents for your birthday, Derek. Would you like to open them?"

Walford, who had collected the packages, now said, "Here, Derek. Go ahead. One at a time."

Derek made short, listless work of the first two, tossing the catcher's mitt and the teddy bear aside after only a moment; Kevin handed over the soap without expecting any response, already grateful that he would be able to leave, go outside into the cool air, leaving the tears and tantrums in Walford's capable care. Derek's small hands fumbled with the paper, having more difficulty with this little package than with the larger ones; Kevin reached out to help him, numbly removing the wrapping. It had been a stupid idea; it wouldn't mean anything to the child.

But when the box was uncovered Derek sat still, turning it carefully to examine each side with the minute concentration possessed only by the very young. He touched the picture of Humpty Dumpty tentatively, and then sniffed the box much as Kevin had done in the store.

"It's soap," Kevin explained, marveling at the things children choose

to cherish and feeling more than a bit ridiculous in front of Sharon Walford. "Soap, see?" He pried the box out of Derek's hands and opened it, shaking out the miniature, almond-scented Humpty Dumpty. "It's to wash yourself with."

"Mommy," Derek said, subdued. Kevin, chilled, wondered whether it was the object or the character which had made the boy choose that instant to name Janet. Whatever the connection, Derek surrendered the soap grudgingly, and only after Walford had promised that she would use it when she gave him his bath.

"Major improvement in outward behavior," Sharon Walford's crabbed handwriting informed him in the next report. "Self-destructive impulses have subsided, although Derek's lack of affect indicates depression. The soap has been a great success. He insists on using it whenever he washes and seems to associate it with his mother. Long-term prognosis good."

And for me? Kevin wondered. *Is my long-term prognosis good, I who have no padded cell in which to mourn?*

He lay on his bed, staring up at the ceiling, recognizing the futility of his thoughts but too tired to fight them. Only since Derek had been away, the constant dread safely contained, had he discovered the depth of his own loss. His colleagues—who had been Janet's as well, after all—had been unexpectedly supportive, shouldering part of his teaching load and helping out with administrative scutwork, but he found that the extra time only increased his pain.

The apartment swarmed with memories—Janet's old clothing and anthropology texts, papers on belief structures and naming rituals, perfume bottles and bobby pins and paper clips. He should clear all of it away, get on with his life, but he hadn't wanted to seem so ruthless when Derek was still in the apartment. He couldn't seem to face the task now; it would make too much too final, make the vacuum too immense. When he found out Derek was coming home, when there would be something here for him to love again—that's when he'd clean.

He lived for weekend visits, mechanically delivering history lectures which no longer seemed connected to anything real, picking up an attractive graduate student once to see if he was still capable of sex, but finding no joy in it. Derek's behavior, as Walford had indicated, had grown quieter, replaced with an expressionless intensity which was, if anything, more frightening.

The weekly write-ups reported that the child had reached a plateau; since the violence had ceased and sensory stimulation might coax Derek out of his withdrawal, he was allowed to go for walks with adult attendants. Kevin escorted the child on one of these expeditions, telling the boy how proud he was of him—but Derek merely walked along pas-

sively between Kevin and Sharon Walford, doing what he was told but exhibiting no interest in his surroundings. He was seemingly intent on something the others couldn't see.

But he was allowed outside, at least; a move towards freedom, towards health—and Kevin, sitting alone in the apartment after his lectures, was able for a few days to rejoice and ignore the new, glaring glass.

Until the afternoon when he got a call from a Sunshine staff member informing him that Derek had broken away from his escort and climbed a tree, scampering higher until a branch gave way beneath him; the aide—fired now for negligence—had managed to break his fall so that the boy hadn't been seriously hurt.

"How high?" Kevin asked. Stunned to discover that Derek had plummeted ten feet, he couldn't help but remember the scars, the small body hurtling towards the window.

They told him that the lower branches of all the trees on the property had been cut, to prevent a similar occurrence; they told him that Derek had regressed and become more withdrawn again. Sharon Walford's report arrived the next day. "The fall shook him," she wrote. "He has been unnaturally still since then, not enjoying meals and refusing to be bathed; he made the odd comment that water only 'works' with 'Mommy soap.' "

Kevin took the hint and went back to Cateberry & Nevel before his next visit. He chose Alice herself, this time—because she had been a plucky child confronting difficult circumstances and making sense out of chaos. Derek was apathetic during the visit, allowing himself to be held, turning the box over so that he could look at the picture of Alice before dumping out the soap. Kevin had considered taking the book along so that he could read to Derek, but he had not been able to bring himself to remove it from the spot where Janet had put it—and it seemed to him that it would be a sacrilege to intrude here, to usurp what she and Derek had shared. He contented himself with a silent prayer as he kissed Derek goodbye: *May you find your way safely back home, as Alice did.*

"Three cheers for Cateberry & Nevel," Walford wrote with unaccustomed levity the next week. "The soap, or something, has pulled him out of his depression from the fall. Acting out and destructive behavior have resumed, but these are far better than withdrawal."

Acting out indeed. Derek was a whirling dervish during the next visit, and the next. Kevin would have slid deeper into depression again himself, had it not been for Walford's assurances that Derek was slowly getting better.

The world narrowed to visits and reports, tears and small celebrations. One Wednesday evening Kevin treated himself to the best bottle of champagne he could afford because Walford had written: "Today Derek said he wanted to see his Daddy. He has reached the stage in grief work

where he is beginning to look forward instead of back, and his mood swings, although still potentially dangerous, are less severe."

Kevin felt as if he had suddenly begun to exist again, after months spent in the exile of nightmare. Colleagues commented on the new spring in his walk and his students actually looked awake during lectures—to his gratification, the graduate student expressed renewed interest and he discovered that the ghost of Janet no longer haunted him behind closed eyelids.

Short-lived, that joy; the following Friday an early-morning caller from the school informed him that Derek had tried to escape—had somehow gotten out of the cottage during an inattentive moment of Walford's. He wanted to go home, he had told them. Walford was going to be fired.

"I'll be right there," Kevin said. He canceled his lectures and rented a car, arriving to find Walford in the Director's office. She winced when Kevin walked in, no doubt expecting him to rail at her.

"What happened?" he demanded.

"I don't know," she said, with less composure than he had ever seen in her.

The Director—Kevin always thought of him simply as The Director, although his name was Tanner—ran a hand over his bald spot and sighed. "The window was open."

"Not that far!" Walford answered. "Two or three inches—do you think I'm a fool? As small as he is there's no way he could have slipped out there. Mr. Mallern, I don't know. I honestly don't know. I'm sorry."

"Just tell me what happened!"

"He'd gotten very quiet," Walford said, "just before—very intense. As if he were planning something, you know the way he gets—but they go through cycles, just like big people do. Mr. Mallern, that window wasn't open far enough for him to have gotten outside. Everything else was locked. When they brought him back—oh, he'd only gotten a few feet—I had to unbolt the door from the inside to get him back in, and he couldn't have reached that high. There was no furniture nearby for him to climb on. I thought he was taking a nap . . . I just looked away for a minute."

Kevin allowed himself a rush of triumph. "He wants to come home. I know that's what it is. I don't care how he got out—it means he wants to come home, and I'm going to take him. Today."

"He isn't ready yet," Walford said sharply. "Mr. Mallern, he's not ready yet and neither are you—"

Kevin, infuriated, snapped, "Your job's to observe my son's health, Ms. Walford, not mine."

The Director shook his head. "Mr. Mallern, I have to agree with Sharon on this one. Derek isn't ready. His moods are still too violent and he's still too potentially destructive—"

"Isn't it possible that being home now would calm him?"

"Theoretically, yes, it's possible—but it isn't our informed opinion. Look, he's your son. You can pull him out of here whenever you want to, but before you take him home you'd better be sure you're ready to handle anything that might happen. Better to wait a little longer and be really ready than to have to come back after a relapse. Better both for you and the child."

"Yeah—well, I'm starting to think he might have been ready sooner, somewhere else."

"Mr. Mallern," Walford said quietly, "I feel terrible about what happened today, but there aren't many places as good as this one. I know. I've worked at other places. They weren't very happy."

"You go get yourself a happy job. I'm taking my son home."

"My little sister's in one of the other places," Walford went on, her voice completely steady. "When they get better it's the happiest job in the world, Mr. Mallern. I want Derek to be ready to leave here as much as you do, believe me, but I don't think he's ready yet."

"I'd like to judge that for myself. Let me see Derek now, please."

When he entered the cottage Derek was crying on the lap of a new companion, greeting Kevin with howls and hugs.

"The soap's gone—Daddy, the soap—home—"

"Yes, Derek, I'm taking you home today. We'll be home soon."

The new psychologist, Connie Pirazzi, gave a warning shake of her head, mouthed the words, "Too soon." She was smaller than Walford had been, even more compact, less placid and more unsmiling, although perhaps she was only wary of her new charge.

Kevin ignored her, hunkering down on his knees so that he was at eye-level with his son. "I'm going to take you home now, Derek. You want to go home, don't you?" The boy, silent now, blinked and nodded solemnly.

"That's why you went outside today, isn't it?"

Another nod, more vigorous. "Through the window," Derek said shyly.

Walford had been lying to cover herself, then. Kevin hugged the child, his anger swept away by joy at the upcoming journey. "Okay, Derek, we're going home now! We're going to get in the car and drive home—"

"Car?" Derek asked, beginning to tremble. "Home in a car?"

"That's right," Kevin said. "Derek, everyone uses cars. Most cars don't hurt people. We won't get hurt going home, I promise."

"No," Derek said, shaking his head and backing off. "No car, Daddy. Bring me soap."

"Derek, come on now. How else are you going to get home?" Kevin reached to pick the boy up, was stunned to feel small teeth sink into his arm as they had on the first visit.

"Derek!"

"No car," the child repeated, standing now by the new psychologist. She shook her head again, her lips compressed, looking accusations at Kevin, and he decided that he liked her far less than he had liked Walford.

"Derek, you got here in a car and that's how you have to leave—"

"*No!*" the boy screamed. "No car! Soap!"

"I think," said Pirazzi, "that maybe he shouldn't leave today."

"All right," Kevin answered in defeat. "All right, Derek. I'll be back next week, okay? When you're ready for me to take you home, you just tell me." He drove back to the city in misery, reliving the anguish of Janet's death and the onset of Derek's illness all over again.

The nightmares started again that night.

Derek wanted to come home. It was a constant refrain now, in the reports and the visits both. Pirazzi's handwriting, less precise than Sharon Walford's—as were her thoughts—noted that "Derek is homesick and cries for his father."

And yet he stubbornly recoiled at the issue of transportation. "He's not ready yet," Tanner advised during a phone conference. "It doesn't mean he's damaged for life and will never use anything with four wheels; it's his way of trying to keep you happy and keep himself safe at the same time, by rejecting the car instead of you. When he's ready it won't be a problem, but he has to follow his own schedule and find his own way back."

Kevin's joy at being readmitted into his son's universe gave way to a dull ache of inadequacy. During visits Derek alternately cried to go home and cried for soap, keeping up the refrain until finally Kevin gave in and got him the Cheshire Cat, not his favorite character but the only one left, since Christmas was approaching and evidently the little boxes made popular gifts.

Derek calmed down again, as if the soap were a drug, and Kevin found himself despairing that he had ever entered the child's thoughts at all. The only thing that seemed to soothe the boy was this tenuous link with Janet and the stories she had read him. They formed a thread through Kevin's nightmares now, Janet and Derek reading, pretending to be the characters, imitating Alice and the others.

On Christmas Eve Kevin woke sweating from a dream, sharper than usual, of Janet and the boy with Carroll's masterpiece. I failed, he thought, lying there staring up at the ceiling. Blinking Christmas lights from the windows across the street colored the plaster faintly in flickering pastels. I've failed both of them—I couldn't take care of Derek without Janet here and now all he wants from me is that stupid soap—the egg that falls and breaks, Alice who shrinks, the cat who disappears . . .

"Oh, dear *God*!" He sat bolt upright, grasping it only then, the pattern.

He saw in that moment, with a certainty overpowering any astonishment, that both he and the people at the school had been wrong. Derek's refusal to come back with Kevin was neither rejection nor a wish to stay where he was—the child had indeed found his own way home, on a path paved with memories and mimicry and the tools Janet had given him for overcoming obstacles. He had learned a strength Kevin could not match.

"No," Kevin said aloud, torn between wonder and fear. "No, Derek. You have to come home the way everyone does. I can't follow you if you can do that. I'm your daddy, Derek. I have to be bigger than you are, just for a while . . . Derek, I want you here but I need you to be normal, baby, *please* . . . " It occurred to him then, with a stab of vertigo, that all along he had been using Derek's health as a barometer of his own.

But the realization came too late, perhaps would have been too late from the beginning. What could you do with a kid who copied everything? There was a shimmer in the corner, a tiny grin quickly surrounded by substance and shadow and the scamper of running feet, a thud on the bed and small arms around Kevin's neck, the often-dreamt-of voice crying in his ear, tears trickling against his shoulder, "Daddy daddy daddy I'm home." ●

MARTIN GARDNER (from page 29)

SOLUTION TO FLARP FLIPS ANOTHER FIVER

"Suppose the odds favor an even number of heads," Tanya explained. "Obviously the same could be said of an even number of tails, because a head is as likely on any flip as tails. There's no way the odds can favor *both* because when there's an even number of heads, there's an odd number of tails, and vice versa. So the assumption that the odds favor both must be false. And the only way it can be false is if the probability of an even number of heads exactly equals the probability of an odd number of tails."

Even Flarp was surprised by the simplicity of Tanya's reasoning. "Why didn't *I* think of that?" he said. He started to toss the fiver, but Tanya stopped him with a hand on his arm.

"Don't be a male chauvinist," she said. "I have as much right to pay as either of you two. Let's flip for a three-way decision."

"How can we do that?" asked Flarp. "I have only one coin, and Pulver tells me he has only bills."

"*I* have some change," said Tanya, "but you really don't need more than one coin."

Again, what in space does Tanya have in mind? How can a single coin be used to decide fairly between three persons? See page 133 for the solution.

STOPPING AT AN UNDEVELOPED PLANET EN ROUTE TO ANOTHER GALAXY

Welcome to the surface of Saturn, where
We have not been expecting you.

Hello anyway.

Observe our rings, some say the remains
Of an ancient comet, strayed too near
And spun on its icy tail. Discouraging
To tourism. Come this way. Watch
Your step.

Note our moons, nine in number, themselves
A navigational challenge; and that star,
Brighter than the rest, slung
Low on the horizon, is
Your sun.

And, say some, ours.

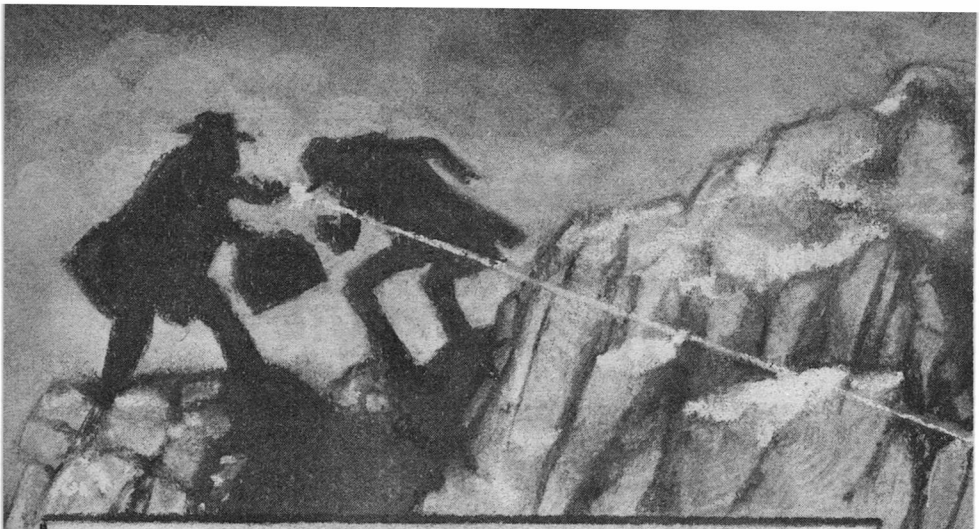
Beware the methane winds now rising in the east,
Presaging storms of ammonia.
Now you will see
Where tumble overhead
The bones of our own god Icarus,

Who is still flying.

True,
He has not
Even in death
Yet escaped;

But he will never come down.

—J.J. Hunt



LORD KELVIN'S MACHINE

by James P. Blaylock

art: Hank Jankus

Jim Blaylock, who lives in Southern California with his wife Viki, his sons Johnny and Danny, and his dog Ahab, is the author of several novels, most recently *The Digging Leviathan,* an Ace book. His fourth novel, tentatively titled *Homunculus,* will be published in March of next year, also by Ace, and involves further adventures of Langdon St. Ives, his man Hasbro, and the nefarious Doctor Ignacio Narbondo. He is currently at work on a novel for Del Rey, the third in his Elfin Ship series.

PROLOGUE

South America

Langdon St. Ives, scientist and explorer, clutched a heavy alpaca blanket about his shoulders and stared out across countless miles of rocky plateau and jagged volcanic peaks. The tight weave of ivory wool clipped off a dry, chill wind that blew across the fifty miles of Antarctic-spawned Peruvian Coastal Current, up from the Bay of Guayaquil, and across the Pacific slope of the Peruvian Andes. A wide and sluggish river, grey-green beneath the lowering sky, crept across broad grasslands behind and below him. Moored like an alien vessel amid the bunch grasses and tola bush was a tiny zeppelin, silver in the afternoon sun and flying the Union Jack from a jury-rigged mast.

At St. Ives' feet the scree-strewn rim of a volcanic cone, Mt. Ocapaxi, fell two thousand feet toward steamy, open fissures, the entire crater glowing like the bowl of an enormous pipe. St. Ives waved ponderously to his companion Hasbro, his gentleman's gentleman, actually, who crouched some hundred yards down the slope on the interior of the cone, working the compression mechanism of a Rawls-Hibbing Mechanical Bladder. Coils of India rubber hose snaked away, disappearing into cracks in the igneous skin of the mountainside.

A cloud of fierce, sulphur-laced steam whirled suddenly up and out of the crater in a wild, sighing rush, and the red glow of the twisted fissures winked abruptly out, replaced by misty darkness. St. Ives nodded, satisfied, and consulted a pocketwatch. His left shoulder, recently grazed by a bullet, throbbed tiredly. It was late afternoon. Long shadows cast by scattered, distant peaks obscured the hillsides roundabout. On the heels of the shadows would come darkness.

The figure below ceased his furious manipulations of the contrivance and signaled to St. Ives, whereupon the scientist turned and repeated the signal—a broad, windmill gesture, visible to the several thousand Indians massed on the plain below. "Sharp's the word, Jacky," muttered St. Ives under his breath. And straightaway, thin and sailing on the knife-edged wind, came a half dozen faint syllables, first in English, then repeated in Quechua, then giving way to the resonant cadence of almost five thousand people marching in step. He could feel the rhythmic reverberations beneath his feet as he turned, bent over, and, mouthing a quick, silent prayer, depressed the plunger of a tubular detonator.

He threw himself flat and pressed an ear to the cold ground. The rumble of marching feet rolled through the hillsides like the sound of an approaching express or the rushing passage of a subterranean river. Then, abruptly, a deep and vast explosion, muffled by the crust of the

Earth itself, heaved the ground in a tumultuous wave, and it appeared to St. Ives from his aerie atop the volcano as if the grassland below were a giant carpet and that the gods were shaking the dust from it. The marching horde pitched higgledy piggledy into one another and collapsed all of a heap. The stars in the eastern sky seemed to dance briefly, as if the Earth had been jiggled from her course. Then, slowly, the ground ceased to shake.

St. Ives smiled for the first time in nearly a week. His man Hasbro strode up the hillside toward him carrying the Rawls-Hibbing apparatus, and together they watched the sky deepen from blue to purple, cut by the pale radiance of the milky way. On the horizon glowed a misty semi-circle of radiance like a lantern hooded with muslin—the first faint glimmer of an ascending comet.

CHAPTER 1

Dover

The tumbled rocks of Castle Jetty loomed black and wet in the fog. Below, where the grey tide of the North Sea fell inch by inch away, green tufts of waterweed alternately danced and collapsed across barnacled stone, and brown penny-crabs scuttled through dark crevaces as if their sidewise scramble would render them invisible to the men who stood above. Langdon St. Ives, wrapped in a greatcoat and shod in hip boots, cocked a telescoped spyglass to his eye and squinted north toward the Eastern Docks.

The mist swirled and flew, now covering the sea and sky in an opaque grey-green curtain, now tearing itself into transparent lace. There, some hundred-fifty meters distant, the steamer H.M.S. Ramsgate heaved on the groundswell, its handful of paying passengers having hours since wended their way shoreward toward one of the inns along Castle Hill Road—all the passengers, that is, but one. St. Ives felt as if he'd stood atop the rocks for a lifetime, watching nothing at all but an empty ship.

He lowered the glass and gazed down into the sea. It took an act of will to believe that beyond the strait lay Belgium and that behind him, a bowshot distant, lay the city of Dover. He was overcome suddenly with the uncanny certainty that the jetty was moving, that he stood on the bow of a sailing vessel plying the waters of a phantom sea. The rushing tide below him bent and swirled around the edges of thrusting rocks, and for a perilous second he felt himself pitch forward, nearly flinging the glass away and tumbling headfirst from his perch.

A firm hand grasped his shoulder and the vertigo passed. He caught

himself, straightened, and wiped beaded moisture from his forehead with the sleeve of his coat. "Thank you."

"Certainly sir. Steady-on, sir."

"I've reached the limits of my patience, Hasbro," said St. Ives to the man beside him. "I'm convinced we're watching an empty ship. Our man has given us the slip, and I'd sooner have a look at the inside of a glass of ale than another look at that damned steamer."

"Patience is its own reward, sir," replied St. Ives' manservant.

St. Ives gave him a look. "My patience must be thinner than yours." He pulled a pouch from the pocket of his greatcoat, extracting a bent bulldog pipe and a quantity of tobacco. "Do you suppose Kraken has given up?" He pressed the curly black tobacco into the pipe bowl with his thumb and struck a match, the flame hissing and sputtering in the misty evening air.

"Not Kraken, sir, if I'm any judge. If our man went ashore along the docks, then Kraken followed him. A disguise wouldn't answer, not with that hump. And it's an even bet that he wouldn't be away to London, not this late in the evening. For my money he's in a public house and Kraken's in the street outside. If he made away north, then Jack's got him, and the outcome is the same. The best—"

"Hark!"

Silence fell, interrupted only by the sighing of wavelets splashing against the stones of the jetty and by the hushed clatter of distant activity along the docks. The two men stood barely breathing, smoke from St. Ives' pipe rising invisibly into the fog. "There!" whispered St. Ives, holding up his left hand.

Softly, too rhythmically to be mistaken for the natural cadence of the ocean, came the muted dipping of oars and the creak of shafts in oarlocks. St. Ives crouched, then stepped gingerly across to an adjacent rock and clambered down into a little crab-infested grotto. He could just discern, through a sort of triangular window, the thin grey line where the sky met the sea. And there, pulling into view, was a long rowboat in which sat two men, one plying the oars and the other crouched on a thwart, wrapped in a dark blanket and with a frazzle of black hair dropping in moist curls around his shoulders.

"It's him," whispered Hasbro into St. Ives' ear.

"That it is. And up to no good at all. He's bound for Hargreaves', or I'm a fool. We were right about this one. That eruption in Natvik was no eruption at all. It was a detonation. And now the task is unspeakably complicated. I'm half inclined to let the monster have a go at it, Hasbro. I'm weary of this world of late." St. Ives paused tiredly, the rowboat having disappeared into the fog, the night having drifted into silence.

"There's the matter of the ale glass," said Hasbro wisely, grasping St.

Ives by the elbow. "And a kidney pie, unless I'm amiss, is required. We'll fetch in Bill Kraken and Jack on the way. We've time enough to stroll 'round to Hargreaves' after supper."

St. Ives squinted at Hasbro, as if suddenly bucked by the idea of a pie and a glass of ale. "Of course we do," he said. "I might send you lads out tonight alone, though. I need about ten hours of the best to bring me around. Sleep, that's the tune the piper's playing. In the morning I'll wrestle with these demons."

"There's the ticket, sir," said the stalwart Hasbro, and through the gathering gloom the two men picked their way from rock to rock toward the warm lights of Dover.

"I can't imagine I've ever been this hungry before," said St. Ives, spearing up a pair of rashers from a passing platter. "Any more eggs?"

"Heaps," said Bill Kraken through a mouthful of cold toast, and he reached for another platter at his elbow. "Full of the right sorts ofhumors, sir, is eggs. It's the unctuous secretions of the yolk that fetches the home stake, if you follow me. Loaded up with all manners of fluids."

Jack Owlesby paused, a forkful of egg halfway to his mouth. He gave Kraken a look and cleared his throat.

"Sorry, lad. There's no stopping me when I'm swept off by the scientific. I've forgot that you ain't partial to the talk of fluids over breakfast. Not that it maters a bit about fluids or any of the rest of it, what with that comet sailing in to smash us to flinders—"

"Harrumph!" coughed St. Ives, seeming to choke, his fit drowning the last few words of Kraken's observation. "Lower your voice, man!"

"Sorry, Professor. I don't think sometimes. You know me. This coffee tastes like rat poison, don't it? And not high-toned rat poison either, but something mixed up by your man with the hump."

"I haven't tried it," said St. Ives, raising his cup. He peered into the depths of the dark stuff and was reminded instantly of the murky water in the night-shrouded tidepool he'd slipped into on his way back from the tip of the jetty the night before. He didn't need to taste the brew; the smell of it was enough. "Any of the tablets?" he asked Hasbro.

"I brought several of each, sir. It doesn't pay to go abroad without them. One would think that the art of brewing coffee would have traveled the few miles from the Normandy coast to the British Isles, sir, but we all know it hasn't." He reached into the pocket of his coat and pulled out a little vial of jellybean-like pills. "Jamaican Blue, sir?"

"If you would," said St. Ives.

Hasbro dropped one into the upheld cup, and in an instant the room was filled with the astonishing, heavy aroma of real coffee, the odd

chemical smell of the pallid facsimile in the rest of their cups retreating before it.

"By God!" whispered Kraken. "What else have you got there?"

"A tolerable Weiner Melange, sir, and a Mocha Java that I can vouch for. There's an espresso, too, but it's untried as yet."

"Then I'm your man!" cried the enthusiastic Kraken, and he held out his hand for the little pill. There's money in these," he said, plopping it into his full cup and watching the result as if mystified. "Millions of pounds."

"Art for art's sake," laughed St. Ives, dipping the end of a white kerchief into his cup and studying the stained corner of it in the thin sunlight shining through the casement. He nodded, satisfied, then tasted the coffee, nodding again. He bent over his plate and addressed Bill Kraken, although his words, clearly, were intended for the assembled company. "We mustn't, Bill, give in to fears about this . . . this . . . heavenly visitation, to lapse into metaphysical language. I woke up fresh this morning. A new man. And the solution, I discovered, was in front of my face. I'd been given it by the very villain we pursue. Our only real enemy now is time, gentlemen, time and the excesses of our own fears."

St. Ives paused to have another go at the coffee, then squinted past his cup and resumed his speech. "The single greatest catastrophe now would be for the news to leak to the general public. The man in the street would dissolve into chaos if he knew what confronted him. Let us take a lesson in reverse from the otherwise admirable tale of Mr. H. G. Wells. His science was, I fear, awash with error, but that was no real fault of his. He was a literary man first, and a scientist afterward. But he was fearfully wide of the mark in underestimating the common man's susceptibility to panic." St. Ives stroked his chin, staring at the debris on his plate. "I'm certain that science will save us this time, gentlemen, if it doesn't kill us first. The thing will be close, though, and if the public gets wind, great damage will come of it." He smiled into the befuddled faces of his three companions. Kraken wiped a dribble of egg from the edge of his mouth. Jack pursed his lips.

"I'll need to know about Hargreaves," continued St. Ives, "and you'll want to know what I'm blathering about. But this isn't the place. Let's adjourn to the street, shall we?" And with that the men arose, Kraken tossing off the last of his coffee. Then, seeing that Jack was leaving half a cup, he tossed Jack's off too and mumbled something about waste and starvation as he followed the rest toward the door.

Doctor Ignacio Narbondo grinned over his tea. He watched the back of Hargreaves' head as it nodded above a great sheet of paper covered over with lines, numbers, and notations. Why oxygen allowed itself to

flow in and out of the man's lungs Narbondo couldn't at all say; the man seemed to be animated by hatred—an indiscriminate loathing for the most innocent things. He gladly built bombs for idiotic anarchist deviltry, not out of any particular regard for causes, but simply to create mayhem, to blow things to bits.

If he could have built a device sufficiently large to obliterate the Dover cliffs and the sun rising beyond them he'd do it without hesitation. He loathed tea. He loathed eggs. He loathed brandy. He loathed the very art of constructing infernal devices.

Narbondo looked round him at the barren room, the lumpy pallet on the ground where Hargreaves allowed himself a few hours miserable sleep, as often as not to lurch awake at night, a shriek half uttered in his throat, as if he'd peered into a mirror and seen the face of a beetle staring back. Narbondo whistled merrily all of a sudden, watching Hargreaves stiffen, loathing the melody that had broken the discordant mumblings of his brain.

Hargreaves turned, his bearded face set in a rictus of twisted rage, his dark, shrunken eyes blank as eclipsed moons. He breathed heavily. Narbondo waited with raised eyebrows, as if surprised at the man's reaction. "Damn a man that whistles," said Hargreaves slowly, running the back of his hand across his mouth. He looked at his hand, expecting to find Lord knew what, and turned slowly back to his benchtop. Ignacio Narbondo smiled and poured himself another cup of tea. All in all it was a glorious day. Hargreaves had agreed to help him destroy the Earth without so much as a second thought. He'd agreed with a certain amount of relish, in fact—had expended a moment's effort to twist his face into a contorted smile. Why he didn't just slit his throat and be done with life for good and all was one of the first great mysteries of the twentieth century.

He wouldn't have been half so agreeable if he knew that Narbondo had no intention of destroying anything, that his motivation was greed—greed and revenge. His threat to cast the Earth forcibly into the path of the approaching comet wouldn't be taken lightly. There were those in the Royal Academy who knew he could do it, who supposed, no doubt, that he might quite likely do it. They were as foolish as Hargreaves and every bit as useful.

The surprising internal eruption of Mount Hjarstaad would throw the fear into them. They'd be quaking over their rashers at that very moment, the lot of them wondering and gaping. Beards would be wagging. Dark suspicions would be mouthed. Where was the doctor? Had he been seen in London? Not for months. He'd threatened this, hadn't he?—an eruption above the Arctic Circle, just to demonstrate the seriousness of his intent. The comet would pass close enough to the earth to provide a spectacular

display for the masses—foolish creatures. The iron core of the thing might easily be pulled so solidly by the Earth's magnetic field that the comet would hurtle groundward, slamming the poor old Earth into powder and all the gaping multitudes with it. What if, Narbondo had suggested, what if a man were to give the Earth a bit of a push, to propel it even closer to the approaching star and so turn a longshot into a dead cert, as a blade of the turf might put it?

Well, Dr. Ignacio Narbondo was that man. Could he do it? Narbondo grinned. His demands of two weeks past had been met with a sneer, but Mount Hjarstaad would wipe the sneers from their faces. They'd wax grave. Their grins would set like plaster of Paris. What had the poet said about that sort of thing? "Gravity was a mysterious carriage of the body to cover the defects of the mind."

That was it. Gravity would answer for a day or two, but when it faded into futility they'd pay, and pay well. Narbondo set in to whistle again, this time out of the innocence of good cheer, but the effect on Hargreaves was so immediately consumptive and maddening that Narbondo gave it off abruptly. There was no use baiting the man into ruination before the job was done.

Wiping the lanky hair from his eyes and reaching for his coat, Dr. Narbondo rose and stepped silently from the room, carrying his teacup with him. On the morning street outside he smiled maliciously at an orange sun that burned through evaporating fog, then threw the dregs of his tea, cup and all, over a vine-draped stone wall and strode away east up Archcliffe Road, composing in his mind a letter to the Royal Academy.

"Damn me!" mumbled Bill Kraken through the fingers mashed against his mouth. He wiped away furiously at the tea leaves and tea that ran down his neck and collar. The cup that had hit him on the ear had fallen and broken on the stones of the garden. He peered up over the wall at the retreating figure of the hunchback and added this last unintended insult to the list of villainies he'd suffered over the years. He'd have his turn yet.

Why St. Ives hadn't given him leave to merely beat the capers out of this devil Hargreaves he couldn't at all fathom. The man was a monster; there was no gainsaying it. They could set off one of his own devices—hoist him on his own filthy petard, so to speak. His remains would be found amid the wreckage of infernal machines, built with his own hands. The world would have owed Bill Kraken a debt. But Narbondo, St. Ives had insisted, would have found another willing acomplice. Hargreaves was only a pawn, and pawns could be dealt with easily enough when the time came. St. Ives couldn't afford to tip his hand.

Kraken crouched out from behind the wall and slipped away in Narbondo's wake, keeping to the other side of the road when the hunchback entered a stationer's, then circling round to the back when Narbondo went in at the post office door. Stepping through a dark, arched rear entry, a ready lie on his lips in case he were confronted, Kraken found himself in a tiny, deserted room. He slid behind a convenient heap of crates, peeping through slats at an enormously fat, stooped man who lumbered in, tossed Narbondo's letter into a wooden bin, and lumbered back out. Kraken snatched up the letter, tucked it into his coat, and in a moment was back in the sunlight, prying at the stickum with his index finger. Ten minutes later he was in at the front door of the post office, grinning into the wide face of the postman and mailing Narbondo's missive for the second time that morning.

"Surely it's a bluff," said Jack Owlesby, scowling at Langdon St. Ives. The four of them sat on lawn chairs in the Gardens, listening with half an ear to the lackluster tootings of a tired orchestra. "What would it profit him to alert the *Times*? There'd be mayhem. If it's extortion he's after, this won't further his hopes by an inch."

"The threat of it might," replied St. Ives. "If his promise to pitch the Earth into the path of the comet weren't taken seriously, the mere suggestion that the public be apprised of the magnetic affinity of the comet and the earth might be. It's pale in comparison; I grant you that. But the panic that would ensue if an ably stated message were to reach the right journalist. . . ."

St. Ives paused and shook his head, as if such panic wasn't to be contemplated. "What was the name of that scoundrel who leaked the news of the alien threat four years ago?"

"Beezer, sir," said Hasbro. "He's still in the employ of the *Times*, and, we must suppose, no less likely to be in communication with the doctor today than he was then. He'd be your man, sir, if you wanted to wave the bloody shirt."

"I rather believe," said St. Ives, grimacing at the raucous climax of an unidentifiable bit of orchestration, "that we should pay this man Beezer a visit. We can't do a thing sitting around Dover. Narbondo has agreed to wait four days for a reply from the Academy. There's no reason to believe that he won't keep his word—he's got nothing to gain by haste. The comet, after all, is ten days off. We've got to suppose that he means just what he claims. Evil begets idiocy, gentlemen, and there is no earthly way to tell how far down the path into degeneration our doctor has trod. The next train to London, Hasbro?"

"Two-forty-five, sir."

"We'll be aboard her."

CHAPTER 2

London and Harrogate

The Bayswater Club, owned by the Royal Acadmey of Sciences, sat across from Kensington Gardens, commanding a view of trimmed lawns and roses and cleverly pruned trees. St. Ives peered out the window on the second floor of the club, satisfied with what he saw. The sun loomed like an orange just below the zenith, and the radiant heat glancing through the geminate windows of the club felt almost alive. The April weather was so altogether pleasant that it came near to making up for the fearful lunch that would at any moment arrive to stare at St. Ives from a china plate. He'd attempted a bit of cheerful banter with the stony-faced waiter, ordering dirt cutlets and beer, but the man hadn't seen the humor in it. What he *had* seen had been evident on his face.

St. Ives sighed and wished heartily that he was taking the sun along with the multitudes in the park, but the thought that a week hence there mightn't be any park at all—or any multitudes either—sobered him, and he drained the bottom half of a glass of claret. He regarded the man seated across from him. Parsons, the ancient secretary of the Royal Academy, spooned up broth with an enthusiasm that left St. Ives tired. Floating on the surface of the broth were what appeared to be twisted little bugs, but which must have been some sort of Oriental mushroom sprinkled on by a chef with a sense of humor. Parsons chased them with his spoon.

"So you've nothing at all to fear," said Parsons, dabbing at his chin with a napkin. He grinned at St. Ives in a satisfied way, as if proud of himself. "The greatest minds in the scientific world are at work on the problem. The comet will sail past us with no commotion whatsoever. It's a matter of electromagnetic forces, really. The comet might easily be drawn to the Earth, unless, of course, the Earth's magnetic field were forcibly suspended."

"Suspended?"

"It's not unknown to have happened. Common knowledge has it that the magnetic poles have reversed themselves any number of times, and that during the interim between the establishing of new poles, the Earth was blessedly free of any electromagnetic field whatsoever. I'm surprised that a physicist such as yourself has to be informed of such a thing." Parsons peered at St. Ives over the top of his pince-nez, then fished up out of his broth a tendril of unidentifiable vegetable. St. Ives gaped at it. "Kelp," said the secretary, slathering the dripping weed into his mouth and chomping away lustily.

St. Ives nodded, a shiver running up along his spine. The pink chicken

breast that lay beneath wilted lettuce on his plate began, suddenly, to fill him with a curious sort of dread. His lunches with Parsons at the Bayswater Club invariably went so. The secretary was always one up on him, simply because of the food. "So what, exactly, do you intend? To *hope* such an event into existence?"

"Not at all," said Parsons smugly. "We're building a device."

"A device?"

"To reverse the polarity of the Earth, thereby negating any natural affinity the Earth might have for the comet and vice versa."

"Impossible," said St. Ives, a kernel of doubt and fear beginning to sprout within him.

"Hardly." Parsons waved his fork with an air of gaiety, then scratched the end of his nose with it. "No less a personage than Lord Kelvin himself is at work on it, although the theoretical basis of the thing was entirely a product of James Clerk Maxwell. Maxwell's sixteen equations in tensor calculus demonstrated a good bit beyond the idea that gravity is merely a form of electromagnetism. But his conclusions, taken altogether, had such terrible and far-reaching side implications that they were never published. Lord Kelvin, of course, has access to them. And I think that we have little to fear that in such benevolent hands, Maxwell's discoveries will lead to anything but scientific advancement. To more, actually—to the temporary reversal of the poles, as I said, and the switching off, as it were, of any currents that would attract our comet. Trust us, sir. This threat, as you call it, is a threat no more."

St. Ives sat silently for a moment, wondering if any objections would penetrate into Parsons' head past the crunching of vegetation. Quite likely not, but he had to try. Two days earlier, when he'd assured his friends in Dover that they'd easily come it across Ignacio Narbondo, he hadn't bargained on this. Was it possible that the clever contrivances of Lord Kelvin and the Royal Academy would constitute a graver threat than that posed by the hunchbacked doctor? It wasn't to be thought of. Yet here was Parsons, full of talk about reversing the polarity of the Earth. St. Ives was duty bound to speak. He seemed to find himself continually at odds with his peers.

"Have you read the works of young Rutherford?"

"Pinwinnie Rutherford of Edinburgh?"

"Ernest Rutherford. Of New Zealand. I ran across him in Canada. He's done some interesting work in the area of light rays, if you can call them that." St. Ives wiggled loose a thread of chicken, carried the morsel halfway to his mouth, looked at it, and changed his mind. "There's some indication that alpha and beta rays from the sun slide away along the Earth's magnetic field, arriving harmlessly at the poles. It seems likely, at a hasty glance, that without the field they'd sail in straightaway—we'd

be bathed in radioactivity. The most frightful mutations might occur. It has been my pet theory, in fact, that the dinosaurs were laid low in precisely that same fashion—that their demise was a consequence of the reversal of the poles and the inherent cessation of the magnetic field."

Parsons shrugged. "All of this *is* theory, of course. But the comet is eight days away, and *that's* not at all theory. It's an enormous chunk of iron that threatens to smash us into jelly. From your chair across the table it's easy enough to fly in the face of the Academy, but I'm afraid, sir, that Lord Kelvin will get along very well without you—he has in the past."

"There's a better way," said St. Ives simply. It was useless to lose one's temper over Parsons' practiced stubbornness.

"Oh?" said the secretary.

"Ignacio Narbondo, I believe, has showed it to us."

Parsons dropped his spoon onto his lap and launched into a choking fit. St. Ives held up a constraining hand. "I'm very much aware of his threats, I assure you. And they're not idle threats, either. Do you propose to pay him?"

"I'm constrained from discussing it."

"He'll do what he claims. He's taken the first steps already."

"What has this to do with your 'better way'?"

"He intends, if I read him correctly, to effect the stoppage of certain very active volcanoes in arctic Scandinavia via the introduction of petrefacting catalysts into open fissures and dykes. The subsequent detonation of an explosive charge would lead to the eruption of a chain of volcanic mountains that rise above the jungles of Amazonian Peru. The entrapped energy expended by such an upheaval would, he hopes, cast us like a Chinese rocket into the course of the comet."

"Given the structure of the interior of the earth," said Parsons, grinning into his mineral water, "it seems a dubious undertaking at best. Perhaps—"

"Are you familiar with hollow Earth theory?"

Parsons blinked at St. Ives. The corners of his mouth twitched.

"Specifically with the work of McClung-Jones of the Quebec Geological Mechanics Institute? The 'thin-crust phenomenon'?"

Parsons shook his head tiredly.

"It's possible," said St. Ives, "that Narbondo's detonation will effect a series of eruptions in volcanoes residing in the hollow core of the Earth. The stupendous inner-Earth pressures would themselves trigger an eruption at Jones's thin-crust point."

"Thin-crust point?" asked Parsons in a plonking tone.

"The very Peruvian mountains toward which our man Narbondo has cast the glad eye!"

"That's an interesting notion," muttered Parsons, coughing into his napkin. He stared out the window, blinking his eyes ponderously, as if satisfied that St. Ives had concluded his speech.

"What I propose," said St. Ives, pressing on, "is to thwart Narbondo, and then effect the same thing, only in reverse—to propel the Earth temporarily out of her orbit in a long arc that would put the comet beyond her grasp. If the calculations were fined down sufficiently—and I can assure you that they have been—we'd simply slide back into orbit some few thousand miles farther along our elipse, a pittance in the eyes of the incalculable distances of our journeying through the void."

St. Ives sat back and fished in his coat for a cigar. Here was the Royal Academy, unutterably fearful of the machinations of Ignacio Narbondo—certain, that is, that the doctor was not talking, as it were, through his hat. If they could trust to Narbondo to destroy the Earth through volcanic manipulation, then they could quite clearly trust St. Ives to save it by the same means. What was good for the goose, after all . . . St. Ives took a breath and continued. "There's been some study of the disastrous effects of in-step marching on bridges and platforms—military study mostly. My own theory, which abets Narbondo's, would make use of such study, of the resonant energy expended by a troop of synchronized marchers . . ."

Parsons grimaced and shook his head slowly. He wasn't prepared to admit anything about the doings of the nefarious doctor. And St. Ives' theories, although fascinating, were of little use to them here. Then there was this man Jones. Hadn't he been involved in certain ghastly lizard experiments in the forests of New Hampshire? "Very ugly incident, that one," Parsons muttered sadly. "One of your hollow Earth men, wasn't he? Had a lot of Mesozoic reptiles dummied up at a waxworks in Boston, as I recall, and insisted he'd found them sporting in some bottomless cavern or another." Parsons squinted shrewdly at St. Ives. It was *real* science that they'd ordered up here. Humanity cried out for it, didn't they? Wasn't Lord Kelvin at that very moment riveting together the carcass of the device that Parsons had described? Hadn't St. Ives been listening? Parsons shrugged. Discussions with St. Ives were always—how should one put it?—revealing. But St. Ives had gotten in out of his depth this time, and Parsons' advice was to strike out at once for shore—a hearty breaststroke so as not to tire himself unduly. He patted St. Ives on the sleeve, waving the wine decanter at him. St. Ives nodded and watched the secretary fill his glass to within a centimeter of the top. There was no arguing with the man. And it wasn't argument that was wanted now anyway. It was action.

The manor house and laboratory of Langdon St. Ives sat some three

quarters of a mile from the summer house of William Thomson, Lord Kelvin. The River Nidd ran placid and slow between, slicing neatly in two the broad meadow that separated the grounds of the manor from the grounds of the summer house. The willows that lined the banks of the Nidd effected a rolling, green cloudbank that almost obscured each house from the view of the other, but from St. Ives' attic window, Lord Kelvin's broad, low barn was just visible atop a grassy knoll. In and out of that barn trooped a platoon of white-coated scientists and grimed machinists. Covered wagons scoured along the High Road from Kirk Hammerton, bearing enigmatic mechanical apparatus, and were met at the gates by a man in military fatigues, who poked his head in under tarpaulins in search, perhaps, for unwelcome sightseers or for agents of Doctor Ignacio Narbondo.

St. Ives watched their comings and goings through his spyglass. He turned a grim eye on Hasbro, who stood silently behind him. "I've come to a difficult decision, Hasbro."

"Yes, sir."

"I've decided that we must play the role of saboteur, and nothing less. I shrink from such deviltry, but far more is at stake here than honor. We must ruin, somehow, Lord Kelvin's machine."

"Very good, sir."

"Doing so, of course, necessitates not only carrying out the plan to manipulate the volcanoes, but implies utter faith in that plan. Here we are setting in to thwart the effort of one of the greatest living practical scientists and to substitute our own feeble designs in its stead—an act of monumental egotism."

"As you say, sir."

"But the stakes are high, Hasbro. We *must* have our hand in. It's nothing more or less than the salvation of the Earth, secularly speaking, that we engage in."

"Shall we want lunch first, sir?"

"Kippers and gherkins, thank you. And bring up two bottles of Double Diamond to go along with it—and a bottle or two for yourself, of course."

"Thank you, sir," said the redoubtable Hasbro. "You're most generous, sir."

"Very well," mumbled St. Ives, striding back and forth beneath the exposed roof rafters and knuckling his brow. He paused and squinted out into the sunlight, watching another wagon rattle along into the open door of Lord Kelvin's barn. Disguise would avail them nothing. It would be an easy thing to fill a wagon with unidentifiable scientific trash—heaven knew he had any amount of it lying about—and to dress up in threadbare pants and coat and merely drive the stuff in at the gate. The guard would have no inkling of who he was. But Lord Kelvin, of course, would. A

putty nose and false chin whiskers would be dangerous things. If any members of the academy saw through them they'd clap him in irons—accuse him of intended sabotage, of seeking the destruction of the world. He could argue his case well enough in the courts, to be sure. He could depend on Rutherford, at least, to support him. But in the mean time the Earth would have exploded. That wouldn't answer. And if Lord Kelvin's machine were put into operation and were successful, then he'd quite possibly face a jury of two-headed men and a judge with a third eye. They'd be sympathetic, under the circumstances, but still . . .

He paused and pressed his face into his hands. They'd have to brass it out—stride in grinning, offering their services. Parsons would be there. Would he have them pitched out? Quite possibly. But in the meantime, between the four of them, they'd surely see some opportunity, some little chink in the armor of Lord Kelvin's apparatus. Who could say what it would consist of? Subtlety, thought St. Ives as the top of Hasbro's head hove into view on the steep stairs, was worth a fortune.

The vast interior of Lord Kelvin's barn was awash with activity—a sort of carnival of strange debris: of coiled copper and tubs of bubbling fluids and rubber-wrapped cable thick as a man's wrist hanging from overhead joists like jungle creepers. A vast globular device shuddered beneath laboring welders and riveters square in the center of the floor, and Lord Kelvin himself, talking through his beard and clad in a white smock and Leibnitz cap, pointed and shouted and squinted with a calculating eye at the dread machine that piece by piece took shape in the lamplight. Parsons stood beside him, leaning on a brass-shod cane.

At the sight of Langdon St. Ives standing in the sunlight outside the open door, Parsons' chin dropped. St. Ives glanced at Jack Owlesby and Hasbro. Bill Kraken had disappeared. Parsons raised an exhorting finger, widening and squinting his eyes at the same time, with the curious effect of making the bulk of his forehead disappear into his thin, grey hair.

"Parsons!" cried St. Ives, getting in before him. "Your man at the gate is a disgrace. We sauntered in past him mumbling nonsense about the Atlantic Cable and showed him a worthless letter signed by the Duke of Windsor. He tried to shake our hands. You've *got* to do better than that, Parsons. We might have been anyone, mightn't we—villains of any sort at all. And here we are, trooping in like so many ants. It's the great good fortune of the Commonwealth that we're friendly ants. In a word, we've come to offer our skills, such as they are."

St. Ives paused for breath and bowed almost imperceptibly. Parsons sputtered like the burning fuse of a fizz bomb, and for one dangerous moment St. Ives was fearful that the old man would explode, would pitch over from apoplexy and that the sum of their efforts would turn out to

be merely the murder of poor Parsons. But the fit passed. The secretary snatched his quivering face back into shape and gave the three of them an appraising look, stepping across so as to stand between St. Ives and the machine, as if his gaunt frame, pinched by years of a weedy, vegetarian diet, would somehow hide the thing from view.

"*Persona non grata,* is it?" asked St. Ives, giving Parsons a look in return, then instantly regretting the action. There was nothing to be gained by being antagonistic.

"I haven't any idea how you swindled the officer at the gate," said Parsons evenly, holding his ground, "but this operation has been commissioned by His Majesty the King and is undertaken by the collected members of the Royal Academy of Sciences, an organization, if I remember aright, which does not count you among its members. In short, we thank you for your kind offer of assistance and very humbly ask you to leave, along with your ruffians." He turned to solicit Lord Kelvin's agreement, but the great man was sighting down the length of a brass tube, tugging on it in order, apparently, to align it with an identical tube that hung suspended from the ceiling fifteen feet away. "My Lord," said Parsons, clearing his throat meaningfully, but he got no response at all, and gave off his efforts when St. Ives seemed intent on strolling 'round to the opposite side of the machine.

"*Must* we make an issue of this, sir?" Parsons demanded of St. Ives, stepping along in an obvious effort to cut him off and casting worried looks at Hasbro and Jack Owlesby, as if fearful that the two of them might produce some fearful device of their own with which to blow up the barn and exterminate the lot of them.

St. Ives stopped, surprised to see Bill Kraken, grimed with oil and wearing the clothes of a workman, step out from behind a heap of broken crates and straw stuffing. Without so much as a sideways glance at his employer, Kraken hurried to where Lord Kelvin fiddled with the brass tube, grasped the distant end of it, and offered his services. In a moment he was wrestling with the thing, hauling it this way and that to the apparent approval of his Lordship, and managing to tip St. Ives a broad wink in the process.

There was clearly no way of getting around Parsons short of knocking the man down, and such an action hardly seemed justifiable. "Well, well," said St. Ives in a defeated tone, "I'm saddened by this, Parsons. Saddened. I'd hoped to lend a hand."

Parsons, seeming mightily relieved all of a sudden, cast St. Ives a wide smile. "Thank you, sir," he said, limping toward the scientist, his hand outstretched. "If this project were in the developmental stages, I assure you we'd welcome your expertise. But it's really a matter of nuts and bolts now, isn't it? And your genius, I'm afraid, would be wasted." He

ushered the three of them out into the sunlight, grinning now, and stood atop the knoll, watching until he was certain the threat had passed and the three were beyond the gate. Then he called round to have the gate guard relieved. He couldn't, he supposed, have the man flogged, but he could see to it that he spent an enterprising year patrolling the thoroughfares of Dublin.

CHAPTER 3

London and Harrogate Again

It was late evening along Fleet Street, and the London night was clear and unseasonably warm, as if the enormous moon that swam in the purple sky beyond the dome of St. Pauls were radiating a thin, white heat. The very luminosity of the moon paled the surrounding stars, but as the night deepened where it fell away into space, the stars winked on and brightened and thickened in such a way as to remind St. Ives that the universe wasn't an empty place after all. And out there among the planets, hurtling toward Earth, was the vast comet, its curved tail a hundred million miles of showering ice blown by solar wind along the uncharted byways of space. St. Ives could see it. Tomorrow or the next day the man in the street, peering skyward to admire the stars, would see it too. Would it be a thing of startling beauty, a wash of fire across the canvas of heaven? Or would it send a thrill of fear through a populace still veined with the superstitious dread of the medieval church?

The shuffle of footsteps behind him brought St. Ives to himself. He wrinkled his face up, feeling the gluey pull of the horsehair eyebrows and beard, which, along with a putty nose and monk's wig, made up a very suitable disguise. Coming along toward him was Beezer the journalist, talking animatedly to a man in shirtsleeves. Beezer chewed the end of a tiny cigar and waved his arms to illustrate a story that he told with particular venom. He seemed unnaturally excited, although St. Ives had to remind himself that he was almost entirely unfamiliar with the man—perhaps he always gestured and railed so.

St. Ives fell in behind the two, making no effort to conceal himself. Hasbro and Jack Owlesby stood in the shadows two blocks farther along in an alley past Whitefriars. There was precious little time to waste. Occasional strollers passed; the abduction would have to be quick and subtle. "Excuse me, Mr. Beezer is it, the journalist?"

The two men stopped, looking back at St. Ives. Beezer's hands fell to his side. " 'At's right, pappy," came the reply. Beezer squinted at him,

as if ready to doubt the existence of such a wild figure on the evening street.

"My name, actually, is Penrod," said St. Ives. "Jules Penrod. You've apparently mistaken me for someone else. I have one of the twelve common faces."

Beezer's companion burst into abrupt laughter at the idea. Beezer, however, seemed impatient at the interruption. "Face like yours is a pity," he said, nudging his companion in the abdomen with his elbow. "Suits a beggar, though. I haven't got a thing for you, pappy. Go scrub yourself with a sponge." And with that the two of them turned and made away, the second man laughing again and Beezer gesturing.

"One moment, sir!" cried St. Ives, pursuing the pair. "We've a mutual friend."

Beezer turned and scowled, chewing his cigar slowly and thoughtfully. He stared carefully at St. Ives' unlikely visage and shook his head. "No, we don't," he said, "unless it's the devil. Any other friend of yours would've hung himself by now out of regret. Why don't you disappear into the night, pappy, before I show you the shine on my boot?"

"You're right, as far as it goes," said St. Ives, grinning inwardly. "I'm a friend of Doctor Ignacio Narbondo, in fact. He's sent me 'round with another communication." Beezer squinted at him. The word 'another' hadn't jarred him.

"Is that right?" he said.

St. Ives bowed, clapping a hand hastily onto the top of his head to hold his wig on.

"Bugger off, will you, Clyde?" Beezer said to his friend.

"My drink . . ." came the reply.

"Stow your drink. I'll see you tomorrow. I'll buy you two. Now get along."

The man turned away regretfully, despondent over the lost drink perhaps, and St. Ives waited until he'd crossed Whitefriars and his footsteps faded out of earshot before he spoke. He nodded to the still scowling Beezer and set out in the wake of the departed Clyde, looking up and down the street as if to discern anything suspicious or threatening. Beezer fell in beside him. "It's about the money," said St. Ives.

"The money?"

"Narbondo fears that he promised you too much of it."

"He's a filthy cheat!" cried Beezer, eliminating any doubts that St. Ives might have had about Beezer's having received Narbondo's message.

"He's discovered," continued St. Ives, "that there are any of a number of journalists who will sell out the people of London for half the sum. Peabody at the *Herald,* for instance, has agreed to cooperate."

"The filthy, scum-sucking cheat!" Beezer shouted, waving both hands over his head.

"Tut, tut," admonished St. Ives, noting with a surge of anxious anticipation the darkened mouth of the alley some thirty feet distant. "We haven't contracted with Peabody yet. It was merely a matter of feeling out the temperature of the water, so to speak. You understand. You're a businessman yourself in a way." St. Ives gestured broadly with his left hand as if to signify that a man like Beezer could be expected to take the long view. With his right he reached across and snatched the lapels of Beezer's coat, then brought his left hand around and pummeled the startled journalist square in the back, catapulting him into the ill-lit alley.

"Hey!" shouted Beezer, tripping forward into the waiting arms of Jack Owlesby, who leaped in to pinion the man's wrists. Hasbro, waving an enormous bag, appeared from the shadows and flung the bag like a gill net over Beezer's head, St. Ives yanking it down across the man's back and pushing him forward off his feet. Hasbro snatched at the draw-rope, grasped Beezer's shoulders, and hissed through the canvas, "Cry out and you're a dead man!"

The struggling Beezer collapsed like a sprung balloon, having an antipathy, apparently, to the idea of being a dead man. Jack clambered up onto the bed of a standing wagon, hauled open the lid of a steamer trunk, and along with St. Ives and Hasbro yanked and shoved and grappled the feebly struggling journalist into the wood and leather prison. He banged ineffectively a half dozen times at the sides of the trunk, mewling miserably, then fell silent as the wagon rattled and bounced along the alley, exiting on Salisbury Court and making away south toward the Thames.

A half hour later the wagon had swerved around the Embankment and doubled back through Soho as St. Ives set a course toward Chingford. Hasbro, always prepared, had uncorked a bottle of whisky, and each of the three men held a glass, lost in his own thoughts about the warm April night and the dangers of their mission. "Sorry to bring you in on this, Jack," said St. Ives. "There might quite likely be the devil to pay before we're through. No telling what sort of a row our man Beezer might set up."

"I'm not complaining," said Jack Owlesby, grinning gamely at St. Ives.

"It was Dorothy I was thinking about, actually. We're only weeks finished with the pig incident, and I've hauled you away again. There she sits in Kensington wondering what sort of nonsense I've drummed up now. She's a stout woman, if you don't mistake my meaning."

Jack nodded. If Dorothy knew, in fact, what sort of business they pursued this time, she'd have insisted on coming along. Jack thought of

her fondly. "Do you know—" he began, reminiscing, but the sound of Beezer pummeling the sides of the trunk cut him off.

"Tell the hunchback!" shrieked a muffled voice, "that I'll have him horsewhipped! He'll be sulking in Newgate Prison by the end of the week, by God! There's nothing about him I don't know!"

St. Ives shrugged at Hasbro. Here, perhaps, was a stroke of luck. If Beezer could be convinced that they actually *were* agents of Narbondo, it would go no little way toward throwing the man off their scent when the affair was over, especially if he went to the authorities with his tale. He hadn't, after all, committed any crime, nor did he contemplate one—no crime, that is, beyond the crime against humanity, against human decency. "Narbondo has authorized us to eliminate you if we see fit," said St. Ives, hunching over the trunk. "If you play along here you'll be well paid; if you struggle, you'll find yourself counting fishes in the rocks off Southend Pier." The journalist fell silent.

Early in the pre-dawn morning the wagon rattled into Chingford and made for the hills beyond, where lay the cottage of Sam Langley, son of St. Ives' long-time cook. The cottage was dark, but a lamp burned through the slats in the locked shutters of a low window in an unused silo fifty yards off. St. Ives reined in the horses, clambering out of the wagon at once, and with the help of his two companions, hauled the steamer trunk off the tailgate and into the unfastened door of the silo. Jack Owlesby and Hasbro hastened back out into the night, and for a moment through the hastily open door, St. Ives could see Sam Langley stepping off his kitchen porch and pulling on a coat. The door shut and St. Ives was alone in the feebly lit silo with the trunk and scattered pieces of furniture.

"I'm going to unlock the trunk—" St. Ives began.

"You sons of . . . ," Beezer started to shout, but St. Ives rapped against the lid of the trunk with his knuckles to silence him.

"I'm either going to unlock the trunk or set it afire," said St. Ives with great deliberation. "The choice is yours." The trunk was silent. "Once the trunk is unlocked, you can quite easily extricate yourself. The bag isn't knotted. You've probably already discovered that. My advice to you is to stay absolutely still for ten minutes, then you can thrash and shriek and stamp about until you collapse. No one will hear you. You'll be happy to hear that a quantity of money will be advanced to your account, and that you'll have a far easier time spending it if you're not shot full of holes. Don't, then, get impatient. You've ridden out the night in the trunk; you can stand ten minutes more." Beezer, it seemed, had seen reason, for as St. Ives crouched out into the night, shook hands hastily with Langley, leaped into the wagon and took up the ribands, nothing but silence emanated from the stones of the silo.

* * *

Two evenings earlier, on the night that St. Ives had waylaid Beezer the journalist, the comet had appeared in the eastern sky, ghostly and round like the moon reflected on a frosty window, just a circular patch of faint, luminous cloud. But now it seemed to drop out of the heavens toward the Earth like a plumb bob toward a melon. St. Ives peered into the eyepiece of his meager telescope, tracking the flight of the comet for no other reason, really, than to while away the early dawn hours. There was nothing to calculate; work of that nature had been accomplished weeks past by astronomers whose knowledge of astral mathematics was sufficient to satisfy both the Royal Academy and Doctor Ignacio Narbondo. St. Ives wouldn't dispute it. His desire, beyond a simple fascination with the mystery and wonder of the thing, was to have a look at the face of what might easily be his last great nemesis.

The glow of the lights of Leeds, and to a much lesser extent the lights of Kirk Hammerton, obscured the clarity of the heavens, and the billows of cloud along the northern horizon threatened at any moment to roil up across the sky and cover the sky utterly. His telescope, with its mirror of speculum metal, had been a gift of Lord Rosse, and through it St. Ives had seen years past the strange lunar activity that had led, very nearly, to his death, and to his final cataclysmic parting of the ways with the Royal Academy of Sciences. The telescope, however, was wasted here. He could have seen the comet clearly enough through the window. His brass spyglass alone was sufficient to turn the thing into a monster hurtling among the planets. But his fascination with the simple presence of the deadly star drew him to his observatory as a curious child is drawn to the edge of a deep and terrifying precipice.

Hasbro packed their bags in the manor. Their train left Kirk Hammerton Station at six. Dr. Narbondo, St. Ives had to assume, would discover that same morning that he'd been foiled, that Beezer, somehow, had failed. The morning *Times* would rattle in on the Dover train, ignorant of pending doom. The doctor would try to contact the nefarious Beezer, but Beezer wouldn't be found. He's taken ill, they'd say, repeating the substance of the letter St. Ives had sent off to Beezer's employers. Beezer, they'd assure Narbondo, had been ordered south on holiday—to the north coast of Spain. Narbondo's forehead would wrinkle with suspicion and the wrinkling would engender horrible curses and the gnashing of teeth. St. Ives smiled. The doctor wouldn't have an inkling of who had thwarted him.

But the result of the mystery of the disappeared journalist would, quite likely, be the immediate removal of Narbondo and Hargreaves to the environs of northwestern Scandinavia. The chase, thought St. Ives romantically, would be on. The comet loomed only a few days away, barely enough time to accomplish their task.

A door slammed in the manor. St. Ives slipped from his stool and looked out through the west-facing window of his observatory, waving to Hasbro who, in the roseate light of an early dawn, dangled a pocket watch from a chain and nodded to his employer. In a half hour they were away, scouring along the highroad toward the station in Kirk Hammerton, St. Ives, Hasbro, and Jack Owlesby, bound for Ramsgate to board the zeppelin that would transport them to the ice and tundra of arctic Norway. If the labors of Bill Kraken were unsuccessful, they'd know two days hence.

Bill Kraken crouched in the willows along the River Nidd, watching through the lacey tendrils the dark bulk of Lord Kelvin's barn. The device had been finished two days earlier, the ironic result, to a degree, of his own labor—labor he wouldn't be paid for. But money wasn't of particular consequence anymore, not like it had been in the days of his squid merchanting or when he'd been rescued from the life of a lowly peapod man by the charitable Langdon St. Ives. He wanted for nothing now, really, beyond the success of the night's mission.

In a cloth bag beside him wriggled a dozen snakes, collected by Kraken in the high grass beyond the manor house. In a wire screen cage beneath the snakes were a score of mice, hungry, as were the snakes, from days of neglect. A leather bellows dangled from his belt, and a hooded lantern from his right hand.

No one, apparently, was on the meadow. The Royal Academy was glad to be quit of Ignacio Narbondo, who had taken ship for Oslo, word had it, to effect his machinations. But the Royal Academy would be in before him; they would reduce his threats to drivel. Why he hadn't followed through with his plan to alert the press they couldn't say, but it seemed to be evidence that his threats were mere bluff. This latest turn had lightened the atmosphere considerably, it seemed to Kraken. It had lent a sort of holiday air to what had been a business fraught with suspicion and doubt.

He bent out from under the willows and set out across the meadow carrying his bundles. It would do no good to run. He was too old to be cutting capers on a meadow in the dead of night, and if he tripped and dropped his mice or knocked his lantern against a stone, his plan would be foiled utterly. In an hour both the moon and the comet would have appeared on the horizon and the meadow would be bathed in light. If he were sensible, he'd be asleep in his bed by then.

The dark bulk of the barn loomed toward him; the pale stones of its foundation contrasting feebly with the weathered oak battens above. Kraken ducked along the wall toward a tiny mullioned window beneath which extended the last six inches of the final section of brass pipe—the

very pipe which Kraken himself had wrestled through a hole augered into the barn wall on that first day he'd helped Lord Kelvin align the things.

What, exactly, the pipe was intended to accomplish, Kraken couldn't say, but somehow it was the focal point of the workings of the device. Beyond, some twenty feet from the barn and elevated on a stone slab, sat a black monolith, smooth as polished marble. Kraken had been amazed when, late the previous afternoon, Lord Kelvin had flung a ball-peen hammer end over end at the monolith, and the collected workmen and scientists had gasped in wonder when the hammer had been soundlessly reflected with such force that it had sailed out of sight in the general direction of York. That it had come to earth yet not a man of them could say. The reversal of the poles was to be accomplished, then, by emanating the collected magnetic rays developed in Lord Kelvin's machine toward the monolith, thus both exciting and deflecting them in a circuitous pattern, sending them off, as it were, astride a penny whirligig.

Kraken squinted through the darkness at the monolith, doubly black against the purple of the starry night sky, and wondered at the wonderful perspicacity of great scientists. Given a thousand years—two thousand—Kraken couldn't have thought up such a machine, let alone engineer the building of one. But here it was, primed for acceleration on the morrow. Could Kraken, a man of admittedly low intellect, scuttle the marvelous device? Kraken shook his head, full, suddenly, of doubt. He'd been entrusted with little else than the material salvation of humanity. . . . Well, Kraken was just a small man with a small way of doing things. He'd seen low times in his life, had mucked through sewers with murderers, and he'd have to trust to low means here. That was the best he could do.

He quit breathing and cocked an ear. Nothing but silence and the distant hooting of an owl greeted him on the night air. He untied the bellows from his belt and shook them against his ear. Grain and broken biscuits rattled within. He shoved the mouth of the bellows into the end of the brass tube and pumped furiously, listening to the debris clatter away, down the tilted pipe. Long after the last of the grain had been blown clear of the bellows, Kraken continued to manipulate his instrument, desperate to send the bulk of it deep into the bowels of the machine. Haste would avail him nothing here.

Satisfied, he tied the bellows once again to his belt and picked up the mouse cage. The beasts were tumultuous with excitement, stimulated, perhaps, by the evening constitutional, or sensing somehow that they were on the brink of an adventure of powerful magnitude. Kraken pressed the cage front against the end of the tube and pulled open its little door.

The mice scurried roundabout, casting wild glances here and there, suddenly curious about a heap of shredded newspaper or the pink ear of a neighbor. Then, one by one, they filed away down the tube like cattle down a hill, sniffing the air, intent suddenly on buiscuits and grain.

The snakes were a comparatively easy case. A round dozen of the beasts fled away in the wake of the mice, anxious to be quit of their sack. Kraken wondered if he hadn't ought to wad the sack up and shove it into the tube, to make absolutely sure that the beasts remained within. But the dangers of doing so were manifold. Lord Kelvin or some particularly watchful guard might easily discover the stopper before Kraken had a chance to remove it. They mustn't, said St. Ives, discover that the sabotage had been the work of men—thus the mice and snakes. It might easily seem that the natural residents of the barn had merely taken up lodgings there, and the hand of Langdon St. Ives would go undetected.

It was very nearly within the hour that Bill Kraken climbed into bed. But his dreams were filled that night with visions of mice and snakes dribbling from the end of the tube and racing away into the darkness, having consumed the grain and leaving nothing behind sufficient to foul the workings of the dread machine. What could he do, though, save trust to Providence? The shame of his failure—if failure it should be—would likely be as nothing next to the horrors that would beset them after Lord Kelvin's success. God bless the man, thought Kraken philosophically, picturing the aging lord, laboring night and day to complete his engine, certain that he was contributing his greatest gift yet to humankind. His disappointment would be monumental. It seemed almost worth the promised trouble to let the poor man have a go at it. But that, sadly, wouldn't do. The world was certainly a contradictory place.

CHAPTER 4

Norway

The bright April weather had collapsed in a heap before St. Ives and his man Hasbro had chuffed into Dover, and the North Sea was a tumult of wind-tossed waves and driving rain. St. Ives huddled now aboard the Ostende Ferry, out of the rain beneath an overhanging deck ledge and wrapped in an oilcloth, legs spread to counter the heaving swell. His pipe burned like a chimney. Occasional drops, swirling in on the wind, drove into his face, and the orange coal in the pipe bowl hissed and sputtered. He peered out at the roiling black of the heavens, equally dark thoughts drawing his eyes into a squint and making him oblivious to the cold and wet. Had this sudden turn of arctic weather anything to do with the

experimentation of the Royal Academy? Had they effected the reversal of the poles prematurely and driven the weather suddenly mad? Had Kraken failed? He watched a grey swell loom overhead, threatening to slam him into paste, then sink suddenly into nothing as if having changed its mind, only to tower up once again overhead, sheets of flying foam torn from its crest and rendered into vapor.

His plans seemed to be fast going agley. The zeppelin he'd counted upon for transport had been "inoperable," or so he'd been told. The fate of the Earth itself hung in the balance, and the filthy zeppelin was "inoperable." They'd all be inoperable by the end of the week. Jack Owlesby had stayed on in Ramsgate where a crew of nitwits fiddled with the craft, and so yet another variable, as the mathematician would say, had been cast into the muddled stew. Could the zeppelin be made operable in time? Would Jack, along with the flea-brained pilot, find them in the cold wastes of arctic Norway? It didn't bear thinking about. One thing at a time, St. Ives reminded himself. They'd left Jack with a handshake and a compass and had raced south intending to follow Narbondo overland, as it were, trusting to Jack to take care of himself.

But where was Ignacio Narbondo? He'd set sail from Dover with Hargreaves hours earlier; there could be no doubt about that. But the ticket agent could find no record of his having boarded the Dover-Ostende ferry. St. Ives had described him vividly: the hump, the tangle of oily hair, the cloak. No one could remember having seen him board. Had he somehow discovered that agents were at work to foil his efforts? Did he suspect that Beezer had been abducted, that his mail had been interfered with?

It was conceivable, just barely, that St. Ives had made a monumental error, or that Narbondo had tricked the lot of them, had been one up on them all along. He might at that moment be bound, say, for Reykjavik, intent on working his deviltry on the volcanic wastes of the interior of Iceland. The world was vast, full of trackless wilderness. Here was St. Ives, bobbing on the sea like a tin soldier aboard a cork boat, vainly supposing that from his vantage point on the heaving deck he could somehow anticipate the movements of a madman—two madmen. If he and Hasbro arrived in Ostende and there was no word of Narbondo, what then? If no porter or ticket-taker, no vagabond or bun seller, no cleaning woman or constable had seen the hunchback, what would they do? Go on, St. Ives decided.

But in Ostende the rain let up and the wind fell off, and the solid ground beneath his feet lent a steadiness of purpose to St. Ives once again and settled his topsy-turvy stomach. In the cold station a woman stirred a cauldron of mussels in a wall niche, dumping in handfuls of shallots and lumps of butter. Aromatic steam swirled out of the iron pot in such

a way as to make St. Ives light-headed. "Mussels and beer," he said to Hasbro, "would revive a body."

"That they would, sir. And a loaf of bread, I might add, to provide bulk."

"A sound suggestion," said St. Ives, striding toward the woman and removing his hat. She dumped open mussels, black and dripping, into a roughly woven basket lined with newspaper, heaping up the shells until they threatened to cascade to the floor. She winked at St. Ives, fished an enormous mussel from the pot, slid her thumbs into the hiatus of its open shell, and, in a single swift movement, pulled the mollusc open, shoved one of her thumbs under the orange flesh and flipped the morsel into her open mouth. "Some don't chew them," she said, speaking English, "but I do. What's the use of eating at all if you don't chew them? Might as well swallow a toad. Do you know what I mean?"

"Indubitably," said St. Ives. "It's the same way with oysters. I never could stand to simply allow the creatures to slide down my throat. I fly in the face of custom there."

"Aye," she said. "Can you imagine a man's stomach, full of beasts such as these, whole, mind you, and sloshin' like smelts in a bucket?" She canted her head at St. Ives as if expecting an answer, then dipped again into the cauldron and tossed another mussel down, grimacing almost immediately and rooting in her half-filled mouth with a finger. "Mussel pearl," she said, holding up between thumb and forefinger a tiny opalescent sphere twice the size of a pinhead. She slid open a little drawer in the cart on which sat the cauldron of mussels, and dropped the pearl in among what must have been thousands of the tiny orbs, picking at her back teeth thereafter with a bent fingernail. "Can't stand debris," she said, grimacing.

The entire display rather took the edge off St. Ives' appetite, and the heap of mussels in his basket, reclining beneath a coating of congealing butter and bits of garlic and shallot, began to remind him of certain unfortunate suppers he'd consumed at the Bayswater Club. He grinned weakly at the woman and looked around at the hurrying crowds, wondering if he and Hasbro hadn't ought to join them.

"Man in here this afternoon ate one shell and all," she said shaking her head. "Imagine the debris. Must have given his throat bones some trouble, I dare say."

"Shell and all?" asked St. Ives.

"That's the exact case. Crunched away at the thing like it was a marzipan crust, didn't he? Then he took another, chewed it up about halfway, saw what he was about, and spit the filthy thing against the wall there. You can see bits of it still, can't you, despite the birds swarming round.

There's the smear of it against the paint. Do you see it there? Bit of brown paste is all it amounts to now."

St. Ives stared at the woman. "Big man?"

"Who?"

"This fellow who ate the shells. Big, was he, and with a beard? Seemed ready to fly into a rage?"

"That's your man, gents. Cursed vilely, he did, but it weren't at the shells, it was at the poor birds, wasn't it, when they come round to eat up what your man spit onto the wall there. You can see it there, can't you? I never—"

"Was he in the company of a hunchback?"

"Aye," said the woman, giving her pot a perfunctory stirring. "Greasy little man with a grin. Seemed to think the world is a lark. But it ain't no lark, gentlemen. Here you've been, wasting my time this quarter hour, and not another living soul has bought a shell. You've frightened the lot of them off, is what I think, and you haven't paid me a penny." She glowered at St. Ives, then glowered at Hasbro.

"What time this afternoon?" asked St. Ives.

"Three hours past, say, or four. Might have been five. Or less."

"Thank you," said St. Ives, reaching into his pocket for a handful of coin. He dumped a half crown into her outstretched hand and left her blinking, he and Hasbro racing through the terminal toward the distant exit, each of them clutching a Gladstone bag in one hand and a basket of mussels in the other. The streets were wet outside, but the clouds were broken overhead and were taking flight in the grey dusk, and the wind had simmered down to a sort of billowy breeze. A bent man shambled past in trousers meant for a behemoth, clutching at a buttonless coat. St. Ives thrust his basket of mussels at the man, meaning to do him a good turn, but his gesture was mistaken, for the man peered at them with a look of mingled surprise and loathing in his eyes, fetching the basket a swipe with his hand that sent the entire affair into the gutter. St. Ives strode on without a word, marveling at how little space existed at times between madness and the best of intentions. In a half hour they were aboard a train once again, in a sleeping car bound for Amsterdam, Hamburg, and, finally, to Hjorring where on the Denmark ferry they'd once again set sail across the North Sea, up the Oslofjord into Norway.

St. Ives was determined to remain awake, to have a look at the comet when it arced in over the horizon some time after midnight. But the sleepless night he'd spent in the observatory and the long hours of travel since had worn him thin, and after a tolerable meal in the dining car, and what might likely turn out to be, on the morrow, a regrettable lot of brandy, he dropped away at once into a deep sleep. The comet rose in the sky and fell again without him, slanting past the captive earth.

In Oslo Hargreaves had beaten a man half senseless with the man's own cane. In Trondheim, two hours before the arrival of St. Ives and Hasbro on the express, he'd run mad and threatened to explode a greengrocer's cart, kicking the spokes out of one of the wheels before Narbondo had hauled him away and explained to the authorities that his companion was a lunatic bound for a sanitorium in Natvik.

St. Ives itched to be after them, but here he sat, becalmed in a small, brick railway station. The doctor couldn't know that he was so closely pursued. He'd stop in a village for a meal and St. Ives and Hasbro would be upon him as he shoved down a forkful of codfish. St. Ives stared impatiently out the window at the nearly empty station. A delay of a minute seemed an eternity, and each sighing release of steam from the waiting train carried upon it the suggestion of the final, fateful explosion, which Doctor Narbondo, perhaps having finished his codfish quite happily by now, might at that very moment be effecting. Hasbro, St. Ives could see, was equally uneasy at their motionless state, for he sat hunched forward on his seat as if trying to compel the train into flight. Finally, amid tooting and whooshing and three false starts, they were away again. St. Ives prayed that the engineer had understood his translated request that they make an unscheduled stop on the deserted tundra adjacent to Mt. Hjarstaad. Surely he would; he'd accepted the little bag of assorted coffee tablets readily enough. What could he have understood them to be but a bribe?

Darkness had long since fallen, and with it had fled the last of the scattered rainshowers. Ragged clouds pursued by arctic wind capered across the sky, and the stars shone thick and bright between. The train developed steam after chuffing along lazily up a steepening grade, and within a score of minutes was hurtling through the mountainous countryside. St. Ives was gripped once more with the excitement and peril of the chase. He removed his pocketwatch at intervals, putting it back without so much as glancing at it, loosening his collar, and peering out across the rocky landscape at the distant swerve of track ahead when the train lurched into a curve, as if the engine they pursued might be visible a half mile farther on. The slow, labored climb of steep hills was almost instantly maddening and filled him again with the fear that their efforts would prove futile, that from the vantage point of the next peak they'd witness the detonation of half of Scandinavia: crumbling mountainsides, hurtling rocks. But they'd creep, finally, to summits void of trees, where the track was wafered onto ledges that fronted unimaginable precipices, the train scouring away again in a startling rush of steam and clatter.

They thundered through shrieking tunnels, the starry sky going momentarily black, then reappearing in an instant only to be dashed again

into darkness. And when the train burst each time into the cold Norwegian night, both St. Ives and Hasbro were pressed against the window, peering skyward, relieved to see the last scattered clouds fleeing before the wind. Then all at once, as if they'd been waved into existence by a magic wand, the lights of the aurora borealis swept across the sky in lacey showers of green and red and blue, like a semi-transparent Christmas tapestry hung across the wash of stars.

"Yes!" cried St. Ives, leaping to his feet and nearly pitching into the aisle as they rushed howling into another tunnel. "He's done it! Kraken has done it!"

"Indeed, sir?"

"Absolutely," said St. Ives animatedly. "Without the shadow of a doubt. The northern lights, my good fellow, are a consequence of the Earth's electro-magnetic field. It's a simple matter—no field, no lights. Had Lord Kelvin's machine done the job, the display you see before us would have been postponed for heaven knows how many woeful years. But here it is, isn't it? Good old Bill!" And on this last cheerful note, they emerged once again into the aurora-lit night, hurtling along beside a broad cataract that tumbled down through a boulder-strewn gorge.

Another hour's worth of tunnels, however, began to make it seem finally as if there were no end to their journey, as if, perhaps, their train labored round and round a clever, circular track, that they had been monumentally hoaxed one last, fatal time by Dr. Ignacio Narbondo. And then in an effort of steam they crested one last, steep summit. Away to the west, far below them, moonlight shimmered on the rippled surface of a fjord stretching out of the distant Norwegian Sea. Tumbling down out of the rocky precipices to their right rushed the wild river they'd followed for what seemed an age, the torrent wrapping round the edge of Mt. Hjarstaad and disappearing into shadow where it cascaded, finally, into the vast emptiness of an abyss. A trestled bridge spanned the cataract and gave out onto a tundra-covered plain, scattered with the angular moon shadows of tilted stones.

Between two such shadows lay a strange and alien object—a sizeable steamer trunk, its lid thrown back, its contents removed. Beyond, a hundred yards distant, lay another, yanked over onto its side. The train raced past both before howling to a steam-shrieking stop. St. Ives and Hasbro pitched their bags out onto the icy plain and leaped out after them, the train almost immediately setting out, north, toward Hammerfest, leaving the world and the two men to their collective fate.

St. Ives hurried across the plain toward the slope of Mt. Hjarstaad. A footpath wound upward along the edge of the precipice through which the river thundered and roiled. "I'm afraid we've rather announced our arrival through a megaphone," shouted St. Ives over his shoulder. "Let

us hope," he huffed, "that the doctor is too anxious to culminate his exertions to pay us any real heed."

"Perhaps the roar of the falls . . ." shouted Hasbro at St. Ives' back. But the rest of his words were lost in the watery tumult as the two men leaped up the steepening hill.

St. Ives patted his coat, feeling beneath it the hard, foreign bulk of his revolver. With the exception of certain loathsome bugs, he had an aversion to the killing of anything at all, and he wondered as he edged along the trail, peering past tumbled rock, listening to the unfathomable roar of the maelstrom below, whether he could deliberately shoot either of the madmen that labored above them, even if the consequence was the delivery of humankind out of their wretched clutches.

There was a shout behind him. A crack like a pistol shot followed, and St. Ives threw himself onto his face, rolling against a carriage-sized boulder. A hail of stones showered roundabout, and an enormous circular rock, big as a cartwheel, bounded over his head, soaring away into the misty depths of the abyss.

Above, leaping from perch to rocky perch, was a man with wild hair and beard—Hargreaves, there could be little doubt. St. Ives rolled to his knees, drew his revolver, steadied his forearm along the top of a rock, and fired twice at the retreating figure. His bullets pinged off rocks twenty feet short of their mark, but the effect on the anarchist was startling—it was if he'd been turned suddenly into a mountain sheep.

Again St. Ives set out up the footpath, but Hasbro, following Hargreaves' lead, pursued a course across the granite hillside, gesturing to St. Ives as he disappeared into shadow. St. Ives, pressed against the stony wall of the path, crept along carefully, grimly imagining himself following the course of the plummeting stone and wondering at the fate of the redoubtable Hasbro. Ice crunched underfoot, and the hillside opened up briefly on his right to reveal a steep depression in the rock—a sort of conical hole at the bottom of which lay a black, silent tarn. The water brimmed with reflected stars washed with the blue-red light of the aurora.

Abruptly he rounded a sharp bend and there above him, perched on the rim of the smoking crater and hauling on the coils of a mechanical bladder, was the venomous Hargreaves, the steamy reek of boiling mud swirling about his head and shoulders. Ignacio Narbondo capered beside him, dancing from one foot to the other like a man treading on hot pavement.

They were too distant to shoot at. Anything farther off than forty feet confounded St. Ives' aim. Where was Hasbro? How in the world were either of them to interfere with the rapidly culminating shenanigan above without racing into the muzzle of a gun? St. Ives was struck with

the awful loneliness of the cold night, of the arctic wind slanting across the hillsides, of the black and grey landscape and the unearthly beauty of the northern lights.

He slid two bullets into the empty chambers of his revolver and stepped forward, intent upon simply brassing it out, come what may. The anarchist grappled now with a Gladstone bag. His curses reached St. Ives on the wind. Narbondo raged beside him, looking hastily back and forth between the approaching St. Ives and his fumbling companion. St. Ives smiled grimly and pressed on, pistol aimed, shouting into the wind for Narbondo to give off.

But the doctor was oblivious to his exhortations. He peered suddenly skyward, his forearm thrown across his brow as if to shade his eyes from moonlight. St. Ives followed Narbondo's gaze, vaguely conscious of a low hum, droning, it seemed, in the back of his ears. The crescent moon bobbed along above the aurora, and below it, dropping into a pale blue wash of color, was the dark, ovoid silhouette of a descending zeppelin.

"Hooray!" cried St. Ives, forgetting himself momentarily and understanding Narbondo's anxiety. Emboldened, he took a determined step forward, hearing the crack of Hargreaves' pistol almost at the same time that the bullet struck him in the shoulder. He cried out and dropped to his knees, his revolver spinning away into the void. A shriek followed, and St. Ives looked up to see Hargreaves, pistol smoking in one hand and the Gladstone bag gripped in another, lurch round, teeter for a moment on the edge of the crater, and topple off, disappearing utterly into the mouth of the volcano, Narbondo making one futile grab at the bag clutched in Hargreaves' disappearing hand.

A prolonged but diminishing shriek ended moments later, followed by a thunderous explosion—the volatile contents of the bag having been detonated by the fires of Mt. Hjarstaad. St. Ives clutched his shoulder as Hasbro stepped out of the shadows above, leveling his pistol at the furious Narbondo in a manner that implied he'd brook no nonsense—that Narbondo was an ace away from following Hargreaves into the pit.

Narbondo shrugged and seemed to slump, half raising his hands in resignation. Then, without so much as a backward glance, he bolted down the footpath toward St. Ives, gathering momentum, running headlong at the surprised scientist. Hasbro aimed the pistol, but a shot was impossible. St. Ives would be imperiled. Narbondo leaped along in great springing strides, his face contorted now with fear and wonderment. St. Ives threw himself sideways, and Narbondo whirled past in uncontrolled, headlong flight.

It seemed certain that at the bend in the footpath he'd find himself plummeting into the abyss, but such was not to be. He tripped, tumbled, bounced shrieking against a rock, and caromed back into the hillside,

head over heels, sliding across the steep, scree-slippery slope into the black water of the tarn. The reflection of the moon and stars on the surface disintegrated, bits and pieces dancing wildly. But by the time Hasbro, hat in hand, had made his way down to where his master stood staring into the depths of the pool, the surface was placid once again.

"He's gone," said St. Ives simply.

"Will he float surfaceward, sir?"

"Not necessarily," replied the scientist. "I rather believe that the fall knocked the wind from him. He'll stay down until he bloats with gasses—until he begins to rot. And the water, I fear, is so cold as to slow the process substantially, perhaps indefinitely. We could wait a bit, just to be certain, but I very much fear that waiting would be injudicious." And with that St. Ives nodded at the horizon where glowed a great arc of white fire. As the two men watched, the flaming orb of the comet crept skyward, enormous now, as if it were soaring in to swallow the puny Earth at a gulp.

Hasbro nodded quietly. "Shall we fetch their equipment, sir?"

"We'll want the lot of it," said St. Ives. "And to all appearances, we'll want it quickly. We've a long and wearisome journey yet before us." He sighed deeply. His shoulder began suddenly to ache. He turned one last time toward the tarn which had stolen from him the satisfaction of confronting the defeated Ignacio Narbondo. "I very much suspect," he said in a low and measured tone, "that our villain has found an icy and not undeserved grave, no less fitting than that of his accomplice. It almost seems choreographed, doesn't it, by some higher authority?"

Hasbro stood for a moment as if in silent contemplation, then replaced his hat and set off up the path, leaving St. Ives to welcome Jack Owlesby, whose hurried footfalls scuffled up the trail behind them. ●

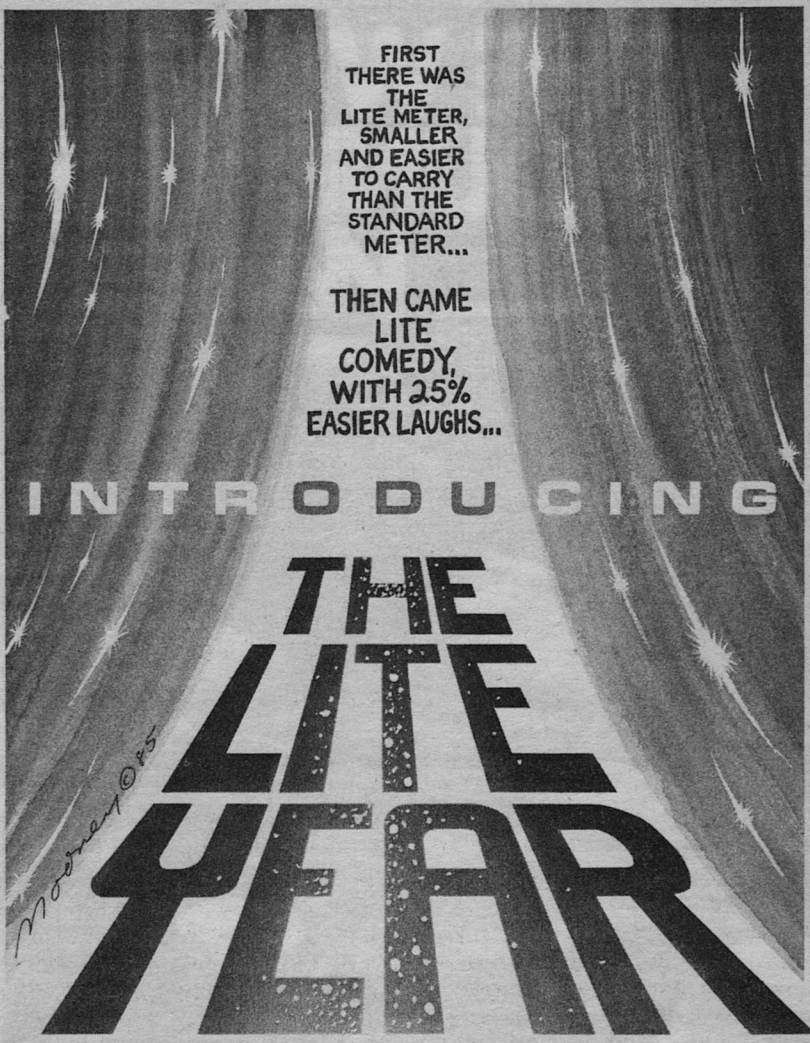
UP FRONT

(continued from page 4)

familiar with his work will find a sample thereof on page 134 (bought and paid for by me, not Gardner, for those of you with suspicious minds). I have complete faith in Gardner's editorial capabilities, and I have no doubt that I'm leaving you in good hands. I think that those of you who liked the magazine under my editorship will like it every bit as much under Gardner's (I'm not so selfless as to say *more*, mind you), and those of you who weren't crazy about my editorial tastes may find some things more to your liking now.

This has turned out to be a rather long Up Front, and I am sorry about stealing your space like this. But before I go I just want to thank you all for your support, your letters, your comments (both kind and not so), and most of all for the real sense of "family" I got from all of you. You were great. ●

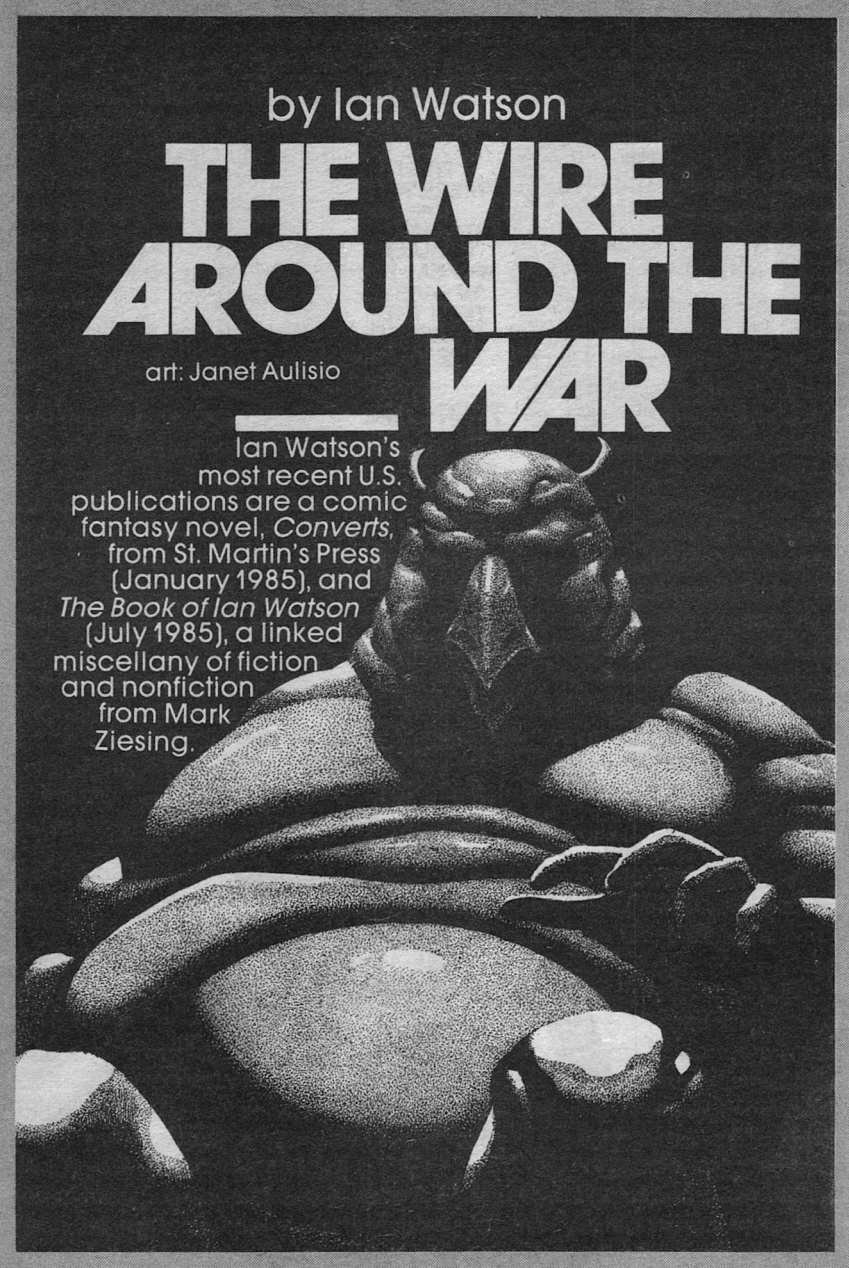
MOONEY'S MODULE



by Ian Watson

THE WIRE AROUND THE WAR

art: Janet Aulisio



Ian Watson's most recent U.S. publications are a comic fantasy novel, *Converts*, from St. Martin's Press (January 1985), and *The Book of Ian Watson* (July 1985), a linked miscellany of fiction and nonfiction from Mark Ziesing.

Today as usual hundreds of buses from all over the country are converging upon these fields and narrow lanes. A marshal waves our own bus on to a parking place at the head of a long line of other buses decorated with peace posters. After three hours of travel we can disembark and stretch our legs beside golden cornfield ablaze with poppies.

An invasion of poppies! Maybe the poppies are a nuisance to the farmer, but they're a beautiful nuisance.

As journeys go, ours has been quite short. Further up the lane I spot a small party of Africans in tribal robes. Beyond them, some Buddhist monks in saffron cloth.

But wherever in the world we marchers come from, you might say that the longest journey begins right now—with the walk to the wire. Beyond which, space undergoes a change. From which, not everyone returns.

"Alicia! You forgot your sandwiches!"

It's Mark, swinging my rainbow-ribboned knapsack. Mark's a physicist, so he understands a little of events beyond the wire.

"Oh. . . . I was just going to have a pee. Hang on a moment, will you?"

Actually, till this moment I hadn't thought of emptying my bladder; though it's a sensible idea. There's a little copse of quivering aspens behind the bus, which other marchers are using for the purpose.

By the time I rejoin Mark, Sandra and Jack have unfurled our banner with its white dove swooping across a sky-blue background, a broken rifle clutched in one claw like a snapped twig.

Fronted by the banner, the thirty of us set off up the lane past all the buses which arrived before. Several times we detour on to the verge to let a new bus nose its way through. Away across the cornfields we can see another long line of buses parking on another lane.

From here to the wire is a good two miles, and the lane is crowded. Soon I find myself munching a tuna sandwich. I don't quite recollect deciding I was hungry, or diving my hand into my knapsack. It's almost as though I want the sandwich out of the way. Well, it's easier to carry food in your tummy than slung over your shoulder!

The others start to sing. *We Have Overcome . . .*

A marshal cycles by, tinkling his bell in accompaniment.

"How many here today?" calls Mark.

"We reckon thirty thousand."

"Will we even get *close* to the wire?" I ask.

The marshal laughs. "Oh yes. You'll touch it. Everyone will. That's the whole point, isn't it?" He cycles on.

Our party overtakes a young fellow pushing a wheelchair in which an old, wrinkled, joyful woman sits with a thick brown rug over her knees even though the weather's warm. As our banner-bearers bunch together to pass by, our linen dove hunches its wings and dives for a moment like

a hawk. How the old woman smiles and claps her hands at our song. And joins in, quaveringly.

We in turn are overtaken by a striding churchman in grey flannel suit and purple singlet with dogcollar. Maybe's he's a Bishop. He wears his pectoral cross slung upside-down.

"Look, Mark!"

What a host of marchers stream ahead; and how slowly we make our way. But right across the very next field—of oats—I can see arc-lights, towers, and a long barrier shimmering with rainbow colors, lancing out occasional flashes where razor-wire twists sunlight.

An ugly black helicopter is lumbering up from close behind the wire. From very close. It looks like a flying bathtub with rotors at both ends; and it must be big enough to carry an armored car inside it. All we hear, even so, is the distant clang of bells and clash of tambourines and shrill of whistles sounded to ward it off.

"That's a Chinook," says Mark.

The chopper only reaches a height of fifty feet before it banks over on its side and heads away inward—shrinking ever so fast. Within a few seconds it's no more than a tiny smut of soot.

I find I'm finishing off my second sandwich of salami and tomato.

And here we are, right next to the wire.

Mark and I, and thousands of others in a line two or three deep stretching away into the distance.

Behind us, ripe oats.

Ahead, death and destruction, all the engines and personnel of doom.

First of all there are coiled bales of ordinary barbed wire, shoulder-high, impaled upon steel stakes. Then there's a twelve-foot-high barbed wire fence topped with tangles of razor-wire which could slice gloves, boots, and flesh into shreds. Finally there's an inner fence which is just as high. We all reach to touch the outermost wire at least once.

Beyond the triple barrier are runways, fuel trucks, F-111 fighter-bombers, giant Galaxy cargo jets, and sunken silos. Missile transporters trundle slowly about. Radar dishes swivel. Military police speed about in jeeps. Choppers poke their snouts through the air with lazy menace like questing sharks.

Obviously this area is an American base. But is it in Britain or Sicily or Turkey, or in America itself? Who knows in which country the original is sited?

At first glance the base looks jam-packed with hardware and personnel. But this is something of an optical illusion: "a compression effect," as Mark calls it. Also, the size of objects diminishes rapidly. A Galaxy jet a bit further away looks no bigger than a gnat.

Here in the real world outside the wire, a mile is a mile. Inside, dis-

tances obey a "negative exponential curve"—which means that whole bases and battlefields get compressed into a strip of space which we, from here, would only take to be a few yards wide. A few feet. A few inches. Deep in the interior a nuclear explosion would throw up a mushroom cloud no bigger than an actual field mushroom sprouting from horse dung in a pasture.

As we head slowly around the wire the American base shimmers into a Soviet base with different uniforms, different planes, different rockets pointing at the sky. Maybe this next base is located in East Germany or in Mongolia. But here it is, as well. Here is its double, its "analogue," busily functioning away—while somewhere else the original base hunches frozen and inert, wrapped in Sleeping Beauty slumber. Nothing moves in those quiet places of the Earth where no one goes. All the deathly activity has been translated inside the "event horizon" of the wire—into the circles of hell within.

"See: American and Russian and all other war bases are connected topologically," says Mark. "They share the same linked space."

"And we keep them glued together inside, don't we? It's the pressure of our presence that pens them in. And the bells we ring. And the songs we sing."

"And something else too, Alicia."

"Yes. Something else."

Within: steel and concrete, tanks and warheads. Without: oats and corn and poppies and happiness.

There's a long queue at the first of the telescopes.

"Shall we wait?" he asks.

"Yes, Mark. I want to see."

Sandra and Jack and the banner move onward.

In fact it's only a quarter of an hour till I get my turn at the eyepiece. Through it, I spy depth within depth, airbase within airbase, camp within camp, death within death, as far as the lens can pierce.

"Could those soldiers ever burst out through the wire?"

"Not while we're here, Alicia. Not while *he's* here."

Not while he's here. Our god-child. Our devil-child. Our prince of peace.

I say child. Yet what is childish about our prince—apart from his age? Apart from the fact that he was originally wheeled here in a stroller through chocolate mud four years ago—when there was only a single war base newly built behind the wire. When he was only two years old.

Now all the war bases of the world are here, securely fenced in.

His mother was an ordinary peace protester, Sarah Gardner. Recently divorced. A social worker. He was a toddler, Tommy Gardner. And he reached out from his stroller and grasped the wire.

A Christ child was born in Bethlehem. The years rolled by and the

world witnessed the Crusades and the Holy Inquisition and the torture and burning of witches and heretics, and pogroms and infernos and holocausts, and a hundred wars of religion, and the manufacture of fifty thousand nuclear warheads to defend the faithful from atheism.

Perhaps it *had* to be the devil's turn to be born as man, to save the world. Maybe only the devil could be bothered or concerned enough. Maybe only the devil understood evil and madness and stupidity well enough. Not God but Satan. Not Allah but Iblis.

Yet not without some sacrifice. Last time, the Christ child sacrificed himself to save mankind. This time, it's up to us to make the sacrifice ourselves.

Willingly. Oh so willingly.

We continue on along the outside of the wire for a further mile. Two miles.

"There he is!"

Up on a stout wooden platform just above the heads of the crowd sits our devil-child, our hope, our bliss. Who was once the toddler Tommy Gardner. Who is now altered utterly.

At that particular point the barbed bales are piled high so that the platform thrusts right into them. Steps lead up to it. Ten minutes more, and we're near them.

One of Tommy's great ogre hands brushes the sharp barbs as you might stroke a cat. His other clawed hand is open and empty.

He's horned and bloated and huge—the size of a young elephant. His great violet eyes blink monotonously at the wire. The eyes of an octopus? His mouth is a giant horny beak.

He's a gross fat Buddha mated with Beelzebub. He's a beast-human. He's the greatest ugliness in the world; and yet he has an eerie grandeur. So therefore the dais around him is thickly strewn with flowers: with poppies, musky white lilies, spikes of pink lupin.

He starts to nod his inhuman head. His empty hand begins to flex open and shut.

And a yellow-robed monk mounts the steps to the platform, his palms together in blessing. His skull is shaved bald, though his face is young; he can't be much more than twenty.

The monk bows his head. Our Tommy grasps him gently round the waist. Tommy's claw-hand completely encloses the young man's midriff. For a while the crowd falls silent, and the silence spreads. No gongs beat, no whistles blow. Then our devil-child hoists the monk aloft. The beak gapes; Tommy pops the offering in. Gulps; and swallows.

And the crowd breathes out a sigh like wind rustling through wheat. Tambourines clash, and bells clang—as rainbow light blushes along the wire.

"How soon till he feeds again?"

Mark shrugs. "An hour or two. Could be three. It varies."

"Next time he feeds, *I'll* be the one."

There: I've said it. At last I have allowed the thought to surface.

Mark gapes. "What?"

"Next time—"

"But . . . Alicia, you can't be serious!"

"Why shouldn't I feed myself to him, if I wish? And if he wants me? Someone has to feed him willingly. Do you think it's too vile a payment for peace? One life every few hours—so that untold millions of people can survive? And fields and forests and beasts and birds?"

"Of course not. Of course," answers Mark in confusion.

Our prince of peace has hardly ever spoken. But in the beginning he told us why he must take us to him one by one, absorbing our flesh into his flesh. The power of his mind maintains the prison of the wire, but he needs to channel the energy of our own souls into it.

And why not indeed? In the old days we who campaigned for peace sacrificed our comfort, our freedom, sometimes even our lives. And sometimes we made headway for a while. Then the momentum of war would sweep onward. Nowadays our sacrifice is always of life itself—as regards the person who makes the sacrifice. But this sacrifice is completely effective.

"When did you decide?" asks Mark.

"Now. Earlier. I'm not sure."

"But there'll be other people here who are eager to . . . Willing to, anyway!"

"*I'm* the person who feels willing. Me, here, right now. Maybe no one else is willing just at this moment. But I am. And because I am, in another few hours somebody else will be willing." I even laugh. "That somebody else doesn't need to be you, Mark. Don't think of it! You carry on considering the physics of this thing. The topology of space inside the wire, okay? Maybe you'll make some wonderful, vital discovery—just in case our prince ever grows tired, or goes away. That's your path. Mine is up these steps."

I ease my way closer, with Mark at my shoulder.

"Be happy," I tell him. "Don't feel sad. Don't feel guilty. Think about connectedness."

"I thought *we* were connected. You and I."

"Yes we are. And we'll always stay connected, forever after."

"You'll be dead."

"Better little me, than millions burned in a fireball."

There's really nothing more to say. Any other talk would now be trivial.

So we stand together inside our own silence, Mark and I, while around us songs are sung, and gongs go *bong*, and bells clang and tinkle.

An hour passes, then most of another hour.

Till once again our prince begins to nod his head and to grope with his empty hand.

Mark stays below when I ascend the steps, on to the rafts of poppies and crunchy lupins.

Tommy is so close to me now. So large, so monstrous. His body smells oddly of fish-oil, though the dominant smell is the musk of lilies. I'm afraid yet not afraid. Maybe my fear is my courage.

He notices me. His violet eyes regard me. Not exactly with compassion but rather with a deep, calm, soothing vacancy. Within him is all the violence in the world, which he annuls and neuters.

I wonder: within the boundary of the wire, is time the same as it is for us? Is consciousness the same? Some of those soldiers who are trapped in the collapsed geometry of that zone perhaps never wished to be soldiers; perhaps hated being soldiers. Do they grieve that an incomprehensible hell has closed about them? Or do they simply go about their military business in a species of trance, repeating the same activities day after day, unaware that everything has altered? I don't know. Perhaps I soon will know.

Tommy's free hand moves towards me. His grip is so light, yet so unrelenting. He lifts me upward, headfirst to his gaping beak. I see a red cave, a dark throbbing tunnel opening downward.

And I don't die.

I flash with brightness. Rainbow colors wash my senses. I taste gold and silver and steel. I am extended. I am the wire; the wire is me.

I sense the presence of my prince in the way a wave senses the whole ocean. I sense the thousands of souls preceding mine—the young monk and all the others—as a fish senses the other fish swimming in a vast shoal. Or as a bird senses the rest of its flock. Bird or fish are only one little individual mind. Yet at the same time each is the whole of the flock. How else could a shoal all dart in the same direction at once? How else could a flock swoop or soar?

Together we are the circuit of the wire. I'm at once a little part of it, yet nevertheless all of it.

I'm at peace; yet it's a peace which pulses like a beating heart, a peace like the breeze upon a mountain top, a peace like the rolling, powerful sea.

War is compressed within me like a tumor which is frozen, like a cancer paralyzed. Or like an oyster's pearl.

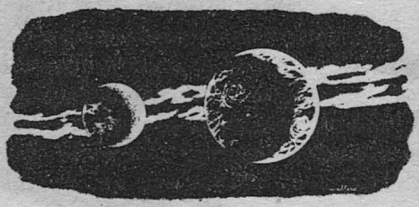
Tommy lets us glimpse the future reflected in this pearl. Or perhaps,

timelessly, the future has already happened—so that we sense events which have occurred already outside the wire, or are occurring even now.

Within fifty years the first alien beings are joining us in the wire. They have come to Earth, or else human beings have reached the stars; I'm not sure which. Maybe Mark found a way to connect Earthspace to Starspace. At first these aliens arrive out of curiosity; then presently as pilgrims. I believe Tommy is the size of a blue whale by now. Yet his hands still reach out, one to strum the wire, the other to accept the visitors who offer themselves to him.

And our flock, our shoal, always grows.

And the wire gleams bright. ●



MARTIN GARDNER (from page 90)

SECOND SOLUTION TO FLARP FLIPS ANOTHER FIVER

As Tanya explained, you toss the coin twice. If *HH*, person *A* pays. If *HT*, person *B* pays, and if *TH*, person *C* pays. If the coin falls tails twice, you make another pair of tosses.

The decision can come with two tosses. There is no required maximum, but the probability of a solution after n tosses is $1 - (2^n)^{-1}$. This value explodes so rapidly that a decision is practically certain to be reached quickly.

As readers of this column know, Tanya enjoys word play as much as recreational math. She picked up Flarp's pen and jotted down the triplet of letters *SPB*. "Can you tell me what familiar English word has those three letters in it, side by side and in that order?"

Flarp and Pulver puzzled over the problem for about ten minutes without getting anywhere.

"Here's a hint," said Tanya. She pushed the pink tip of her tongue through her lips and blew such a loud Bronx cheer that everybody in the lounge swiveled their heads and looked startled.

If you can't think of the word, you'll find it on page 143.

SEND NO MONEY

by Susan Casper
and Gardner Dozois

This story marks Susan Casper's first appearance in *IAsfm*. She has sold fiction to *Playboy*, *F&SF*, and *Amazing*. Her short story, "Spring-Fingered Jack" appeared both in Charles L. Grant's *Fears* anthology (Berkley, 1983) and Karl Edward Wagner's *The Year's Best Horror Stories*, XII (DAW, 1984). Gardner Dozois is the winner of two Nebula awards. He last appeared in *IAsfm* in our November issue with a story, "Snow Job," that he wrote in collaboration with Michael Swanwick.

art: Arthur George

SEND NO MONEY! the postcard said, in dark blue letters against a bright orange background. Judy smiled, and pushed it into the stack. She liked her junk mail. Certainly it was less depressing than the load of bills that made up the bulk of her mail. She especially liked the computer-generated "personalized" ones, eternally optimistic, that excitedly announced "You may have won a million dollars!" (Only Maybe Not), or the ones that promised to send you something "Absolutely Free!" for only $2 plus shipping and handling, or the ones that enclosed sample swatches of material, or paperthin slices of stale-looking fruitcake, or slightly squashed bits of cheese wrapped up in cellophane. Today's stack of junk mail was particularly large. Who *knew* what might be in it?

She carried the mail inside, hung her coat neatly in the closet, and then went in search of something to eat. The freezer was packed with frozen food of the "gourmet dinner" variety. She stared at them listlessly, unable to work up any enthusiasm. Too much trouble after the kind of day she'd had at work. She settled for cold left-over spaghetti and a glass of milk. Sighing, she carried the food over to the table. Lately, it seemed like deciding what to have for dinner was the most important decision of her day; certainly it was the day's most *exciting* moment, with the possible exception of the "Dark Shadows" reruns on TV . . . Well, whose fault was *that*? she asked herself. Ginny and Lois weren't eating leftovers tonight, were they? They had gone to dinner at Le Boeuf, and then on to Spangles for dancing, and they had wanted her to come too. In fact, Ginny had spent the whole last week trying to talk her into it. Why had she refused?

The fact was, she was tired of the whole dating scene—the bars, the banal small talk, the cliched pick-up lines, the loud insipid music, the leering faces. Anyway, all you ever seemed to meet were nerds, or narcissistic romeos in mirror sunglasses, or prowling husbands in clever plastic disguises . . .

So *this* is better? she thought. *Oh* yeah. Right. Sighing again, she sat down to go through the mail while she ate. Simple Pleasures . . . but at least there was no cover charge.

It seemed like a fairly typical assortment. The first three envelopes were bills, from, respectively, the electric company, the phone company, and the credit-card company. One was *awful*, the others not as bad as she had feared. There was an unordered catalogue from one of those "naughty underwear" places; a solicitation from a local animal-rescue shelter; a "Vote for So-and-So" political flyer; an offer of twenty-percent off on a diamond engagement ring with a genuine imitation diamond—guaranteed absolutely undetectable from the real thing at fifty feet or more—addressed to Mr. J. B. Pender; an offer of "personal-

ized" ballpoint pens that promised an emormous money-saving discount on orders of 100 or more; and, finally, a little green postcard.

Green? She could have *sworn* that it had been orange. Or had there been *two* postcards, and she'd somehow dropped the orange one somewhere on the way in? She ate a forkful of spaghetti, and prodded the postcard idly with her finger. Strange . . . No company name, no return address. It was one of those "personalized" come-ons, and the front of the card shouted MS. JUDY PENDER!! in enormous glittery letters. She turned it over.

The card said: MS. JUDY PENDER, WHY ARE YOU SITTING THERE EATING COLD SPAGHETTI WHEN YOU *COULD* BE OUT HAVING THE TIME OF YOUR LIFE?

Whoo. She was startled enough to drop the card and sit back suddenly in her chair. Pretty strange. What were the odds against her reading that *particular* come-on pitch just at the exact moment that she actually *did* happen to be eating some cold spaghetti? Pretty astronomical. She tittered nervously, then began to laugh, perhaps a shade too loudly. Mindboggling coincidences *did* happen, she knew that. But this one was weird. Ripley's *Believe It or Not* would love it. They'd publish it right next to "Man Who Grew A Potato in the Shape of Anita Ekberg" and "Replica of the *Titanic* Made Entirely Out of Old Fingernail Parings."

Still chuckling, she quickly finished her spaghetti. Almost time for her nightly fix of "Dark Shadows" reruns. She reached out and picked up the postcard again.

This time it said: IS A NIGHT SPENT WATCHING "DARK SHADOWS" RERUNS REALLY *ALL* YOU WANT OUT OF LIFE?

She dropped the card again.

She found that, without realizing it, she had pushed herself away from the table and was standing bolt upright, quivering, like a garden rake that's been stepped on.

Her mind was blank for several heartbeats, and then she began casting frantically about for explanations. She'd just *missed* that part of the text the first time she'd read the card, skipped right over it. Sure, that was it. And as for the card mentioning "Dark Shadows" . . . Well, coincidences *did* happen. Remember that. A man drops his watch in the ocean and twenty years later finds it inside the belly of a fish he's just caught; another one jumps off the Empire State Building, and survives because he happens to land on top of the long-lost twin brother he hasn't seen since they both were five . . . It Happens All The time. Or—and she grabbed for this one eagerly, although the ultimate implications of it were somewhat unflattering—she was just statistically *predictable*, normal, average, humdrum, easy meat for the trend-spotters and social analyists. Doubtless her habits were far from unique. Probably there

were *millions* of bored young women just like her who spent their evenings eating cold spaghetti and watching "Dark Shadows." Hence the card, addressed to her statistical *type*, a profile she just happened to fit embarrassingly well . . .

Nevertheless, she didn't touch the card again.

Leaving it where it lay, she bustled nervously around, putting the spaghetti bowl into the sink to soak, picking up last Sunday's paper (which was still strewn over the end of the couch), emptying the ashtrays, annoyedly pushing the term "displacement activity" out of her head everytime it forced its way into it.

After a while, she began to get tired. She glanced at the television, but whoever the Machiavellian social researcher responsible for the postcard was, she'd be damned if she'd prove him *right*. Besides, "Dark Shadows" was almost over anyway. The only thing on now were "M*A*S*H" reruns, and she'd always thought that Hawkeye was a wimp, like one of those oh-so-sincere-and-sensitive types from the singles bars who suddenly turned into married men when the full moon came out. She could survive a night without television just fine, thank you. Decisively, Judy went into the bedroom to get the book she'd been reading and to pick up her double-acrostic magazine, and then headed back toward her favorite armchair.

On her way past the table, she glanced suspiciously at the card again—and it was *red*. Bright fire-engine red! It had been *green* before, hadn't it? She stood swaying in shock, trying to remember. Had it? Yes, dammit, it *had* been green, bright apple green. There was no doubt about that.

Unfortunately, there was also no doubt that the card was now *red*.

Shakily, Judy sat down. One part of her mind was keeping up a stream of desperate speculation about dyes that faded from one color to another, perhaps depending on the length of time they'd been exposed to light, but that was so obviously a last-ditch—and rather ineffectual—defensive effort on behalf of Rationality that she didn't pay much attention to it. Slowly, with immense trepidation, as if it were a venomous insect, she picked up the card again, this time with only two fingers, holding it as far away from herself as she could and still make out the words.

This time, in spangly gold letters, it said: SURE *THE GULAG ARCHIPELAGO* IS A GOOD BOOK, BUT WOULDN'T YOU RATHER PUT ON YOUR BLUE CHANEL DRESS—THE SLINKY ONE WITH THE GOLD GLITTER SASH—AND THE GOLD HOOP EARRINGS YOU BOUGHT AT THE CRAFTS FAIR, AND GO *OUT* ON THE TOWN FOR A ROMANTIC EVENING AT DELANEY'S OR KARISMA? INSTEAD OF STARTING ANOTHER ONE OF THOSE STUPID CROSS-

WORD PUZZLE MAGAZINES, WOULDN'T YOU RATHER BE OUT STARTING UP A "MEANINGFUL RELATIONSHIP"?

Her hand began to tremble, vibrating the card into unreadibility. By the time she steadied it down again, it read: WE CAN FIND THE PERFECT MATE FOR *YOU!*

Moving with exaggerated caution, as if it might explode, she lowered the card to the tabletop. She wiped her hands on her thighs. Her mouth was dry.

The card changed to a soft chocolate brown, this time before her eyes. In urgent red letters, it now said: WE CAN HELP YOU FIND THE MAN OF YOUR DREAMS! SATISFACTION GUARANTEED! MANY, *MANY* YEARS OF EXPERIENCE! STAFF OF EXPERTS!

That faded, and was replaced by: SEND NO MONEY!

Followed, after a pause, in a somewhat more subdued script, by: *Magic Mates . . . a division of Elf Hill Corp.*

To her own surprise, much of Judy's fear was draining rapidly away, to be replaced by a drifting, dreamlike bemusement. Could this *really* be happening? Had someone sifted LSD into the grated parmesan cheese she'd used on the spaghetti? Her rational mind kept throwing up feverish high-tech speculations about wireless telegraphy and time-release invisible inks, but she no more believed them than she really believed that she was dreaming, or hallucinating, or crazy. Instead, she was beginning to feel a curious tranced calm, a bemused nonchalance. Oh, magic. Of course.

Can you guys read my mind? she thought, trying to project her thoughts *at* the card, the way they do in sci-fi movies, keeping her lips firmly shut. *Do you know what I'm thinking*? *Hello? Hello in there . . . ?*

The card didn't answer.

No mind-reading, then. Still, there was no *way* that the postcard could know all that stuff about her unless they had her under some sort of magical observation. Maybe they really *could* do what they said they could do . . .

"Well," she said, aloud. "I don't know. I don't really *need*—"

COME NOW, MS. PENDER, the card said, brown letters on gold this time. WE *KNOW* YOU DREAM ABOUT YOUR PERFECT MAN ALL THE TIME. YOU CERTAINLY TALK TO YOUR GIRLFRIENDS ABOUT HIM OFTEN ENOUGH. DON'T WORRY, WE *KNOW* WHAT YOU WANT. TALL AND SLENDER, WITH GRAY EYES. WAVY BROWN HAIR, RIGHT? GLASSES. NO MUSTACHE. WITTY. ARTICULATE. SENSITIVE YET MASCULINE. DECISIVE YET UNDERSTANDING. NOT MARRIED. RIGHT? WELL, WE CAN *FIND* HIM FOR YOU! SATISFACTION GUARANTEED! THIRTY-DAY TRIAL

PERIOD! SEND NO MONEY! DEAL'S OFF IF YOU DON'T LIKE HIM! GIVE IT A TRY!

"Well . . . " Judy said, feeling only a distant twinge of wonder that she was sitting here talking to a postcard.

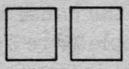
OH, GO AHEAD, the postcard said. YOU KNOW YOU'RE AS HORNY AS A GOAT . . .

"Well," Judy said weakly. "I really *shouldn't* . . . "

The postcard went blank. Then, in large block letters, formal and somewhat severe, as though it were growing impatient with her, there appeared:

DO YOU WANT THIS SERVICE?

yes no



CHECK ONE.

Hesitantly, feeling an odd little chill run up her spine, she checked the square for "yes."

The doorbell rang.

Early one Saturday morning, a month later, Judy awoke to the soft liquid trilling of birdsong. The sun had not reached the bedroom window yet, and the room was still in shadow, but hot bright sunlight was already touching the roof of the house across the street, turning tile and mortar and brick to gold. The wedge of sky she could see was a clear bright blue. It was going to be another beautiful day, more like May than March.

Mark snored softly beside her, and she raised herself up on one elbow to look down at him for a moment, smiling fondly. Even his *snores* were melodic!

Moving carefully, so as not to wake him, she got up and threw on a bathrobe, and quietly let herself out of the bedroom. She would make breakfast, a big weekend breakfast, and serve it to him in bed, along with maybe one or two other items . . .

The thought made her smile as she padded into the kitchen to start the coffee perking, but when she popped into the front room to pick up a sheet of newspaper to drain the bacon on, her smile died at once.

There was a little green postcard lying on the throw rug next to the front door, as though someone had ignored the box outside and pushed it through the mail slot instead.

She knew at once what it was, of course.

Judy and Mark had been dating for a month now, ever since his car

had broken down outside, and he'd rung her doorbell to ask if he could use the phone. They'd been fascinated with each other at once. Mark was *perfect.* It was almost *scary* how perfect he was. Never had she jibed better with a man. They liked the same books, the same movies, the same music, the same foods, enjoyed the same kind of quirky humor, shared the same kinds of dreams and aspirations, disagreeing just enough to add a touch of spice to the relationship, but never enough to make them seriously squabble or fight. Physically, they couldn't possibly have been more compatible.

The month had gone by for Judy in a blur of excitement and happiness. She had done her best to forget about the magic postcard, thrust it out of her mind, and deny its reality. That had been made easier by the fact that the postcard itself had disappeared right after that first evening, although at one point she tore the house apart looking for it. She sighed. Out of sight, out of mind. People were *always* willing to be lulled into forgetting about unpleasant or inconvenient facts, and she was no exception. For long stretches of time, she had almost managed to convince herself that it had never happened at all—or that, at most, it had been some strange sort of waking dream . . . But always, sooner or later, she would seem to hear a dry little voice in her head whispering THIRTY-DAY TRIAL PERIOD!, and then she would *know* better, and she would feel a chill of apprehension.

And now here was the postcard—or another just like it—turning up again, right on schedule. She had had her month's free trial, and now, having hooked her on the product, they were about to reel her in and scoop her up in a net and clean and gut her. Here came the price tag. Here came *the catch.* She *knew* it. In every sales pitch, behind every "free offer," there was always a catch. There was *always* a price tag. Why hadn't she remembered that? The sweeter and more generous the deal seemed, the higher the price tag was likely to be. They—whoever They were—weren't in business for their *health,* after all . . .

Unsteadily, she sat down in one of her beat-up old armchairs, keeping her eyes riveted on that innocent-looking little postcard, as if it might slither sinisterly away under the highboy if she looked away for a second. She even knew who They were, had always known, really, although she'd tried to suppress that knowledge, too. Elves. Leprechauns. The Little People. The Good Folk . . .

Faeries, of course. Of *course* faeries. Who else?

The knowledge did not reassure her. Now that it was too late, she found herself remembering all the folktales and fairy stories she'd read as a child: the Brothers Grimm, Hans Christian Andersen, Charles Perrault, Yeats's collection of Irish folklore, *The Blue Fairy Book* . . . All of them agreed on one thing: faeries were worse than used-car salesmen.

No matter how wonderful the service they performed, there was *always* a price, and it was usually far more than you were willing to pay.

With a sudden flurry of the heart, she even thought that she knew *what* the price would be . . .

Compressing her lips into a thin hard line, Judy got up and walked determinedly over to the front door. Hesitating only for the smallest fraction of a second, she picked up the postcard and held it up to the light.

In fine copperplate letters, it said: MS. JUDY PENDER,YOUR THIRTY-DAY TRIAL PERIOD IS OVER! DID THE SERVICE MEET YOUR EXPECTATIONS? ARE YOU SATISFIED WITH THE PRODUCT?

"No," Judy said weakly, her voice lacking conviction even to her own ears. "No, I'm not at all satisfied . . ."

OH, COME NOW, MS. PENDER, the postcard chided in somehow tired-looking letters. She could almost hear it sigh. DON'T DISSEMBLE. WE *KNOW* BETTER THAN *THAT*!

Judy—who with Mark had found herself easily and naturally acting out several sexual fantasies she had never even thought of *mentioning* to any other man—began to blush.

THAT'S BETTER, the card said, in florid purple ink this time. IN FACT, WE KNOW PERFECTLY WELL THAT THE PRODUCT MORE THAN FULFILLS YOUR EVERY EXPECTATION. YOUR EVERY DREAM, FOR THAT MATTER. WE'RE EXPERTS. WE *KNOW* WHAT WE'RE DOING—IT'S OUR *BUSINESS,* AFTER ALL. SO LET'S HAVE NO MORE EVASIVENESS, MS. PENDER. MARK PROPOSED LAST NIGHT, CORRECT? AND YOU ACCEPTED. SO IT'S TIME, AND PAST TIME, TO ENTER INTO A BINDING AGREEMENT CONCERNING *PAYMENT* FOR THIS SERVICE . . .

"All right," she said through tight lips. "Tell me. Just what is it you want?"

FOR SERVICES RENDERED . . . said the card, and seemed to pause portentously. . . . YOUR FIRSTBORN CHILD.

"I *knew* it!" Judy cried. "I *knew* that's what it was going to be! You're *crazy!*"

IT'S THE TRADITIONAL PRICE, the card said. NOT AT ALL EXCESSIVE, REALLY, CONSIDERING ALL WE'VE DONE TO CHANGE YOUR LIFE FOR THE BETTER.

"I won't do it!" Judy said.

YOU DON'T HAVE MUCH CHOICE, the card said. YOU HAVE TO PAY YOUR DEBT TO US AT ONCE IF YOU DON'T WANT THE PRODUCT . . . SHIPPED BACK, AS IT WERE.

"Mark *loves* me," Judy said fiercely. "It's too late for you to change that *now*."

DON'T KID YOURSELF, MS. PENDER, the card said. IF WE CAN'T FINALIZE A BINDING AGREEMENT RIGHT *NOW*, YOU'LL HAVE AN EXTREMELY BITTER FIGHT WITH HIM THIS VERY MORNING. NO MATTER HOW HARD YOU TRY TO AVOID IT, IT *WILL* HAPPEN. HE'LL WALK OUT OF HERE, AND YOU'LL NEVER SEE HIM AGAIN. WE GUARANTEE *THAT*.

"But, my firstborn *child* . . . " Judy whispered

A HIGH PRICE INDEED, the card gloated. AH, YES. A VERY HIGH PRICE. BUT THINK . . . REMEMBER . . . BE *HONEST* WITH YOURSELF. DO YOU REALLY WANT TO GO BACK TO "DARK SHADOWS" AND COLD SPAGHETTI? NOW THAT YOU'VE MET MARK, COULD YOU REALLY LIVE WITHOUT HIM?

"No," Judy said, in the smallest of voices.

WE THOUGHT NOT, the card said smugly.

Judy groped behind her for a chair, and sank into it. She dropped the card on the coffee table, and buried her face in her hands. After a moment or two, she raised her head wearily and looked over at the card again. It said: COME, COME, MS. PENDER. IT'S NOT REALLY SUCH A TRAGEDY. BABIES ARE NUISANCES, ANYWAY. THEY SQUALL AND STINK, THEY CRAYON ON YOUR WALLS AND VOMIT ON YOUR CARPET . . . THEY WEIGH YOU *DOWN*, MS. PENDER. YOU'LL BE BETTER OFF WITHOUT IT, REALLY. YOU OUGHT TO BE GLAD WE'LL BE TAKING IT OFF YOUR HANDS. ALL THE MORE TIME YOU'LL BE ABLE TO SPEND WITH MARK . . .

There was a long pause, and then, in tacit surrender, Judy said, "Why in the world did you guys ever get into this *mail-order* scam?" Her voice was flat and weary, bitter and dull. "It doesn't seem your style, somehow . . . "

MODERNIZATION IS A MUST, MS. PENDER, the card said. THE OLD WAYS JUST AREN'T VERY EFFECTIVE ANYMORE. WE HAVE TO KEEP UP WITH THE TIMES TOO, YOU KNOW. It paused. NOW . . . ENOUGH SHILLY-SHALLYING, MS. PENDER. YOU MUST DECIDE *NOW*. IF YOU AGREE TO PAY THE PRICE FOR OUR SERVICE—TO SPECIFY: YOUR FIRSTBORN CHILD—THEN SIGN HERE . . .

A dotted signature line appeared on the postcard.

Judy stared at it, her face haggard, and then slowly, hesitantly, reluctantly, with many a stop and start, she picked up a pen and leaned forward.

She signed her name.

After a moment, the card vanished, disappearing with a smug little pop.

Everything was quiet. Everything was still.

Judy held her breath for a few moments, then slowly let it out. She wiped her brow. Slowly, she began to smile.

She had had her tubes tied two years ago because it was the cheapest and surest form of birth control. It was a good thing that the Wee Folk didn't *really* keep up with the times . . .

Whistling cheerfully, she strolled into the kitchen and finished making breakfast. ●

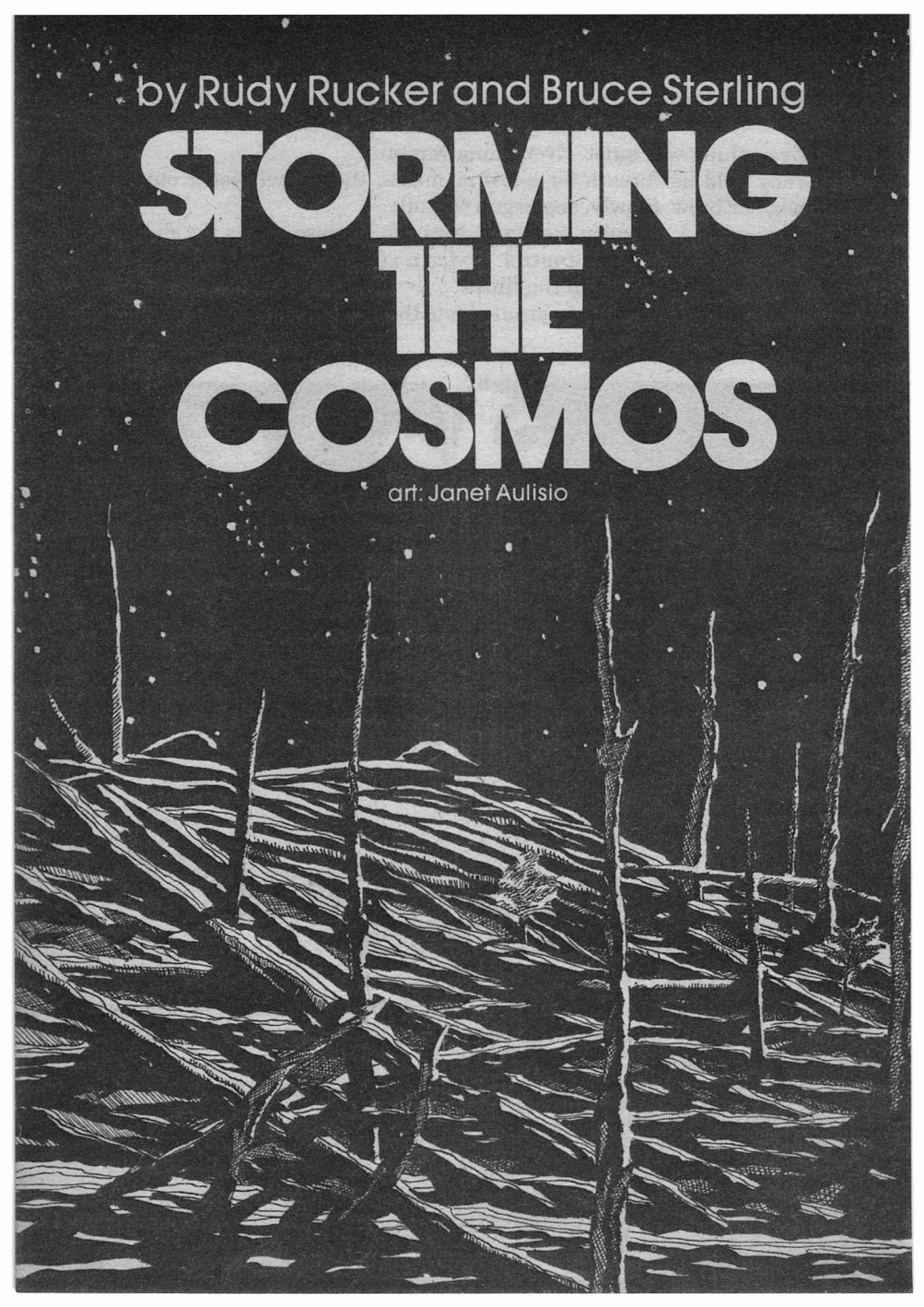
MARTIN GARDNER (from page 133)

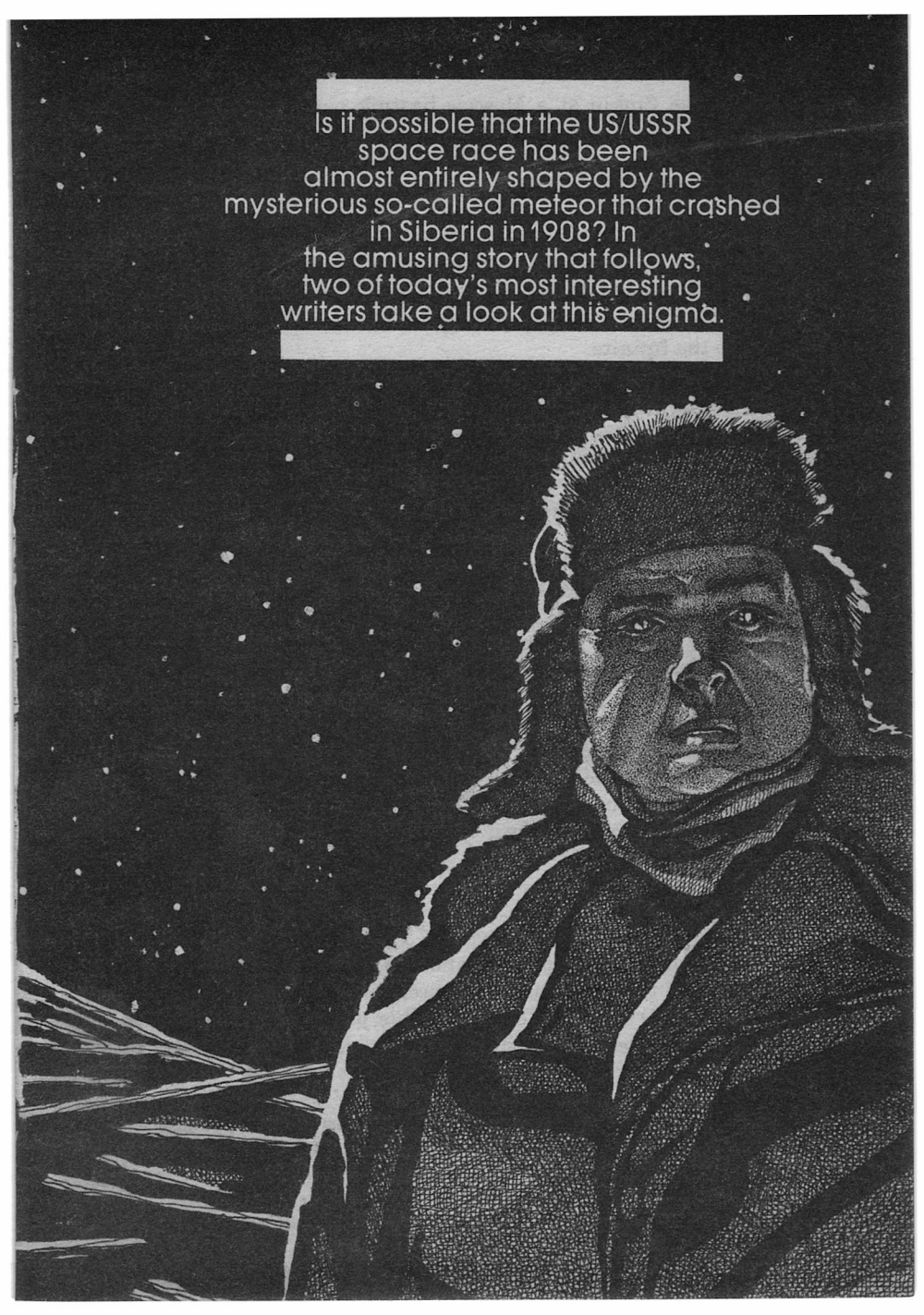
THIRD SOLUTION TO FLARP FLIPS ANOTHER FIVER

The word is RASPBERRY.

It's a choice example of a word once available to poets, but now damaged by its acquired meaning. The Oxford English Dictionary's *Supplement* traces this uncouth use of the word back to 1915, but fails to explain its origin. Here's a lovely quatrain from "Daisy," by Francis Thompson, that is impossible to read today without chuckling:

Her beauty smoothed earth's furrowed face!
She gave me tokens three:
A look, a word of her winsome mouth,
And a wild raspberry.


by Rudy Rucker and Bruce Sterling
STORMING THE COSMOS
art: Janet Aulisio


Is it possible that the US/USSR
space race has been
almost entirely shaped by the
mysterious so-called meteor that crashed
in Siberia in 1908? In
the amusing story that follows,
two of today's most interesting
writers take a look at this enigma.

I first met Vlad Zipkin at a Moscow beatnik party in the glorious winter of 1957. I went there as a KGB informer. Because of my report on that first meeting, poor Vlad had to spend six months in a mental hospital—not that he wasn't crazy.

As a boy I often tattled on wrongdoers, but I certainly didn't plan to grow up to be a professional informer. It just worked out that way. The turning point was in the spring of 1953, when I failed my completion exams at the All-Union Metallurgical Institute. I'd been working towards those exams for years; I wanted to help build the rockets that would launch us into the Infinite.

And then, suddenly, one day in April, it was all over. Our examination grades were posted, and I was one of the three in seventeen who'd failed. To take the exam again, I'd have to wait a whole year. First I was depressed, then angry. I knew for a fact that four of the students with good grades had cheated. I, who was honest, had failed; and they, who had cheated, had passed. It wasn't fair, it wasn't communist—I went and told the head of the Institute.

The upshot was that I passed after all, and became an assistant metallurgical engineer at the Kaliningrad space center. But, in reality, my main duty was to make weekly reports to the KGB on what my co-workers thought and said and did. I was, frankly, grateful to have my KGB work to do, as most of the metallurgical work was a bit beyond me.

There is an ugly Russian word for informer: *stukach,* snitch. The criminals, the psychotics, the parasites, and the beatniks—to them I was a *stukach.* But without *stukachi,* our communist society would explode into anarchy or grind to a decadent halt. Vlad Zipkin might be a genius, and I might be a *stukach*—but society needed us both.

I first met Vlad at a party thrown by a girl called Lyuda. Lyuda had her own Moscow apartment; her father was a Red Army colonel-general in Kaliningrad. She was a nice, sexy girl who looked a little like Doris Day.

Lyuda and her friends were all beatniks. They drank a lot; they used English slang; they listened to jazz; and the men hung around with prostitutes. One of the guys got Lyuda pregnant and she went for an abortion. She had VD as well. We heard of this, of course. Word spreads about these matters. Someone in Higher Circles decided to eliminate the anti-social sex-gangster responsible for this. It was my job to find out who he was.

It was a matter for space-center KGB because several rocket-scientists were known to be in Lyuda's orbit. My approach was cagey. I made contact with a prostitute named Trina who hung around the Metropol, the Moskva, and other foreign hotels. Trina had chic Western clothes from her customers, and she was friends with many of the Moscow beat-

niks. I'm certainly not dashing enough to charm a girl like Trina—instead, I simply told her that I was KGB, and that if she didn't get me into one of Lyuda's bashes I'd have her arrested.

Lyuda's pad was jammed when we got there. I was proud to show up with a cool chick like Trina on my arm. I looked very sharp too, with the leather jacket, and the black stove-pipe pants with no cuffs that all the beatniks were wearing that season. Trina stuck right with me—as we'd planned—and lots of men came up to talk to us. Trina would get them to talking dirty, and then I'd make some remark about Lyuda, ending with "But I guess she has a boyfriend?" The problem was that she had *lots* of them. I kept having to go into the bathroom to write down more names. Somehow I had to decide on one particular guy.

Time went on, and I got tenser. Cigarette smoke filled the room. The bathroom was jammed and I had to wait. When I came back I saw Trina with a hardcore beatnik named Starsky—he got her attention with some garbled Americanisms: "Hey baby, let's jive down to Hollywood and drink cool Scotch. I love making it with gone broads like you and Lyuda." He showed her a wad of hard currency—dollars he had illegally bought from tourists. I decided on the spot that Starsky was my man, and told Trina to leave with him and find out where he lived.

Now that I'd finished my investigation, I could relax and enjoy myself. I got a bottle of vodka and sat down by Lyuda's Steinway piano. Some guy in sunglasses was playing a slow boogie-woogie. It was lovely, lovely enough to move me to tears—tears for Lyuda's corrupted beauty, tears for my lost childhood, tears for my mother's grave.

A sharp poke in the thigh interrupted my reverie.

"Quit bawling, fatso, this isn't the Ukraine."

The voice came from beneath the piano. Leaning down, I saw a man sitting cross-legged there, a thin, blond man with pale eyes. He smiled and showed his bad teeth. "Cheer up, pal, I mean it. And pass me that vodka bottle you're sucking. My name's Vlad Zipkin."

I passed him my bottle. "I'm Nikita Iosifovich Globov."

"Nice shoes," Vlad said admiringly. "Cool jacket, too. You're a snappy dresser, for a rocket-type."

"What makes you thnk I'm from the space center?" I said.

Vlad lowered his voice. "The shoes. You got those from Nokidze the Kazakh, the black market guy. He's been selling 'em all over Kaliningrad."

I climbed under the piano with Zipkin. The air was a little clearer there. "You're one of us, Comrade Zipkin?"

"I do information theory," Zipkin whispered, drunkenly touching one finger to his lips. "We're designing error-proof codes for communicating with the . . . you know." He made a little orbiting movement with his

forefinger and looked upward at the shiny dark bottom of the piano. The Sputnik had only been up since October. We space workers were still not used to talking about it in public.

"Come now, don't be shy," I said, smiling. "We can say 'Sputnik,' can't we? Everyone in the world has talked of nothing else for months!"

It was easy to draw Vlad out. "My group's hush-hush," he bragged criminally. "The top brass think 'information theory' has to be classified and censored. But the theory's not information itself, it's an abstract meta-information . . . " He burbled on a while in the weird jargon of his profession. I grew bored and opened a pack of Kent cigarettes.

Vlad bummed one instantly. He was impressed that I had American cigarettes. Only cool black-market operators had classy cigs like that. Vlad felt the need to impress me in return. "Khrushchev wants the next Sputnik to broadcast propaganda," he confided, blowing smoke. "The *Internationale* in outer space—what foolishness!" Vlad shook his head. "As if countries matter any more outside our atmosphere. To any real Russian, it is already clear that we have surpassed the Americans. Why should we copy their fascist nationalism? We have soared into the void and left them in the dirt!" He grinned. "Damn, these are good smokes. Can you get me a connection?"

"What are you offering?" I said.

He nodded at Lyuda. "See our hostess? You see those earrings she has? They're gold-plated transistors I stole from the Center! All property is theft, hey, Nikita?"

I liked Vlad well enough, but I felt duty-bound to report his questionable attitudes along with my information about Starsky. Political deviance such as Vlad's is a type of mental illness. I liked Vlad enough to truly want to see him get better.

Having made my report, I returned to Kaliningrad, and forgot about Vlad. I didn't hear about him for a month.

Since the early '50s, Kaliningrad had been the home of the Soviet space effort. Kaliningrad was 30 kilometers north of Moscow and had once been a summer resort. There we worked heroically at rocket research and construction—though the actual launches took place at the famous Baikonur Cosmodrome, far to the south. I enjoyed life in Kaliningrad. The stores were crammed with Polish hams and fresh lamb chops, and the landscape of forests and lakes was romantic and pleasant. Security was excellent.

Outside the research complex and block apartments were *"dachas,"* resort homes for space scientists, engineers, and party officials, including our top boss, the Chief Designer himself. The entire compound was surrounded by a high wood-and-concrete fence manned around the clock by armed guards. It was very peaceful. The compound held almost fifty

dachas. I owned a small one—a kitchen and two rooms—with a large garden filled with fruit trees and berry-bushes, now covered by winter snow.

A month after Lyuda's party, I was enjoying myself in my *dacha*, quietly pressing a new suit I had bought from Nokidze the Kazakh, when I heard a black ZIL sedan splash up through the mud outside. I peeked through the curtains. A woman stamped up the path and knocked. I opened the door slightly.

"Nikita Iosifovich Globov?"

"Yes?"

"Let me in, you fat sneak!" she said.

I gaped at her. She addressed me with filthy words. Shocked, I let her in. She was a dusky, strong-featured Tartar woman dressed in a cheap black two-piece suit from the Moscow G.U.M. store. No woman in Kaliningrad wore clothes or shoes that ugly, unless she was a real hard-liner. So I got worried. She kicked the door shut and glared at me.

"You turned in Vladimir Zipkin!"

"What?"

"Listen, you meddling idiot, I'm Captain Bogulyubova from Information Mechanics. You've put my best worker into the mental hospital! What were you thinking? Do you realize what this will do to my production schedules?"

I was caught off guard. I babbled something about proper ideology coming first.

"You louse!" she snarled. "It's my department and I handle Security there! How dare you report one of my people without coming to me first? Do you see me turning in metallurgists?"

"Well, you can't have him babbling state secrets to every beatnik in Moscow!" I said defensively.

"You forget yourself," said Captain Bogulyobova with a taut smile. "I have a rank in KGB and you are a common *stukach*. I can make a great deal of trouble for you. A very great deal."

I began to sweat. "I was doing my duty. No one can deny that. Besides, I didn't know he was in the hospital! All he needed was a few counseling sessions!"

"You fouled up everything," she said, staring at me through slitted eyes like a Cossack sizing up a captured hog. She crossed her arms over her hefty chest and looked around my *dacha*. "This little place of yours will be nice for Vlad. He'll need some rest. *Poor* Vlad. No one else from my section will want to work with him after he gets out. They'll be afraid to be seen with him! But we need him, and you're going to help me. Vlad will work here, and you'll keep an eye on him. It can be a kind of house arrest."

"But what about my work in metallurgy?"

She glared at me. "Your new work will be Comrade Zipkin's rehabilitation. You'll volunteer to do it, and you'll tell the Higher Circles that he's become a splendid example of communist dedication! He'd better get the Order of Lenin, understand?"

"This isn't fair, Comrade Captain. Be reasonable!"

"Listen, you hypocrite swine, I know all about you and your black-market dealings. Those shoes cost more than you make in a month!" She snatched the iron off the end of my board and slammed it flat against my brand new suit. Steam curled up.

"All right!" I cried, wringing my hands. "I'll help him." I yanked the suit away and splashed water on the scorched fabric.

Nina laughed and stormed out of the house. I felt terrible. A man can't help it if he needs to dress well. It's unfair to hold a thing like that over someone.

Months passed. The spring of 1958 arrived. The dog Laika had been shot into the cosmic void. A good dog, a Russian, an Earthling. The Americans' first launches had failed, and then in February they shot up a laughable sputnik no bigger than a grapefruit. Meanwhile we metallurgists forged ahead on the mighty RD-108 Supercluster paraffin-fueled engine, which would lift our first cosmonaut into the Infinite. There were technical snags and gross lapses in space-worker ideology, but much progress was made.

Captain Nina dropped by several times to bluster and grumble about Vlad. She blamed me for everything, but it was Vlad's problem. All one has to do, really, is tell the mental-health workers what they want to hear. But Zipkin couldn't seem to master this.

A third sputnik was launched in May 1958, with much instrumentation on board. Yet it still failed to broadcast a coherent propaganda statement, much less sing the *Internationale*. Vlad was missed, and missed badly. I awaited Vlad's return with some trepidation. Would he resent me? Fear me? Despise me?

For my part, I simply wanted Vlad to like me. In going over his dossier I had come to see that, despite his eccentricities, the man was indeed a genius. I resolved to take care of Vlad Zipkin, to protect him from his irrational sociopathic impulses.

A KGB ambulance brought Vlad and his belongings to my *dacha* early one Sunday morning in July. He looked pale and disoriented. I greeted him with false heartiness.

"Greetings Vladimir Eduardovich! It's an honor and a joy to have you share my *dacha*. Come in, come in. I have yogurt and fresh goose-berries. Let me help you carry all that stuff inside!"

"So it was you." Vlad was silent while we carried his suitcase and three boxes of belongings into the *dacha*. When I urged him to eat with me, his face took on a desperate cast. "Please, Globov, leave me alone now. Those months in the hospital—you can't imagine what it's been like."

"Vladimir, don't worry, this *dacha* is your home, and I'm your friend."

Vlad grimaced. "Just let me spend the day alone in your garden, and don't tell the KGB I'm antisocial. I want to conform, I do want to fit in, but for God's sake, not today."

"Vlad, believe me, I want only the best for you. Go out and lie in the hammock; eat the berries, enjoy the sun."

Vlad's pale eyes bulged as they fell on my framed official photograph of Laika, the cosmonaut dog. The dog had a weird, frog-like, rubber oxygen mask on her face. Just before launch, she had been laced up within a heavy, stiff space-suit—a kind of canine straitjacket, actually. Vlad frowned and shuddered. I guess it reminded him of his recent unpleasantness.

Vlad yanked my vodka bottle off the kitchen counter, and headed outside without another word. I watched him through the window—he looked well enough, sipping vodka, picking blackberries, and finally falling asleep in the hammock. His suitcase contained very little of interest, and his boxes were mostly filled with books. Most were technical, but many were scientific romances: the socialist H.G. Wells, Capek, Yefremov, Kazantsev, and the like.

When Vlad awoke he was in much better spirits. I showed him around the property. The garden stretched back thirty meters, where there was a snug outhouse. We strolled together out into the muddy streets. At Vlad's urging, I got the guards to open the gate for us, and we walked out into the peaceful birch and pine woods around the Klyazma Reservoir. It had rained heavily during the preceding week, and mushrooms were everywhere. We amused ourselves by gathering the edible ones—every Russian knows mushrooms.

Vlad knew an "instant pickling" technique based on lightly boiling the mushrooms in brine, then packing them in ice and vinegar. It worked well back in our kitchen, and I congratulated him. He was as pleased as a child.

In the days that followed, I realized that Vlad was not anti-Party. He was simply very unworldly. He was one of those gifted unfortunates who can't manage life without a protector.

Still, his opinion carried a lot of weight around the Center, and he worked on important problems. I escorted him everywhere—except the labs I wasn't cleared for—reminding him not to blurt out anything stupid.

Of course my own work suffered. I told my co-workers that Vlad was a sick relative of mine, which explained my common absence from the

job. Rather than being disappointed by my absence, though, the other engineers praised my dedication to Vlad and encouraged me to spend plenty of time with him.

I liked Vlad, but soon grew tired of the constant shepherding. He did most of his work in our *dacha,* which kept me cooped up there when I could have been out cutting deals with Nokidze or reporting on the beatnik scene.

It was too bad that Captain Nina Bogulyobova had fallen down on her job. She should have been watching over Vlad from the first. Now I had to tidy up after her bungling, so I felt she owed me some free time. I hinted tactfully at this when she arrived with a sealed briefcase containing some of Vlad's work. My reward was another furious tongue-lashing.

"You parasite, how dare you suggest that I failed Vladimir Eduardovich? I have always been aware of his value as a theorist, and as a man! He's worth any ten of you *stukach* vermin! The Chief Designer himself has asked after Vladimir's health. The Chief Designer spent years in a labor camp under Stalin. He knows it's no disgrace to be shut away by some lickspittle sneak . . . " There was more, and worse. I began to feel that Captain Bogulyubova, in her violent Tartar way, had personal feelings for Vlad.

Also I had not known that our Chief Designer had been in camp. This was not good news, because people who have spent time in detention sometimes become embittered and lose proper perspective. Many people were being released from labor camps now that Nikita Khrushchev had become the Leader of Progressive Mankind. Also, amazing and almost insolent things were being published in the *Literary Gazette.*

Like most Ukrainians, I liked Khrushchev, but he had a funny peasant accent and everyone made fun of the way he talked on the radio. We never had such problems in Stalin's days.

We Soviets had achieved a magnificent triumph in space, but I feared we were becoming lax. It saddened me to see how many space engineers, technicians, and designers avoided Party discipline. They claimed that their eighty-hour work-weeks excused them from indoctrination meetings. Many read foreign technical documents without proper clearance. Proper censorship was evaded. Technicians from different departments sometimes gathered to discuss their work, privately, simply between themselves, without an actual need-to-know.

Vlad's behavior was especially scandalous. He left top-secret documents scattered about the *dacha,* where one's eye could not help but fall on them. He often drank to excess. He invited engineers from other departments to come visit us, and some of them, not knowing his dan-

gerous past, accepted. It embarrassed me, because when they saw Vlad and me together they soon guessed the truth.

Still, I did my best to cover Vlad's tracks and minimize his indiscretions. In this I failed miserably.

One evening, to my astonishment, I found him mulling over working papers for the RD-108 Supercluster engine. He had built a cardboard model of the rocket out of roller tubes from my private stock of toilet paper. "Where did you get those?" I demanded.

"Found 'em in a box in the outhouse."

"No, the documents!" I shouted. "That's not your department! Those are state secrets!"

Vlad shrugged. "It's all wrong," he said thickly. He had been drinking again.

"What?"

"Our original rocket, the 107, had four nozzles. But this 108 Supercluster has twenty! Look, the extra engines are just bundled up like bananas and attached to the main rocket. They're held on with hoops! The Americans will laugh when they see this."

"But they won't!" I snatched the blueprints out of his hands. "Who gave you these?"

"Korolyov did," Vlad muttered. "Sergei Pavlovich."

"The Chief Designer?" I said, stunned.

"Yeah, we were talking it over in the sauna this morning," Vlad said. "Your old pal Nokidze came by while you were at work this morning, and he and I had a few. So I walked down to the bathhouse to sweat it off. Turned out the Chief was in the sauna too—he'd been up all night working. He and I did some time together once, years ago. We used to look up at the stars, talk rockets together. . . . So anyway, he turns to me and says, 'You know how much thrust Von Braun is getting from a single engine?' And I said, 'Oh, must be eighty, ninety tons, right?' 'Right,' he said, 'and we're getting twenty-five. We'll have to strap twenty together to launch one man. We need a miracle, Vladimir. I'm ready to try anything.' So then I told him about this book I've been reading."

I said, "You were drunk on working-hours? And the Chief Designer saw you in the sauna?"

"He sweats like anybody else," Vlad said. "I told him about this new fiction writer. Aleksander Kazantsev. He's a thinker, that boy." Vlad tapped the side of his head meaningfully, then scratched his ribs inside his filthy houserobe and lit a cigarette. I felt like killing him. "Kazantsev says we're not the first explorers in space. There've been others, beings from the void. It's no surprise. The great space-prophet Tsiolkovsky said there are an infinite number of inhabited worlds. You know how much

the Chief Designer admired Tsiolkovsky. And when you look at the evidence—I mean this Tunguska thing—it begins to add up nicely."

"Tunguska," I said, fighting back a growing sense of horror. "That's in *Siberia,* isn't it?"

"Sure. So anyway, I said, 'Chief, why are you wasting our time on these firecrackers when we have a shot at true star flight? Send out a crew of trained investigators to the impact site of this so-called Tunguska meteor! Run an information-theoretic analysis! If it was really an atomic-powered spacecraft like Kazantsev says, maybe there's something left that could help us!' "

I winced, imagining Vlad in the sauna, drunk, first bringing up disgusting prison memories, then babbling on about space fiction to the premier genius of Soviet rocketry. It was horrible. "What did the Chief say to you?"

"He said it sounded promising," said Vlad airily. "Said he'd get things rolling right away. You got any more of those Kents?"

I slumped into my chair, dazed. "Look inside my boots," I said numbly. "My Italian ones."

"Oh," Vlad said in a small voice. "I sort of found those last week."

I roused myself. "The Chief let you see the Supercluster plans? And said you ought to go to Siberia?"

"Oh, not just you and me," Vlad said, amused. "He needs a really thorough investigation! We'll commandeer a whole train, get all the personnel and equipment we need!" Vlad grinned. "Excited, Nikita?"

My head spun. The man was a demon. I knew in my soul that he was goading me. Deliberately. Sadistically. Suddenly I realized how sick I was of Vlad, of constantly watchdogging this visionary moron. Words tumbled out of me.

"I hate you, Zipkin! So this is your revenge at last, eh? Sending me to Siberia! You beatnik scum! You think you're smart, blondie? You're weak, you're sick, that's what! I wish the KGB had shot you, you stupid, selfish, crazy . . . " My eyes flooded with sudden tears.

Vlad patted my shoulder, surprised. "Now don't get all worked up—"

"You're nuts!" I sobbed. "You rocketship types are all crazy, every one of you! Storming the cosmos . . . well, you can storm my sacred ass! I'm not boarding any secret train to nowhere—"

"Now, now," Vlad soothed. "My imagination, your thoroughness—we make a great team! Just think of them pinning awards on us."

"If it's such a great idea, then you do it! I'm not slogging through some stinking wilderness . . . "

"Be logical!" Vlad said, rolling his eyes in derision. "You know I'm not well trusted. Your Higher Circles don't understand me the way you do.

I need you along to smooth things, that's all. Relax, Nikita! I promise, I'll split the fame and glory with you, fair and square."

Of course, I did my best to defuse, or at least avoid, this lunatic scheme. I protested to Higher Circles. My usual contact, a balding jazz fanatic named Colonel Popov, watched me blankly, with the empty stare of a professional interrogator. I hinted broadly that Vlad had been misbehaving with classified documents. Popov ignored this, absently tapping a pencil on his "special" phone in catchy 5/4 rhythm.

Hesitantly I mentioned Vlad's insane mission. Popov still gave no response. One of the phones, not the "special" one, rang loudly. Popov answered, said, "Yes," three times, and left the room.

I waited a long hour, careful not to look at or touch anything on his desk. Finally Popov returned.

I began at once to babble. I knew his silent treatment was an old trick, but I couldn't help it. Popov cut me off.

"Marx's laws of historical development apply universally to all societies," he said, sitting in his squeaking chair. "That, of course, includes possible star-dwelling societies." He steepled his fingers. "It follows logically that progressive Interstellar Void-ites would look kindly on us progressive peoples."

"But the Tunguska meteor fell in 1908!" I said.

"Interesting," Popov mused. "Historical-determinist Cosmic-oids could have calculated through Marxist science that Russia would be first to achieve communism. They might well have left us some message or legacy."

"But Comrade Colonel . . . "

Popov rustled open a desk drawer. "Have you read this book?" It was Kazantsev's space romance. "It's all the rage at the space center these days. I got my copy from your friend Nina Bogulyobova."

"Well . . . " I said.

"Then why do you presume to debate me without even reading the facts?" Popov folded his arms. "We find it significant that the Tunguska event took place on June 30, 1908. Today is June 15, 1958. If heroic measures are taken, you may reach the Tunguska valley on the very day of the 50th anniversary!"

That Tartar cow Bogulyobova had gotten to the Higher Circles first. Actually, it didn't surprise me that our KGB would support Vlad's scheme. They controlled our security, but our complex engineering and technical developments much exceeded their mental grasp. Space aliens, however, were a concept anyone could understand.

Any skepticism on their part was crushed by the Chief Designer's personal support for the scheme. The Chief had been getting a lot of play

in Khrushchev's speeches lately, and was known as a miracle worker. If he said it was possible, that was good enough for Security.

I was helpless. An expedition was organized in frantic haste.

Naturally it was vital to have KGB along. Me, of course, since I was guarding Vlad. And Nina Bogulyobova, as she was Vlad's superior. But then the KGB of the other departments grew jealous of Metallurgy and Information Mechanics. They suspected that we were pulling a fast one. Suppose an artifact really *were* discovered? It would make all our other work obsolete overnight. Would it not be best that each department have a KGB observer present? Soon we found no end of applicants for the expedition.

We were lavishly equipped. We had ten railway cars. Four held our Red Army escort and their tracked all-terrain vehicles. We also had three sleepers, a galley car, and two flatcars piled high with rations, tents, excavators, geiger counters, radios, and surveying instruments. Vlad brought a bulky calculating device, Captain Nina supplied her own mysterious crates, and I had a box of metallurgical analysis equipment, in case we found a piece of the UFO.

We were towed through Moscow under tight security, then our cars were shackled to the green-and-yellow Trans-Siberian express.

Soon the expedition was chugging across the endless, featureless steppes of central Asia. I grew so bored that I was forced to read Kazantsev's book.

On June 30, 1908, a huge, mysterious fireball had smashed into the Tunguska River valley of the central Siberian uplands. This place was impossibly remote. Kazantsev suggested that the crash point had been chosen deliberately to avoid injuring Earthlings.

It was not until 1927 that the first expedition reached the crash site, revealing terrific devastation, but—*no sign whatsoever of a meteorite!* They found no impact crater, either; only the swampy Tunguska valley, surrounded by an elliptical blast pattern: sixty kilometers of dead, smashed trees.

Kazantsev pointed out that the facts suggested a nuclear airburst. Perhaps it was a deliberate detonation by aliens, to demonstrate atomic power to Earthlings. Or it might have been the accidental explosion of a nuclear starship drive. In an accidental crash, a socially advanced alien pilot would naturally guide his stricken craft to one of the planet's "poles of uninhabitedness." And eyewitness reports made it clear that the Tunguska body had definitely changed course in flight!

Once I had read this excellent work, my natural optimism surfaced again. Perhaps we would find something grand in Tunguska after all, something miraculous that the 1927 expedition had overlooked. Kulik's expedition had missed it, but now we were in the atomic age. Or so we

told ourselves. It seemed much more plausible on a train with two dozen other explorers, all eager for the great adventure.

It was an unsought vacation for us hardworking *stukachi*. Work had been savage throughout our departments, and we KGB had had a tough time keeping track of our comrades' correctness. Meanwhile, back in Kaliningrad, they were still laboring away, while we relaxed in the dining saloon with pegged chessboards and tall brass samovars of steaming tea.

Vlad and I shared our own sleeping car. I forgave him for having involved me in this mess. We became friends again. This would be real man's work, we told each other. Tramping through savage taiga with bears, wolves, and Siberian tigers! Hunting strange, possibly dangerous relics—relics that might change the very course of cosmic history! No more of this poring over blueprints and formulae like clerks! Neither of us had fought in the Great Patriotic War—I'd been too young, and Vlad had been in some camp or something. Other guys were always bragging about how they'd stormed this or shelled that or eaten shoe leather in Stalingrad—well, we'd soon be making them feel pretty small!

Day after day, the countryside rolled past. First the endless, grassy steppes, then a dark wall of pine forest, broken by white-barked birches. Khrushchev's Virgin Lands campaign was in full swing, and the radio was full of patriotic stuff about settling the wilderness. Every few hundred kilometers, especially by rivers, raw and ugly new towns had sprung up along the Trans-Sib line. Prefab apartment blocks, mud streets, cement trucks, and giant sooty power plants. Trains unloaded huge spools of black wire. "Electrification" was another big propaganda theme of 1958.

Our Trans-Sib train stopped often to take on passengers, but our long section was sealed under orders from Higher Circles. We had no chance to stretch our legs and slowly all our carriages filled up with the reek of dirty clothes and endless cigarettes.

I was doing my best to keep Vlad's spirits up when Nina Bogulyubova entered our carriage, ducking under a line of wet laundry. "Ah, Nina Igorovna," I said, trying to keep things friendly. "Vlad and I were just discussing something. Exactly what *does* it take to merit burial in the Kremlin?"

"Oh, put a cork in it," Bogolyubova said testily. "My money says your so-called spacecraft was just a chunk of ice and gas. Probably a piece of a comet which vaporized on impact. Maybe it's worth a look, but that doesn't mean I have to swallow crackpot pseudo-science!"

She sat on the bunk facing Vlad's, where he sprawled out, stunned with boredom and strong cigarettes. Nina opened her briefcase. "Vladimir, I've developed those pictures I took of you."

"Yeah?"

She produced a Kirlian photograph of his hand. "Look at these spiky flares of suppressed energy from your fingertips. Your aura has changed since we've boarded the train."

Vlad frowned. "I could do with a few deciliters of vodka, that's all."

She shook her head quickly, then smiled and blinked at him flirtatiously. "Vladimir Eduardovich, you're a man of genius. You have strong, passionate drives. . . . "

Vlad studied her for a moment, obviously weighing her dubious attractions against his extreme boredom. An affair with a woman who was his superior, and also KGB, would be grossly improper and risky. Vlad, naturally, caught my eye and winked. "Look, Nikita, take a hike for a while, okay?"

He was putty in her hands. I was disgusted by the way she exploited Vlad's weaknesses. I left him in her carnal clutches, though I felt really sorry for Vlad. Maybe I could scare him up something to drink.

The closest train-stop to Tunguska is near a place called Ust-Ilimsk, two hundred kilometers north of Bratsk, and three thousand long kilometers from Moscow. Even London, England, is twice as close to Moscow as Tunguska.

A secondary-line engine hauled our string of cars to a tiny railway junction in the absolute middle of nowhere. Then it chugged away. It was four in the morning of June 26, but since it was summer it was already light. There were five families running the place, living in log cabins chinked with mud.

Our ranking KGB officer, an officious jerk named Chalomei, unsealed our doors. Vlad and I jumped out onto the rough boards of the siding. After days of ceaseless train vibration we staggered around like sailors who'd lost their land-legs. All around us was raw wilderness, huge birches and tough Siberian pines, with knobby, shallow roots. Permafrost was only two feet underground. There was nothing but trees and marsh for days in all directions. I found it very depressing.

We tried to strike up a conversation with the local supervisor. He spoke bad Russian, and looked like a relocated Latvian. The rest of our company piled out, yawning and complaining.

When he saw them, our host turned pale. He wasn't much like the brave pioneers on the posters. He looked scrawny and glum.

"Quite a place you have here," I observed.

"Is better than labor camp, I always thinking," he said. He murmured something to Vlad.

"Yeah," Vlad said thoughtfully, looking at our crew. "Now that you mention it, they *are* all police sneaks."

With much confusion, we began unloading our train-cars. Slowly the siding filled up with boxes of rations, bundled tents, and wooden crates labeled SECRET and THIS SIDE UP.

A fight broke out between our civilians and our Red Army detachment. Our Kaliningrad folk were soon sucking their blisters and rubbing strained backs, but the soldiers refused to do the work alone.

Things were getting out of hand. I urged Vlad to give them all a good talking-to, a good, ringing speech to establish who was who and what was what. Something simple and forceful, with lots of "marching steadfastly together" and "storming the stars" and so on.

"I'll give them something better," said Vlad, running his hands back through his hair. "I'll give them the truth." He climbed atop a crate and launched into a strange, ideologically incorrect harangue.

"Comrades, you should think of Einstein's teachings. Matter is illusion. Why do you struggle so? Spacetime is the ultimate reality. Spacetime is one, and we are all patterns on it. We are ripples, Comrades, wrinkles in the fabric of the . . . "

"Einstein is a tool of International Zionism," shouted someone.

"And you are a dog," said Vlad evenly. "Nevertheless you and I are the same. We are different parts of the cosmic One. Matter is just a . . . "

"Drop dead," yelled another heckler.

"Death is an illusion," said Vlad, his smile tightening. "A person's spacetime pattern codes an information pattern which the cosmos is free to . . . "

It was total gibberish. Everyone began shouting and complaining at once, and Vlad's speech stuttered to a halt.

Our KGB Colonel Chalomei jumped up on a crate and declared that he was taking charge. He was attached directly to the Chief Designer's staff, he shouted, and was fed up with our expedition's laxity. This was nothing but pure mutiny, but nobody else outranked him in KGB. It looked like Chalomei would get away with it. He then tried to order our Red Army boys to finish the unloading.

But they got mulish. There were six of them, all Central Asian Uzbeks from Uckduck, a hick burg in Uzbekskaja. They'd all joined the Red Army together, probably at gunpoint. Their leader was Master Sergeant Mukhamed, a rough character with a broken nose and puffy, scarred eyebrows. He looked and acted like a tank.

Mukhamed bellowed that his orders didn't include acting as house-serfs for egghead aristocrats. Chalomei insinuated how much trouble he could make for Mukhamed, but Mukhamed only laughed.

"I may be just a dumb Uzbek," Mukhamed roared, "but I didn't just fall off the turnip truck! Why do you think this train is full of you worthless *stukachi*? It's so those big-brain rocket boys you left behind

can get some real work done for once! Without you stoolies hanging around, stirring up trouble to make yourselves look good! They'd love to see you scum break your necks in the swamps of Siberia. . . ."

He said a great deal more, but the damage was already done. Our expedition's morale collapsed like a burst balloon. The rest of the group refused to move another millimeter without direct orders from Higher Circles.

We spent three days then, on the station's telegraph, waiting for orders. The glorious 50th Anniversary of the event came and went and everything was screwed up and in total shambles. The gloomiest rumors spread among us. Some said that the Chief Designer had tricked us KGB to get us out of the way, and others said that Khrushchev himself was behind it. (There were always rumors of struggle between Party and KBG at the Very Highest Circles.) Whatever it meant, we were all sure to be humiliated when we got back, and heads would roll.

I was worried sick. If this really was a plot to hoodwink KGB, then I was in it up to my neck. Then the galley car caught fire during the night and sabotage was suspected. The locals, fearing interrogation, fled into the forest, though it was probably just one of Chalomei's *stukachi* being careless with a samovar.

Orders finally arrived from Higher Circles. KGB personnel were to return to their posts for a "reassessment of their performance." This did not sound promising at all. No such orders were given to Vlad or the "expedition regulars," whatever that meant. Apparently the Higher Circles had not yet grasped that there *were* no "expedition regulars."

Nina and I were both severely implicated, so we both decided that we were certainly "regulars" and should put off going back as long as possible. Together with Vlad, we had a long talk with Sergeant Mukhamed, who seemed a sensible sort.

"We're better off without those desk jockeys," Mukhamed said bluntly. "This is rough country. We can't waste time tying up the shoelaces of those Moscow fairies. Besides, my orders say 'Zipkin' and I don't see 'KGB' written anywhere on there."

"Maybe he's right," Vlad said. "We're in so deep now that our best chance is to actually *find* an artifact and prove them all wrong! Results are what count, after all! We've come this far—why turn tail now?"

Our own orders said nothing about the equipment. It turned out there was far too much of it for us to load it aboard the Red Army tractor-vehicles. We left most of it on the sidings.

We left early next morning, while the others were still snoring. We had three all-terrain vehicles with us, brand-new Red Army amphibious personnel carriers, called "BTR-50s," or *"byutors"* in Army slang. They had camouflaged steel armor and rode very low to the ground on broad

tracks. They had loud, rugged diesel engines and good navigation equipment, with room for ten troops each in a bay in the back. The front had slits and searchlights and little pop-up armored hatches for the driver and commander. The *byutors* floated in water, too, and could churn through the thickest mud like a salamander. We scientists rode in the first vehicle, while the second carried equipment and the third, fuel.

Once underway, our spirits rose immediately. You could always depend on the good old Red Army to get the job done! We roared through woods and swamps with a loud, comforting racket, scaring up large flocks of herons and geese. Our photoreconnaissance maps, which had been issued to us under the strictest security, helped us avoid the worst obstacles. The days were long and we made good speed, stopping only a few hours a night.

It took three days of steady travel to reach the Tunguska basin. Cone-shaped hills surrounded the valley like watchtowers.

The terrain changed here. Mummified trees strewed the ground like jackstraws, many of them oddly burnt. Trees decayed very slowly in the Siberian taiga. They were deep-frozen all winter and stayed whole for decades.

Dusk fell. We bulled our way around the slope of one of the hills, while leafless, withered branches crunched and shrieked beneath our treads. The marshy Tunguska valley, clogged and gray with debris, came into view. Sergeant Mukhamed called a halt. The maze of fallen lumber was too much for our machines.

We tottered out of the *byutors* and savored the silence. My kidneys felt like jelly from days of lurching and jarring. I stood by our *byutor,* resting my hand on it, taking comfort in the fact that it was man-made. The rough travel and savage dreariness had taken the edge off my enthusiasm. I needed a drink.

But our last liter of vodka had gone out the train-window somewhere between Omsk and Tomsk. Nina had thrown it away "for Vlad's sake." She was acting more like a lovesick schoolgirl every day. She was constantly fussing over Vlad, tidying him up, watching his diet, leaping heavily to his defense in every conversation. Vlad, of course, merely sopped up this devotion as his due, too absent-minded to notice it. Vlad had a real talent for that. I wasn't sure which of the two of them was more disgusting.

"At last," Vlad exulted. "Look, Ninotchka, the site of the mystery! Isn't it sublime!" Nina smiled and linked her solid arm with his.

The dusk thickened. Huge taiga mosquitoes whirred past our ears and settled to sting and pump blood. We slapped furiously, then set up our camp amid a ring of dense, smoky fires.

To our alarm, answering fires flared up on the five other hilltops ringing the valley.

"Evenks," grumbled Sergeant Mukhamed. "Savage nomads. They live off their reindeer, and camp in round tents called yurts. No one can civilize them; it's hopeless. Best just to ignore them."

"Why are they here?" Nina said. "Such a bleak place."

Vlad rubbed his chin. "The record of the '27 Kulik Expedition said the Evenk tribes remembered the explosion. They spoke of a Thunder-God smiting the valley. They must know this place pretty well."

"I'm telling you," rasped Mukhamed, "stay away. The men are all mushroom-eaters and the women are all whores."

One of the shaven-headed Uzbek privates looked up from his tin of rations. "Really, Sarge?"

"Their girls have lice as big as your thumbnails," the sergeant said. "And the men don't like strangers. When they eat those poison toadstools they get like wild beasts."

We had tea and hardtack, sniffling and wiping our eyes from the bug-repelling smoke. Vlad was full of plans. "Tomorrow we'll gather data on the direction of the treefalls. That'll show us the central impact point. Nina, you can help me with that. Nikita, you can stay here and help the soldiers set up base camp. And maybe later tomorrow we'll have an idea of where to look for our artifact."

Later that night, Vlad and Nina crept out of our long tent. I heard restrained groaning and sighing for half an hour. The soldiers snored on peacefully while I lay under the canvas with my eyes wide open. Finally Nina shuffled in, followed by Vlad brushing mud from his knees.

I slept poorly that night. Maybe Nina was no sexy hard-currency girl, but she was a woman, and even a *stukach* can't overhear that sort of thing without getting hot and bothered. After all, I had my needs too.

Around one in the morning I gave up trying to sleep and stepped out of the tent for some air. An incredible aurora display greeted me. We were late for the fiftieth anniversary of the Tunguska crash, but I had the feeling the valley was welcoming me.

There was an arc of rainbow light directly overhead, with crimson and yellow streamers shooting out from it to fall from the zenith towards the horizons. Wide luminous bands, paralleling the arch, kept rising out of the horizon to roll across the heavens with swift steady majesty. The bands crashed into the arch like long breakers from a sea of light.

The great auroral rainbow, with all its wavering streamers, began to wing slowly upwards, and a second, brighter arch formed below it. The new arch shot a long serried row of slender, colored lances towards the Tunguska valley.

The lances stretched down, touched, and a lightning flash of vivid

orange glared out, filling the whole world around me. I held my breath, waiting for the thunder, but the only sound was Nina's light snoring.

I watched a while longer, until finally the great cosmic tide of light shivered into pieces. At the very end, disks appeared, silvery, shimmering saucers that filled the sky. Truly we had come to a very strange place. Filled with profound emotions, I was able to forget myself and sleep.

Next morning everyone woke up refreshed and cheerful. Vlad and Nina traipsed off with the surveying equipment. With the soldiers' help, I set up the diesel generator for Vlad's portable calculator. We did some camp scut-work, cutting heaps of firewood, digging a proper latrine. By then it was noon, but the lovebirds were still not back, so I did some exploring of my own. I tramped downhill into the disaster zone.

I realized almost at once that our task was hopeless. The ground was squelchy and dead, beneath a thick tangling shroud of leafless pines. We couldn't look for wreckage systematically without hauling away the musty, long-dead crust of trees. Even if we managed that, the ground itself was impossibly soggy and treacherous.

I despaired. The valley itself oppressed my soul. The rest of the taiga had chipmunks, wood grouse, the occasional heron or squirrel, but this swamp seemed lifeless, poisonous. In many places the earth had sagged into shallow bowls and depressions, as if the rock below it had rotted away.

New young pines had sprung up to take the place of the old, but I didn't like the look of them. The green saplings, growing up through the gray skeletons of their ancestors, were oddly stunted and twisted. A few older pines had been half-sheltered from the blast by freaks of topography. The living bark on their battered limbs and trunks showed repulsive puckered blast-sears.

Something malign had entered the soil. Perhaps poisoned comet-ice, I thought. I took samples of the mud, mostly to impress the soldiers back at camp. I wasn't much of a scientist, but I knew how to go through the motions.

While digging I disturbed an ant-nest. The strange, big-headed ants emerged from their tunnels and surveyed the damage with eerie calm.

By the time I returned to camp Vlad and Nina were back. Vlad was working on his calculator while Nina read out direction-angles of the felled trees. "We're almost done," Nina told me, her broad-cheeked face full of bovine satisfaction. "We're running an information-theoretic analysis to determine the ground location of the explosion."

The soldiers looked impressed. But the upshot of Vlad and Nina's fancy analysis was what any fool could see by glancing at the elliptical valley. The brunt of the explosion had burst from the nearer focus of the ellipse, directly over a little hill I'd had my eye on all along.

"I've been taking soil samples," I told Nina. "I suspect odd trace elements in the soil. I suppose you noticed the strange growth of the pines. They're particularly tall at the blast's epicenter."

"Hmph," Nina said. "While you were sleeping last night, there was a minor aurora. I took photos. I think the geomagnetic field may have had an influence on the object's trajectory."

"That's elementary," I sniffed. "What we need to study is a possible remagnetization of the rocks. Especially at impact point."

"You're neglecting the biological element," Nina said. By now the soldiers' heads were swiveling to follow our discussion like a tennis match. "I suppose you didn't notice the faint luminescence of the sod?" She pulled some crumpled blades of grass from her pocket. "A Kirlian analysis will prove interesting."

"But, of course, the ants—" I began.

"Will you two fakers shut up a minute?" Vlad broke in. "I'm trying to think."

I swallowed hard. "Oh yes, Comrade Genius? What about?"

"About finding what we came for, Nikita. The alien craft." Vlad frowned, waving his arm at the valley below us. "I'm convinced it's buried out there somewhere. We don't have a chance in this tangle and ooze . . . but we gotta figure some way to sniff it out."

At that moment we heard the distant barking of a dog. "Great," Vlad said without pausing. "Maybe that's a bloodhound."

He'd made a joke. I realized this after a moment, but by then it was too late to laugh. "It's just some Evenk mutt," Sergeant Mukhamed said. "They keep sled-dogs . . . eat 'em, too." The dog barked louder, coming closer. "Maybe it got loose."

Ten minutes later the dog bounded into our camp, barking joyously and frisking. It was a small, bright-eyed female husky, with muddy legs and damp fur caked with bits of bark. "That's no sled-dog," Vlad said, wondering. "That's a city mutt. What's it doing here?"

She was certainly friendly enough. She barked in excitement and sniffed at our hands trustingly. I patted the dog and called her a good girl. "Where on earth did you come from?" I asked. I'd always liked dogs.

One of the soldiers addressed the dog in Uzbek and offered it some of his rations. It sniffed the food, took a tentative lick, but refused to eat it.

"Sit!" Vlad said suddenly. The dog sat obediently.

"She understands Russian," Vlad said.

"Nonsense," I said. "She just reacted to your voice."

"There must be other Russians nearby," Nina said. "A secret research station, maybe? Something we were never told about?"

"Well, I guess we have a mascot," I said, scratching the dog's scalp.

"Come here, Laika," Vlad said. The dog pricked her ears and wandered toward him.

I felt an icy sensation of horror. I snatched my hand back as if I had touched a corpse. With an effort, I controlled myself. "Come on, Vlad," I said. "You're joking again."

"Good dog," Vlad said, patting her.

"Vlad," I said, "Laika's rocket burned up on re-entry."

"Yes," Vlad said, "the first creature we Earthlings put into space was sentenced to be burned alive. I often think about that." Vlad stared dramatically into the depths of the valley. "Comrades, I think something is waiting here to help us storm the cosmos. I think it preserved Laika's soul and reanimated her here, at this place, and at this time . . . It's no coincidence. This is no ordinary animal. This is Laika, the cosmonaut dog!"

Laika barked loudly. I had never seen the dog without the rubber oxygen mask on her face, but I knew with a thrill of supernatural fear that Vlad was right. I felt an instant irrational urge to kill the dog, or at least give her a good kick. If I killed and buried her, I wouldn't have to think about what she meant.

The others looked equally stricken. "Probably fell off a train," Mukhamed muttered at last.

Vlad regally ignored this frail reed of logic. "We ought to follow Laika. The . . . *thunder-god* put her here to lead us. It won't get dark till ten o'clock. Let's move out, comrades." Vlad stood up and shrugged on his backpack. "Mukhamed?"

"Uh . . . " the sergeant said. "My orders are to stay with the vehicles." He cleared his throat and spat. "There are Evenks about. Natural thieves. We wouldn't want our camp to be raided."

Vlad looked at him in surprise, and then with pity. He walked towards me, threw one arm over my shoulder, and took me aside. "Nikita, these Uzbeks are brave soldiers but they're a bit superstitious. Terrified of the unknown. What a laugh. But you and I . . . Scientists, space pioneers . . . the Unknown is our natural habitat, right?"

"Well . . ."

"Come on, Nikita." He glowered. "We can't go back and face the top brass empty-handed."

Nina joined us. "I knew you'd turn yellow, Globov. Never mind him, Vlad, darling. Why should you share your fame and glory with this sneaking coward? I'll go with you—"

"You're a woman," Vlad assured her loftily. "You're staying here where it's safe."

"But Vlad—"

Vlad folded his arms. "Don't make me have to beat you." Nina blushed

girlishly and looked at the toes of her hiking boots. She could have broken his back like a twig.

The dog barked loudly and capered at our feet. "Come on," Vlad said. He set off without looking back.

I grabbed my pack and followed him. I had to. I was guarding him: no more Vlad, no more Globov. . . .

Our journey was a nightmare. The dog kept trying to follow *us,* or would run yipping through ratholes in the brush that we had to circle painfully. Half on intuition, we headed for the epicenter of the blast, the little hillock at the valley's focus.

It was almost dusk again when we finally reached it, battered, scratched and bone-tired. We found a yurt there, half-hidden in a slough off to one side of the hill. It was an Evenk reindeer-skin tent, oozing grayish smoke from a vent-hole. A couple of scabby reindeer were pegged down outside it, gnawing at a lush, purplish patch of swamp moss. The dead trees around had been heavily seared by the blast, leaving half-charcoaled bubbly lumps of ancient resin. Some of the wreckage had been hacked up for firewood. New pines of unequaled sinister nastiness had sprung up, cockscrewed, malformed, and growing with cancerous vigor.

The dog barked loudly at the wretched reindeer, who looked up with bleary-eyed indifference.

We heard leather thongs hiss loose in the door flap. A pale face framed in greasy fur hood poked through. It was a young Evenk girl. She called to the dog, then noticed us and giggled quietly.

The dog rushed toward the yurt, wagging her tail. "Hello," Vlad called. He spread his open hands. "Come on out, we're friends."

The girl stepped out and inched toward us, watching the ground carefully. She paused at a small twig, her dilated eyes goggling as if it were a boulder. She high-jumped far over it, and landed giggling. She wore an elaborate reindeerskin jacket that hung past her knees, thickly embroidered with little beads of bone and wood. She also had tight fur trousers with lumpy beaded booties, sewn all in one piece like a child's pajamas.

She sidled up, grinning coyly, and touched my face and clothes in curiosity. "Nikita," I said, touching my chest.

"Balan Thok," she whispered, running one fingertip down her sweating throat. She laughed drunkenly.

"Is that your dog?" Vlad said. "She came from the sky!" He gestured extravagantly. "Something under the earth here . . . brought her down from the sky . . . yes?"

I shrieked suddenly. A gargoyle had appeared in the tent's opening. But the blank, ghastly face was only a wooden ceremonial mask, shaped like a frying pan, with a handle to grip below the "chin." The mask had

eye-slits and a carved mouth-hole fringed with a glued-on beard of reindeer hair.

Behind it was Balan Thok's father, or maybe grandfather. Cunningly, the old villain peered at us around the edge of his mask. His face was as wrinkled as an old boot. The sides of his head were shaven and filth-choked white hair puffed from the top like a thistle. His long reindeer coat was fringed with black fur and covered with bits of polished bone and metal.

We established that the old savage was called Jif Gurd. Vlad went through his sky-pointing routine again. Jif Gurd returned briefly to his leather yurt and re-emerged with a long wooden spear. Grinning vacuously, he jammed the butt of it into a socket in the ground and pointed to the heavens.

"I don't like the look of this," I told Vlad at once. "That spear has dried blood on it."

"Yeah. I've heard of these," Vlad said. "Sacrifice poles for the thunder-god. Kulik wrote about them." He turned to the old man. "That's right," he encouraged. "Thunder-god." He pointed to the dog. "Thunder-god brought this dog down."

"Thunder-god," said Jif Gurd seriously. "Dog." He looked up at the sky reverently. "Thunder-god." He made a descending motion with his right arm, threw his hands apart to describe the explosion. "Boom!"

"That's right! That's right!" Vlad said excitedly.

Jif Gurd nodded. He bent down almost absent-mindedly and picked little Laika up by the scruff of the neck. "Dog."

"Yes, yes," Vlad nodded eagerly. Before we could do anything, before we could realize what was happening, Jif Gurd reached inside his greasy coat, produced a long, curved knife, and slashed poor Laika's throat. He lifted her up without effort—he was terribly strong, the strength of drug-madness—and jammed her limp neck over the end of the spear as if gaffing a fish.

Blood squirted everywhere. Vlad and I jumped back, horrified. "Hell!" Vlad cried in anguish. "I forgot that they sacrifice dogs!"

The hideous old man grinned and chattered excitedly. He was convinced that he understood us—that Vlad had wanted him to sacrifice the dog to the sky-god. He approved of the idea. He approved of us. I said, "He thinks we have something in common now, Vlad."

"Yeah," Vlad said. He looked sadly at Laika. "Well, we rocket men sacrificed her first, poor beast."

"There goes our last lead to the UFO," I said. "Poor Laika! All that way just for this!"

"This guy's got to know where the thing is," Vlad said stubbornly. "Look at the sly old codger—it's written all over his face." Vlad stepped

forward. "Where is it? Where did it land?" He gestured wildly. "You take us there!"

Balan Thok gnawed her slender knuckles and giggled at our antics, but it didn't take the old guy long to catch on. By gestures, and a few key words, we established that the Thunder-God was in a hole nearby. A hidden hole, deep in the earth. He knew where it was. He could show it to us.

But he wouldn't.

"It's a religious thing," Vlad said, mulling it over. "I think we're ritually unclean."

"Muk-a-moor," said the old man. He opened the tent flap and gestured us inside.

The leather walls inside were black with years of soot. The yurt was round, maybe five steps across, and braced with a lattice of smooth flat sticks and buckskin thongs. A fire blazed away in the yurt's center, chunks of charred pine on a hearth of flat yellow stones. Dense smoke curdled the air. Two huge furry mounds loomed beside the hearth. They were Evenk sleeping bags, like miniature tents in themselves.

Our eyes were caught by the drying-racks over the fire. Mushrooms littered the racks, the red-capped fly agaric mushrooms that one always sees in children's books. The intoxicating toadstools of the Siberian nomad. Their steaming fungal reek filled the tent, below the acrid stench of smoke and rancid sweat.

"Muk-a-moor," said Jif Gurd, pointing at them, and then at his head.

"Oh, Christ," Vlad said. "He won't show us anything unless we eat his sacred mushrooms." He caught the geezer's eye and pantomimed eating.

The old addict shook his head and held up a leather cup. He pretended to drink, then smacked his rubbery, bearded lips. He pointed to Balan Thok.

"I don't get it," Vlad said.

"Right," I said, getting to my feet. "Well, you hold him here, and I'll go back to camp. I'll have the soldiers in by midnight. We'll beat the truth out of the old dog-butcher."

"Sit down, idiot," Vlad hissed. "Don't you remember how quick he was with that knife?"

It was true. At my movement a sinister gleam had entered the old man's eyes. I sat down quickly. "We can outrun him."

"It's getting dark," Vlad said. Just three words, but they brought a whole scene into mind: running blind through a maze of broken branches, with a drug-crazed, panting slasher at my heels. . . . I smiled winningly at the old shaman. He grinned back and again made his drinking gesture.

He tossed the leather cup to Balan Thok, who grabbed at it wildly and missed it by two meters. She picked it up and turned her back on us. We

heard her fumble with the lacing of her trousers. She squatted down. There was a hiss of liquid.

"Oh Jesus," I said. "Vlad, no."

"I've heard about this," Vlad said wonderingly. "The active ingredient passes on into the urine. Ten savages can get drunk on one mushroom. Pass it from man to man." He paused. "The kidneys absorb the impurities. It's supposed to be better for you that way. Not as poisonous."

"Can't we just eat the muk-a-moors?" I said, pointing at the rack. The old shaman glowered at me, and shook his head violently. Balan Thok sashayed toward me, hiding her face behind one sleeve. She put the warm cup into my hands and backed away, giggling.

I held the cup. A terrible fatalism washed over me. "Vladimir," I said. "I'm tired. My head hurts. I've been stung all over by mosquitoes and my pants are drenched with dog blood. I don't want to drink the poison piss of some savage—"

"It's for Science," Vlad said soberly.

"All my life," I began, "I wanted to work for the good of Society. My dear mother, God bless her memory . . . " I choked up. "If she could see what her dear son has come to . . . All those years of training, just for this! For this, Vlad?" I began trembling violently.

"Don't spill it!" Vlad said. Balan Thok stared at me, licking her lips. "I think she likes you," Vlad said.

For some weird reason these last words pushed me over the edge. I shoved the cup to my lips and drained the potion in one go. It sizzled down my gullet in a wave of hot nausea. Somehow I managed to keep from vomiting.

"How do you feel?" Vlad asked eagerly.

"My face is going numb." I stared at Balan Thok. Her eyes were full of hot fascination. I looked at her, willing her to come toward me. Nothing could be worse now. I had gone through the ultimate. I was ready, no, eager, to heap any degradation on myself. Maybe fornication with this degraded creature would raise me to some strange height.

"You're braver than I thought, Nikita," Vlad said. His voice rang with unnatural volume in my drugged ears. He pulled the cup from my numbed hands. "Considered objectively, this is really not so bad. A healthy young woman . . . sterile fluid . . . It's mere custom that makes it seem so repellent." He smiled in superior fashion, gripping the cup.

Suddenly the old Siberian shaman stood before him, guffawing crazily as he donated Vlad's share. A cheesy reek came from his dropped trousers. Vlad stared at me in horror. I fell on my side, laughing wildly. My bones turned to rubber.

The girl laughed like a xylophone, gesturing to me lewdly. Vlad was puking noisily. I got up to lurch toward the girl, but forgot to move my

feet and fell down. My head was inflamed with intense desire for her. She was turning round and round, singing in a high voice, holding a curved knife over her head. Somehow I tackled her and we fell headlong onto one of the Evenk sleeping bags, crushing it with a snapping of wood and lashings. I couldn't get out of my clothes. They were crawling over me like live things.

I paused to retch, not feeling much pain, just a torrent of sensation as the drug came up. Vlad and the old man were singing together loudly and at great length. I was thumping around vaguely on top of the girl, watching a louse crawl through one of her braids.

The old man came crawling up on all fours and stared into my face. "Thunder-god," he cackled, and tugged at my arm. He had pulled aside a large reindeer skin that covered the floor of the yurt. There was a deep hole, right there, right in the tent with us. Fighting the cramps in my stomach, I dragged myself toward it and peered in.

The space in the hole was strangely distorted; it was impossible to tell how deep it was. At its far end was a reticulated blue aurora that seemed to shift and flow in synchronization with my thoughts. For some reason I thought of Laika, and wished again that Jif Gurd hadn't killed her. The aurora pulsed at my thought, and there was a thump outside the tent—a thump followed by loud barking.

"Laika?" I said. My voice came out slow and drugged. Balan Thok had her arms around my neck and was licking my face. Dragging her after me, I crawled to the tent flap and peered out. There was a dog-shaped glob of light out there, barking as if its throat would burst.

I was scared, and I let Balan Thok pull me back into the tent. The full intoxication took over. Balan Thok undid my trousers and aroused me to madness. Vlad and the old man were lying at the edge of the thunder-god hole, staring down into the growing blue light and screaming to it. I threw Balan Thok down between them, and we began coupling savagely. Each spastic twitch of our bodies was a coded message, a message that Vlad and Jif Gurd's howls were reinforcing. Our filth and drug-madness became a sacred ritual, an Eleusinian mystery. Before too long, I could hear the voice of . . .

God? No . . . not God, and not the Devil. The voice was from the blue light in the pit. And it wasn't a voice. It was the same, somehow, as the aurora I'd seen last night. It liked dogs, and it liked me. Behind all the frenzy, I was very happy there, shuddering on Balan Thok. Time passed.

At some point there was more barking outside, and the old man screamed. I saw his face, underlit by the pulsing blue glow from the thunder-god hole. He bounded over me, waving his bloody knife overhead.

I heard a gunshot from the tent-door, and someone came crashing in. A person led by a bright blue dog. Captain Nina. The dog had helped

her find us. The dog ran over and snapped at me, forcing me away from Balan Thok and the hole. I got hold of Vlad's leg, and dragged him along with me. There was another shot, and then Nina was struggling hand to hand with the old man. Vlad staggered to his feet and tried to join the fight. But I got my arms around his thin chest and kept backing away.

Jif Gurd and Nina were near the hole's jumpy light now, and I could see that they both were wounded. She had shot the old man twice with a pistol, but he had his knife, and the strength of a maniac. The two of them wrestled hand-to-hand, clawing and screaming. Now Balan Thok rose to her knees and began slashing at Nina's legs with a short dagger. Nina's pistol pointed this way and that, constantly about to fire.

I dragged Vlad backwards, and we tore through the rotting leather of the yurt's wall. An aurora like last night's filled the sky. Now that I wasn't staring into the hole I could think a little bit. So many things swirled in my mind, but one fact above all stuck out. *We had found an alien artifact.* If only it was a rocket-drive, then all of the terrible mess in the yurt could be forgotten . . .

An incandescent blast lifted Vlad and me off the ground and threw us five meters. The entire yurt leapt into the sky. It was gone instantly, leaving a backward meteor trail of flaming orange in the sudden blackness of the sky. The sodden earth convulsed. From overhead, a leaping sonic boom pressed Vlad and me down into the muck where we had landed. I passed out.

Vlad shook me awake after many hours. The sun was still burning above the horizon. It was another of those dizzying, endless, timeless summer days. I tried to remember what had happened. When my first memories came I retched in pain.

Vlad had started a roaring campfire from dead, mummified branches. "Have some tea, Nikita," he said, handing me a tin army mug filled with hot, yellow liquid.

"No," I choked weakly. "No more."

"It's tea," Vlad said. I could tell his mind was running a mile a minute. "Take it easy. It's all over. We're alive, and we've found the star-drive. That blast last night!" His face hardened a bit. "Why didn't you let me try to save poor Nina?"

I coughed and wiped my bloodshot, aching eyes. I tried to fit my last twelve hallucinated hours into some coherent pattern. "The yurt," I croaked. "The star-drive shot it into the sky? That really happened?"

"Nina shot the old man. She burst in with a kind of ghost-dog? She burst in and the old man rushed her with his knife. When the drive went off, it threw all of them into the sky. Nina, the two Evenks, even the two reindeer and the dog. We were lucky—we were right at the edge of the ellipse."

"I saved you, Vlad. There was no way to save Nina, too. Please don't blame me." I needed his forgiveness because I felt guilty. I had a strange feeling that it had been my *wish of finding a rocket drive* that had made the artifact send out the fatal blast.

Vlad sighed and scratched his ribs. "Poor Ninotchka. Imagine how it must have looked. Us rolling around screaming in delirium and you having filthy sex with that Evenk girl . . . " He frowned sadly. "Not what you expect from Soviet scientists."

I sat up to look at the elliptical blast area where the yurt had been. Nothing was left of it but a few sticks and thongs and bits of hide. The rest was a muddy crater. "My God, Vlad."

"It's extremely powerful," Vlad said moodily. "It wants to help us Earthlings, I know it does. It saved Laika, remember?"

"It saved her twice. Did you see the blue dog last night?"

Vlad frowned impatiently. "I saw lots of things last night, Nikita, but now those things are gone."

"The drive is gone?"

"Oh no," Vlad said. "I dug it out of the crater this morning."

He gestured at our booty. It was sitting in the mud behind him. It was caked with dirt and weird, powdery rust. It looked like an old tractor crankcase.

"Is that it?" I said doubtfully.

"It looked better this morning," Vlad said. "It was made of something like jade and was shaped like a vacuum cleaner. With fins. But if you take your eyes off it, it changes."

"No. Really?"

Vlad said, "It's looked shabby ever since you woke up. It's picking up on your shame. That was really pretty horrible last night, Nikita; I'd never thought that you . . ."

I poked him sharply to shut him up. We looked at each other for a minute, and then I took a deep breath. "The main thing is that we've got it, Vlad. This is a great day in history."

"Yeah," agreed Vlad, finally smiling. The drive looked shinier now. "Help me rig up a sling for it."

With great care, as much for our pounding heads as for the Artifact itself, we bundled it up in Vlad's coat and slung it from a long, crooked shoulder-pole.

My head was still swimming. The mosquitoes were a nightmare. Vlad and I climbed up and over the splintery, denuded trunks of dead pines, stopping often to wheeze on the damp, metallic air. The sky was very clear and blue, the color of Lake Baikal. Sometimes, when Vlad's head and shoulders were outlined against the sky, I seemed to see a faint Kirlian shimmer traveling up the shoulder-pole to dance on his skin.

Panting with exhaustion, we stopped and gulped down more rations. Both of us had the trots. It was a small wonder. We built a good sooty fire to keep the bugs off for a while. We threw in some smoky green boughs from those nasty-looking young pines. Vlad could not resist the urge to look at it again.

We unwrapped it. Vlad stared at it fondly. "After this, it will belong to all mankind," he said. "But for now it's ours!"

It had changed again. Now it had handles. They looked good and solid, less rusty than the rest. We lugged it by the handles until we got within earshot of the base-camp.

The soldiers heard our yells and three of them came to help us.

They told us about Nina on our way back. All day she had paced and fidgeted, worrying about Vlad and trying to talk the soldiers into a rescue mission. Finally, despite their good advice, she had set off after us alone.

The aurora fireworks during the night had terrified the Uzbeks. They were astonished to see that we had not only survived, but triumphed.

But we had to tell them that Nina was gone.

Sergeant Mukhamed produced some 200-proof ethanol from the de-icing tank of his *byutor*. Weeping unashamedly, we toasted the memory of our lost comrade, State Security Captain Nina Igorovna Bogulyubova. After that we had another round, and I made a short but dignified speech about those who fall while storming the cosmos. Yes, dear Captain Nina was gone; but thanks to her sacrifice, we, her comrades, had achieved an unprecedented victory. She would never be forgotten. Vlad and I would see to that.

We had another toast for our cosmic triumph. Then another for the final victory. Then we were out of drinks.

The Uzbeks hadn't been idle while Vlad and I had been gone. They didn't have live ammo, but a small bear had come snuffling round the camp the day before and they'd managed to run over him with one of the *byutors*. The air reeked of roast bear meat and dripping fat. Vlad and I had a good big rack of ribs, each. The ribs in my chunk were pretty broken up, but it was still tasty. For the first time, I felt like a real hero. Eating bear meat in Siberia. It was a heck of a thing.

Now that we were back to the *byutors,* our problems were behind us and we could look forward to a real "rain of gold." Medals, and plenty of them. Big *dachas* on the Black Sea, and maybe even lecture tours in the West, where we could buy jazz records. All the Red Army boys figured they had big promotions coming.

We broke camp and loaded the carriers. Vlad wouldn't join in the soldiers' joking and kidding. He was still mooning about Nina. I felt sorry for Vlad. I'd never liked Nina much, and I'd been against her coming from the first. The wilderness was no place for females, and it

was no wonder she'd come to grief. But I didn't point this out to Vlad. It would only have made him feel worse. Besides, Nina's heroic sacrifice had given a new level of deep moral meaning to our effort.

We packed the drive away in the first *byutor* where Vlad and I could keep an eye on it. Every time we stopped to refuel, or study the maps, Vlad would open its wrappings and have a peek. I teased him about it. "What's the matter, comrade? Want us to chain it to your leg?"

Vlad was running his hand over and over the drive's rusty surface. Beneath his polishing strokes, a faint gleam of silver had appeared. He frowned mightily. "Nikita, we must never forget that this is no soulless machine. I'm convinced it takes its form from what we make of it. It's a frozen idea—that's its true essence. And if you and I forget it, or look aside, it might just vanish."

I tried to laugh him out of it, but Vlad was serious. He slept next to it both nights, until we reached the rail spur.

We followed the line to the station. Vlad telegraphed full particulars to Moscow and I sent along a proud report to Higher Circles.

We waited impatiently for four days. Finally a train arrived. It contained some rocket-drive technicians from the Baikonur Cosmodrome, and two dozen uniformed KGB. Vlad and I were arrested. The Red Army boys were taken in custody by some Red Army brass. Even the Latvian who ran the station was arrested.

We were kept incommunicado in a bunk car. Vlad remained cheerful, though. "This is nothing," he said, drawing on his old jailbird's lore. "When they really mean business, they take your shoelaces. These KGB are just protective custody. After all, you and I have the greatest secret in cosmic history!" And we were treated well—we had red caviar, Crimean champagne, Kamchatkan king crab, blinis with sour cream.

The drive had been loaded aboard a flatcar and swathed down under many layers of canvas. The train pulled to a halt several times. The windowshades on our car were kept lowered, but whenever we stopped, Vlad peeked out. He claimed the rocket specialists were adjusting the load.

After the second day of travel I had grave doubts about our whole situation. No one had interrogated us; for cosmic heroes, we were being badly neglected. I even had to beg ignominiously for DDT to kill the crab-lice I had caught from Balan Thok. Compared to the mundane boredom of our train confinement, our glorious adventure began to seem absurd. How would we explain our strange decisions—how would we explain what had happened to Nina? Our confusion would surely make it look like we were hiding something.

Instead of returning in triumph to Kaliningrad, our train headed south.

We were bound for Baikonur Cosmodrome, where the rockets are launched. Actually, Baikonur is just the "security name" for the installation. The real town of Baikonur is five hundred kilometers away. The true launch site is near the village of Tyuratam. And Tyuratam, worse luck, is even more of a hick town than Baikonur.

This cheerless place lies on a high plain north of Afghanistan and east of the Aral Sea. It was dry and hot when we got there, with a ceaseless irritating wind. As they marched us out of the train, we saw engineers unloading the drive. With derricks.

Over the course of the trip, as the government rocket experts fiddled with it, the drive had expanded to fit their preconceptions. It had grown to the size of a whole flatcar. It had become a maze of crooked hydraulics, with great ridged black blast-nozzles. It was even bound together with those ridiculous hoops.

Vlad and I were hustled into our new quarters: a decontamination suite, built in anticipation of the launch of our first cosmonauts. It was not bad for a jail. We probably would have gotten something worse, except that Vlad's head sometimes oozed a faint but definite blue glow, and that made them cautious.

Our food came through sterilized slots in the wall. The door was like a bank vault. We were interrogated through windows of bulletproof glass via speakers and microphones.

We soon discovered that our space drive had been classified at the Very Highest Circles. It was not to be publicly referred to as an alien artifact. Officially, our space-drive was a secret new design from Kaliningrad. Even the scientists already working on it at Tyuratam had been told this, and apparently believed it.

The Higher Circles expected our drive to work miracles, but they were to be miracles of national Soviet science. No one was to know of our contact with cosmic powers.

Vlad and I became part of a precedence struggle in Higher Circles. Red Army defense radars had spotted the launching of the yurt, and they wanted to grill us. Khrushchev's new Rocket Defense Forces also wanted us. So did the Kaliningrad KGB. And of course the Tyuratam technicians had a claim on us; they were planning to use our drive for a spectacular propaganda feat.

We ended up in the hands of KGB's Paranormal Research Corps.

Weeks grew into months as the state psychics grilled us. They held up Zener cards from behind the glass and demanded that we guess circle, star, or cross. They gave us racks of radish seedlings through the food slots, and wanted us to speak nicely to half of them, and scold the other half.

They wanted us to influence the roll of dice, and to make it interesting

they forced us to gamble for our vodka and cigarette rations. Naturally we blew the lot and were left with nothing to smoke.

We had no result from these investigations, except that Vlad once extruded a tiny bit of pale blue ectoplasm, and I turned out to be pretty good at reading colors, while blindfolded, with my fingertips. (I peeked down the side of my nose.)

One of our interrogators was a scrawny hardline Stalinist named Yezhov. He'd been a student of the biologist Lysenko and was convinced that Vlad and I could turn wheat into barley by forced evolution. Vlad finally blew up at this. "You charlatans!" he screamed into the microphone. "Not one of you has even read Tsiolkovsky! How can I speak to you? Where is the Chief Designer? I demand to be taken to Comrade Sergei Korolyov! He'd understand this!"

"You won't get out of it that way," Yezhov yapped, angrily shaking his vial of wheat seeds. "Your Chief Designer has had a heart attack. He's recovering in his *dacha,* and Khrushchev himself has ordered that he not be disturbed. Besides, do you think we're stupid enough to let people with alien powers into the heart of Moscow?"

"So that's it!" I shouted, wounded to the core at the thought of my beloved Moscow. "You pimp! We've been holding out on you, that's all!" I jabbed my hand dramatically at him from behind the glass. "Tonight, when you're sleeping, my psychic aura will creep into your bed and squeeze your brain, like this!" I made a fist. Yezhov fled in terror.

Silence fell. "You shouldn't have done that," Vlad observed.

I slumped into one of our futuristic aluminum chairs. "I couldn't help it," I muttered. "Vlad, the truth's out. It's permanent exile for us. We'll never see Moscow again." Tears filled my eyes.

Vlad patted my shoulder sympathetically. "It was a brave gesture, Nikita. I'm proud to call you friend."

"You're the brave one, Vlad."

"But without you at my side, Nikita . . . You know, I'd have never dared to go into the valley alone. And if you hadn't drunk that piss first, well, I certainly would never have—"

"That's all in the past now, Vlad." My cheeks burned and I began sobbing. "I should have ignored you when you were sitting under that piano at Lyuda's. I should have left you in peace with your beatnik friends. Vlad, can you ever forgive me?"

"It's nothing," Vlad said nobly, thumping my back. "We've all been used, even poor Chief Korolyov. They've worked him to a frazzle. Even in camp he used to complain about his heart." Vlad shook his fist. "Those fools. We bring them a magnificent drive from Tunguska, and they convince themselves it's a reaction engine from Kaliningrad."

I burned with indignation. "That's right. It was our discovery! We're

heroes, but they treat us like enemies of the State! It's so unfair, so uncommunist!" My voice rose. "If we're enemies of the State, then what are we doing in here? Real enemies of the State live in Paris, with silk suits and a girl on each arm! And plenty of capitalist dollars in a secret Swiss bank!"

Vlad was philosophical. "You can have all that. You know what I wanted? To see men on the moon. I just wanted to see men reach the moon, and know I'd seen a great leap for all humanity!"

I wiped away tears. "You're a dreamer, Vlad. The Infinite is just a propaganda game. We'll never see daylight again."

"Don't give up hope," Vlad said stubbornly. "At least we're not clearing trees in some labor camp where it's forty below. Sooner or later they'll launch some cosmonauts, and then they'll need this place for real. They'll have to spring us then!"

We didn't hear from the psychic corps again. We still got regular meals, and the occasional science magazine, reduced to tatters by some idiot censor who had decided Vlad and I were security risks. Once we even got a charity package from, of all people, Lyuda, who sent Vlad two cartons of Kents. We made a little ceremony of smoking one each, every day.

Our glass decontamination booth fronted on an empty auditorium for journalists and debriefing teams. Too bad none of them ever showed up. Every third day three cleaning women with mops and buckets scoured the auditorium floor. They always ignored us. Vlad and I used to speculate feverishly about their underwear.

The psychics had given up, and no one else seemed interested. Somehow we'd been lost in the files. We had been covered up so thoroughly that we no longer existed. We were the ghosts' ghosts, and the secrets' secrets, the best-hidden people in the world. We seemed to have popped loose from time and space, sleeping later and later each day, until finally we lost a day completely and could never keep track again.

We were down to our last pack of Kents when we had an unexpected visit.

It was a Red Army general with two brass-hat flunkies. We spotted him coming down the aisle from the auditorium's big double doors, and we hustled on our best shirts. The general was a harried-looking, bald guy in his fifties. He turned on our speakers and looked down at his clipboard. "Comrades Zipkin and Globov?"

"Let me handle this, Vlad," I hissed quickly. I leaned into my mike. "Yes, Comrade General?"

"My name's Nedelin. I'm in charge of the launch."

"What launch?" Vlad blurted.

"The Mars probe, of course." Nedelin frowned. "According to this, you were involved in the engine's design and construction?"

"Oh yes," I said. "Thoroughly."

Nedelin turned a page. "A special project with the Chief Designer." He spoke with respect. "I'm no scientist, comrades, and I know you have important work in there. But could you spare time from your labors to lend us a hand? We could use your expertise."

Vlad began to babble. "Oh, let us watch the launch! You can shoot us later, if you want! But let us see it, for God's sake—"

Luckily I had clamped my hand over Vlad's mike. I spoke quickly. "We're at your service, General. Never mind Professor Zipkin, he's a bit distraught."

One of the flunkies wheeled open our bank vault door. His nose wrinkled at the sudden reek of months of our airtight stench, but he said nothing. Vlad and I accompanied Nedelin through the building. I could barely hold back from skipping and leaping, and Vlad's knees trembled so badly I was afraid he would faint.

"I wouldn't have disturbed your secret project," the general informed us, "but Comrade Khrushchev delivers a speech at the United Nations tomorrow. He plans to announce that the Soviet Union has launched a probe to Mars. This launch must succeed today at all costs." We walked through steel double-doors into the Tyuratam sunshine. Dust and grass had never smelled so good.

We climbed into Nedelin's open-top field car. "You understand the stakes involved," Nedelin said, sweating despite the crisp October breeze. "There is a new American president, this Cuban situation . . . our success is crucial!"

We drove off rapidly across the bleak concrete expanse of the rocket-field. Nedelin shouted at us from the front seat. "Intelligence says the Americans are redoubling their space efforts. We must do something unprecedented, something to crush their morale! Something years ahead of its time! The first spacecraft sent to another planet!"

Wind poured through our long hair, our patchy beards. "A new American president," Vlad muttered. "Big deal." As I soaked my lungs with fresh air I realized how much Vlad and I stank. We looked and smelled like derelicts. Nedelin was obviously desperate.

We pulled up outside the sloped, fire-scorched wall of a concrete launch bunker. The Mars rocket towered on its pad, surrounded by four twenty-story hinged gantries. Wisps of cloud poured down from the rocket's liquid oxygen ports. Dozens of technicians in white coats and hard-hats clambered on the skeletal gantry-ladders, or shouted through bullhorns around the rocket's huge base.

"Well, comrades?" Nedelin said. "As you can see, we have our best

people at it. The countdown went smoothly. We called for ignition. And nothing. Nothing at all!" He pulled off his brimmed cap and wiped his balding scalp. "We have a very narrow launch window! Within a matter of hours we will have lost our best parameters. Not to mention Comrade Khrushchev's speech!"

Vlad sniffed the air. "Comrade General. Have you fueled this craft with liquid paraffin?"

"Naturally!"

Vlad's voice sank. "These people are working on a rocket which misfired. And you haven't drained the fuel?"

Nedelin drew himself up stiffly. "That would take hours! I understand the risk! I'm not asking these people to face any danger I wouldn't face myself!"

"You pompous ass!" Vlad screeched. "That's no Earthling rocket! It only looks like one because you expect it to! It's not supposed to have fuel!"

Nedelin stared in amazement. "What?"

"That's why it didn't take off!" Vlad raved. "It didn't want to kill us all! That drive is from outer space! You've turned it into a gigantic firebomb!"

"You've gone mad! Comrade, get hold of yourself!" Nedelin shouted. We were all on the edge of panic.

"This blockhead's useless," Vlad snarled, grabbing my arm. "We've got to get those people out of there, Nikita! It could take off any second —everyone expected it to!"

We ran for the rocket, shouting wildly, yelling anything that came into our heads. We had to get the technicians away. The Tunguska device had never known its own strength—it didn't know how frail we were. I stumbled and looked over my shoulder. Nedelin's flunkies were just a dozen steps behind us.

The ground crew saw us coming. They cried out in alarm. Panic spread like lightning.

It wouldn't have happened if we hadn't all been Russians. A gloomy and sensitive people are always ready to believe the worst. And the worst in this case was obvious: total disaster from a late ignition.

They fled like maniacs, but they couldn't escape their expectations. Pale streamers of flame gushed from the engines. More streamers arced from the rocket's peak, hot spikes of auroral fire. The gantries shattered like matchsticks, filling the air above us with wheeling black shrapnel. Vlad stumbled to the ground. Somewhere ahead of us I could hear barking.

I hauled Vlad to his feet. "Follow the dog!" I bellowed over the roar. "Into the focus of the ellipse, where it's stable!"

Vlad stumbled after me, jabbering with rage. "If only the Americans had gotten the drive! They would have put men on the moon!"

We dashed through a blinding rain of paraffin. The barking grew louder, and now I could see the eager dog of blue light, showing us the way. The rocket was dissolving above us. The blast-seared concrete under our feet pitched and buckled like aspic. Before us the rockets' great nozzles dissolved into flaming webs of spectral whiteness.

Behind us, around us, the paraffin caught in a great flaming sea of deadly heat. I felt my flesh searing in the last instant: the instant when the inferno's shock wave caught us up like straws and flung us into the core of white light.

I saw nothing but white for the longest time, seeing nothing, touching nothing. I floated in the timeless void. All the panic, the terror of the event, evaporated from me. All thoughts stopped. It was like death. Maybe it was a kind of death, I still don't know.

And then, somehow, that perfect silence and oneness broke into pieces again. It shattered into millions of grainy atoms, a soundless crawling blizzard. Like phantom, hissing snow.

I stared into the snow, seeing it swirling, resolving into something new, with perfect ease, as if it were following the shape of my own dreams . . . A beautiful sheen, a white blur—

The white blur of reflections on glass. I was standing in front of a glass window. A department-store window. There were televisions behind the glass, the biggest televisions I had ever seen.

Vlad was standing next to me. A woman was holding my arm, a pretty beatnik girl with a flowered silk blouse and a scandalous short skirt. She was staring raptly at the televisions. A crowd of well-dressed people filled the pavement around and behind us.

I should have fainted then. But I felt fine. I'd just had a good lunch and my mouth tasted of a fine cigar. I blurted something in confusion, and the girl with Vlad said "Shhhh!" and suddenly everyone was cheering.

Vlad grabbed me in a bear hug. I noticed then how fat we were. I don't know why, but it just struck me. Our suits were so well-cut that they'd disguised it. "We've done it!" Vlad bellowed. "The moon!"

All around us people were chattering wildly. In French.

We were in Paris. And Americans were on the moon.

Vlad and I had lost nine years in a moment. Nine years in limbo, as the Artifact flung us through time and space to that moment Vlad had longed so much to see. We were knit back into the world with many

convincing details: paunches from years of decadent Western living, and apartments in the émigré quarter full of fine suits and well-worn shoes, and even some pop-science articles Vlad had written for the émigré magazines. And of course, our Swiss bank accounts.

It was a disappointment to see the Americans steal our glory. But of course, the Americans would never have made it if we Russians hadn't shown them the way and supplied the vision. The Artifact was very generous to the Americans. If it weren't for the Nedelin Disaster, which killed so many of our best technicians, we would surely have won.

The West still believes that the Nedelin Disaster of October 1960 was caused by the explosion of a conventional rocket. They did not even learn of the disaster until years after the fact. Even now this terrible catastrophe is little known. The Higher Circles forged false statements of death for all concerned: heart attacks, air crashes, and the like. Years passed before the coincidences of so many deaths became obvious.

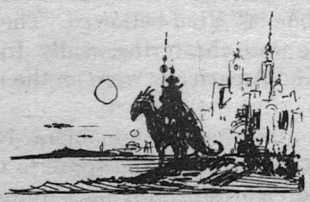
Sometimes I wonder if even the Higher Circles know the real truth. It's easy to imagine every document about Vlad and myself vanishing into the KGB shredders as soon as the disaster news spread. Where there is no history, there can be no blame. It's an old principle.

Now the Cosmos is stormed every day, but the rockets are nothing more than bread trucks. This is not surprising from Americans, who will always try their best to turn the stars into dollars. But where is our memorial? We had the great dream of Tsiolkovsky right there in our hands. Vlad and I found it ourselves and brought it back from Siberia. We practically threw the Infinite right there at their feet! If only the Higher Circles hadn't been so hasty, things would have been different.

Vlad has always told me not to say anything, now that we're safe and rich and officially dead, but it's just not fair. We deserve our historian, and what's a historian but a fancy kind of snitch? So I wrote this all down while Vlad wasn't looking.

I couldn't help it—I just had to inform somebody. No one has ever known how Vlad Zipkin and I stormed the cosmos, except ourselves and the Higher Circles . . . and maybe some American top brass.

And Laika? Yes, the Artifact brought her to Paris, too. She still lives with us—which proves that all of this is true. ●



ON BOOKS

by Baird Searles

The Postman
By David Brin
Bantam, $14.95

Nothing succeeds like success; David Brin is on a roll, and his latest novel, *The Postman*, will probably be as popular as the phenomenal *Startide Rising* (Hugo and Nebula award winner) and the novel which followed, *The Practice Effect*.

Like *The Practice Effect*, the new novel bears no resemblance to *Startide*. However, this one does ride the wave of the current fashion in after-the-bomb stories. Unlike most of them, however, its raison d'etre doesn't seem to be the graphic depiction of anarchy, rape, and violence, though it has its share of action sequences. Brin, in fact, is actually pro-civilization and pro-order, and the story is something of a hymn to the restoration of sanity.

The opening is splendid. Sixteen years after a (relatively) limited war, which resulted in a three-year winter and the collapse of American culture into tiny hamlets struggling for existence, a man named Gordon arrives in Oregon. He has come there from the Midwest in hopes of finding some remnants of organized civilization. He had been a university student when the war occurred; he has made his way by giving one-man versions of Shakespearian plays to whatever appreciative audiences he could find.

He is cleaned out of all his possessions by a band of toughs as soon as he reaches Oregon and saved from death by exposure only by finding a rural mailman's body and rusting jeep. He commandeers the mailman's uniform, and the mail sacks, and more or less as a ploy, passes himself off as the representative of the still-existent government in the East at the next community he reaches. This fictional establishment is contacting the Western states through the revival of the Postal Service. His ruse awakens hope and encourages the belief in the possibility of remaking civilization in those he encounters, and, as he sees what is happening, he finds himself stuck with the role.

It's a nice idea; Brin gives us almost a replay of folklore, a sort of post-holocaust Johnny Appleseed or Johnny Mailbag, as it were, re-

planting the seeds of culture by simply re-establishing the possibility of communication.

The situation gets closer to the ordinary midway through the book; Gordon finds a community in Corvallis more advanced than the rest, supposedly due to the survival of an advanced model of computer. The area is then invaded by the heavies, organized Survivalists from the south who have established a sort of feudal, might-makes-right band of order. Then things get really complicated with the revelation that just before the war, a new sort of physically-augmented human had been developed, and there are a few of them left, including the leaders of the Survivalists.

Will Gordon and his jerry-built coalition, based on the mail routes of a fictional U.S. Postal Service, be able to hold them off?

I wish the satisfying air of realistically told fable had been maintained throughout; it gets lost somewhere in the fairly standard manueverings of the latter part of the story.

And there's a subplot involving some strong ideas about feminism; strong but peculiarly ambiguous, and it may set some female teeth on edge.

But there's no denying that it's a relief to get a life-among-the-ruins novel with an implicit faith in the human spirit, and the charm (that's the only word, despite all the shoot-em-up sequences) of folklore.

Artifact
By Gregory Benford
Tor, $16.95

Fiction. Science. Science fiction.

That's more or less the pattern of Gregory Benford's latest novel, *Artifact*. It divides into chunks that are certainly linked by characters and plot, but in which the emphasis is rather unevenly weighted.

The unlikely artifact found in an ancient tomb is always a grabber, and explaining it is the challenge to the writer on which hangs the success of the story. Here it's a stone cube in a Mycenean beehive tomb in Greece, which means it dates from way before the Classical Age. It's hidden behind a sort of curtainlike wall, and found only as the archaeological expedition is about to shut down the dig. The time is the near future, and a military coup, highly anti-American in nature, is in progress.

American archaeologist Claire Anderson is in charge, in co-operation with a Greek, a Colonel Kontos, who is active in the takeover. It is because of him that the dig is closing early, and he is being obnoxious in other ways, clearly meaning to use the find as an anti-American propaganda effort.

So the first third of the book is essentially a thriller; Claire dragoons an academic colleague, John Bishop, a mathematician, into helping her. As revolution breaks out (not to mention a war with Turkey), they are chased around the Greek Isles (including Santorini, the one that blew up with a bang

that outdid Krakatoa) by Kontos and his henchmen, and end up stealing the cube almost more by force of circumstance than by intent.

This is all great fun if you're into James Bondage, but there's only the barest hint that's there's anything odd about the cube. A two-page prologue at the Mycenean funeral whets the curiosity with hints of the artifact's destructive potential, and that it was regarded as a demon or a god.

Meanwhile, back in the lab—at good old Boston U., with some help from MIT—the artifact causes more and more of a stir. There is a lengthy and very complex section in which its secret is partially unraveled, and which should delight the high tech crowd that's been demanding more S in its SF. To be brief, the thing in the cube is a singularity, a sort of portable, pint-sized quark. The narrative gets slowed down here, though there's some attempt at keeping things going with some academic infighting occasioned by the complaints of Kontos and the new Greek government, and the refusal of Claire's superior to believe that the artifactnapping was justifiable larceny.

But finally, things pick up and get going. Kontos and some henchpersons come to Boston and repossess the artifact by force, and in the process of tracking them, it's discovered that there are *two* singularities; the other one was left in Greece, and since the pair are attracted to each other by a force roughly a tenth that of gravity, the twin is probably at present working its way through the Earth's crust under Europe. Needless to say, this knowledge as well as the potential of the thing(s) (*were* they responsible for the destruction of Santorini?) sets loose a string of events that leads to a finale that is, at the very least, quite a display of pyrotechnics.

So when *Artifact* finally gets its act together, it's a grand SF thriller, and a word might be said, also, for the intelligent and sometimes funny dialogue, which gives John and Claire an edge of character above the usual in the field. Nevertheless, it's a mixed bag—or, to be accurate, not quite well mixed enough. Benford hasn't yet quite mastered the juggling act that makes for the best science fiction, that is, keeping story, action, and science all going at the same time.

The Dream Years

By Lisa Goldstein

Bantam, $14.95

Fantasy and science fiction writers may know what they like, but they don't know much about art. The story in either field that deals intensively with the arts—painting, music, dance, theater, poetry—is a rare one, not often displaying the kind of knowledge of hard science, sociolology, technology, history, or myth that is the usual area of expertise. So when a fantasy comes along that concerns a major period

in art history, it's got to be given points for originality.

Lisa Goldstein took everyone by surprise by winning an American Book Award for her first novel, *The Red Magician*. Her second novel is *The Dream Years* and it has to do with the birth of the Surrealistic movement in Paris in the 1920s. (This was not just a type of painting—it was a philosophy that applied to writing, theater, and living as well.) Here's the founding crowd—dramatist Antonine Artaud, painter Yves Tanguy, poet Paul Eluard, and particularly writer/ theoretician André Breton—hanging out at the Café Cyrano and scaring the public with their antics (relatively harmless ones by today's standards—swinging from chandeliers and the like).

The novel's hero is one Robert St. Onge, friend of Breton's and involved in the movement almost for lack of anything better to do. He buys a mysterious record in a flea market; in the sleeve is a photograph of a woman. The record doesn't play (it's an LP), and the photograph is colored—not tinted, colored. He sees the woman and follows her, and with a zip and a blur, he's in the Paris of 1968, smack dab in the middle of the student riots (which made the U.S. student riots look like corporate board meetings in comparison).

Seems that the revolting students had decided they needed the revolutionary spirit of the Surrealists, and had opened the time passages to go back and catch a few. (What time passages? Only the most perfunctory of explanations is given.) Robert shuttles back and forth a few times, and eventually finds himself, along with a selection of revolutionary spirits from 1925 and 1968, fighting the same battle in the 21st century, using dream images and the subconscious as weapons.

The trouble is that nothing here really works. Surrealism is (simplistically) the juxtaposition of real objects that just don't belong together. Nineteen twenty-four and 1968 certainly don't belong together, and Goldstein just doesn't make either of them real. One gets little feeling of Paris in the '20s and less of the chaos of 1968. Her Surrealists come across as nattering, self-important sophomores, which they undoubtedly were, but they were also a good deal more. The finale is indeed surrealistic, in the sense that rationality disappears entirely, but this is not likely to endear it to the lover of "realistic" fantasy, to whom the surreal is just nonsense.

These flaws would matter less if there were other values, such as masterly writing, but the whole thing is remarkably tepid. And if there was one thing the Surrealists weren't, it's tepid.

Brother Jonathan
By Crawford Kilian
Ace, $2.75 (paper)

When corporations try an unfriendly takeover in Crawford Kil-

ian's *Brother Jonathan* it's not just a matter of buying up shares; they play rough in this future where companies have replaced nations. In Flanders Corp.'s attempt to absorb Intertel, they use bombs, security guards, and kidnapping, as well as a new "secret weapon," a form of assault program which gets into Intertel's computer and raises all sorts of mischief.

Much of this is to sabotage Intertel's latest hot project, the revelation of which would probably deter its stockholders from selling out. This is a sort of organic computer, which, when implanted in brain-damaged subjects, restores full control of the body. This means it's the cure for stroke victims and spastics, but the implications are far greater. "Polydendronic" computers can be implanted in animals making it possible for them to do tasks beyond their usual capabilities, and these implants enable ordinary citizens to interface directly with computer systems and info nets.

Flanders Corp.'s main target is the experimental subjects. The new technology has been used on a dog and two chimpanzees initially, and then on five brain-damaged children, all of whom are disposable because they are nonstats, people with no status because they are neither corporate employees nor shareholders. Their astonishing recoveries will be widely shown on television, and will thus abort the takeover. What neither corporation realizes is that the computer implants have also created a link between the eight subjects, and that they are not only "recovered" but have formed a sort of gestalt personality among themselves.

And then when the assault programs are turned loose on Intertel's computer, its four "turings" (programmed personalities) take refuge in the net also.

These complicated "interior" events are happening as, exteriorly, the three animals and five kids, having escaped from Intertel, are being pursued all over the map.

Kilian has used nothing particularly new here, but it's all put together with great pizzazz; the corporate state background is particularly well realized, and the story is paced with breakneck speed. That's the major drawback, in fact; it's a very short novel, and the elements are all so good that one regrets Kilian didn't devote a bit more time to all of them. He could well have come up with a dazzling longer novel instead of a diverting shorter one.

Downtime
By Cynthia Felice
Bluejay Books, $15.95

When you think about it, writing SF is something like photography. The aim in both is to get your background *and* your foreground clear. The background in SF, of course, is often your created world/universe; the foreground is the plot and characters you set against this. The idea is to have both in focus so that they set one another off.

Both foreground and background in Cynthia Felice's comparatively short novel, *Downtime*, are a little fuzzy, and that could be because she tried to cram too much into the picture. The background is a complicated universe of a Council of (many) Worlds, guided by a Decemvirate, who figure probabilities in crises and push, pull, or threaten the Council into the right path.

The carrot on the stick for everyone in this future is "elixir," a serum which arrests aging. There is not enough to go around, since its production is difficult. And a war is brewing between the older, settled worlds that produce elixir, and the "new worlds," whose population is growing faster than the supply.

In the foreground is a love story—sort of. Years ago Calla and Jason were lovers. How many years ago depends on the effect of space travel—it's been thirty for Calla, ten for Jason. He had been six years older than she when they were together (and if they each had three apples fifteen miles apart, how many . . . no, let's not get into that).

They are reunited on Mutare, where Jason is ranger-governor; the rangers run Mutare, which is inhabited only by a sparse population of miners. An elixir garden has been officially, but more or less surreptitiously established there. Calla, now commander of the Praetorian Guard which serves the Decemvirate, has been sent to Mutare by those of the ten who suspect that there is a traitor in their midst.

Felice labors at bringing the emotional complications of the love affair into focus, but they just don't become very real. It's a difficult task at best, and an interesting problem for a novelist. It might have worked if the novel had had time to concentrate on the ramifications of the aging lovers' reactions to each other, but other things keep being pushed into the picture. There's the animal life of Mutare, the danae, one of whose organs is priceless; it is that which is "mined" on the planet. There's the miner's daughter, young and beautiful and telepathic, who can communicate with the danae, and who might solve the problem for Jason of why some of them seem intelligent and some don't; are they a sentient species? And there's endless intrigue and skullduggery revolving around the elixir and the Decemvirate, which eventually erupts into a war that involves everyone. It solves Jason and Calla's problem in a not unexpected way, though there's a final gimmick with the danae that's pretty contrived.

Like *Brother Jonathan*, *Downtime* should have been a good deal longer to cope with its ingredients. But in this case, one isn't all that sure that one wants more.

Sailing To Byzantium
By Robert Silverberg
Underwood-Miller, $12.95

And, speaking of length, there's Robert Silverberg's *Sailing To Byzantium* which is barely a novella

in length; given this, one wonders why it has become a hard-cover book. However, one doesn't buy books by the pound, but for the content, and in this case, at least, the content is just right for the length. It's a beautifully crafted short work.

It opens on a balcony in Ptolemaic Alexandria. But it's not an historical novel; there are centaurs and sphinxes wandering about. Ah, but it's not a fantasy either. This is an Alexandria reconstructed in the far future, with a good deal of historical accuracy, and some additional amusing touches (like centaurs and sphinxes). It is one of only five cities in the world; the others currently are Timbuctoo, Chang-An, Asgard, and New Chicago, but they change. Timbuctoo is slated to close; Mahenjo-daro will be opening soon.

Through these Williamsburgs of the future wander the "citizens" of the future, eternally at play. (The myriad inhabitants of the cities are manufactured "temporaries.") With them wanders Charles Phillips, a man of the twentieth century, unsure as to how or why he is there. He is the lover of one of the women, Gioia, who seems different from the rest of the eternally youthful, eternally playful people of this time. *He* is certainly different; he is constantly questioned about the odd times from which he comes. He is called a "visitor" by the citizens, but he begins to wonder, particularly when he meets another visitor in Mahenjo-daro. This is an Elizabethan seaman who thinks he's in the Indies and that the citizens are the Portuguese of his time; the seaman is unable to comprehend the idea of time travel.

How Gioia and Charles define and resolve their differences is the substance of the tale, and that will not be told here, since there are a couple of surprises along the way. Silverberg presents it in his usual passionless style, which works well against the lushness of the background future he has created.

Shoptalk . . . Several times in the past year this column has greeted joyously the republication of books by Theodore Sturgeon. Now we must announce sadly, very sadly, Sturgeon's death. By the time this sees print, it will be old news, but no one concerned with the literature of science fiction and fantasy can let the event go unremarked. Ted Sturgeon was one of that brilliant constellation of writers discovered and nurtured by John W. Campbell in *Astounding* and *Unknown Worlds;* his voice was arguably the most original among them, combining fantasy, scientific knowledge, and a love of, and interest in, people that was new to science fiction. Over the past 45 years, a new work by Sturgeon, no matter how brief, was a cause for rejoicing. Now that particular cause for rejoicing is gone. It might be noted, also, that Ted was a very, very nice man; the kindly humanism of his writing reflected accurately the kindly humanism of his approach to life and other people.

All those who have been bewitched, bothered and/or bewildered by A.E.Van Vogt's two Null-A novels (*The World of Null-A* and *The Pawns of Null-A*, published initially in *Astounding* during its really convoluted period, the mid-1940s), will be interested to know that there is a *new* Null-A novel to further complicate their lives. It is *Null-A Three* (DAW, $3.50, paper). For the uninitiate, Null-A is short for non-Aristotelian logic, and should really be written as a capital A with a line over it, which my poor, put-upon word processor can't quite manage.

Recent publications from those associated with this magazine include:

Robots: Machines In Man's Image by Isaac Asimov and Karen Frenkel, Harmony Books, $19.95.

Books to be considered for review in this column should be submitted to Baird Searles, % The Science Fiction Shop, 56 8th Ave., New York, N.Y. 10014. ●

NEXT ISSUE

Our January issue will feature the start of *IAsfm's* first-ever novel serialization, and for this special occasion we have picked a special novel by a special new writer, William Gibson's *Count Zero.* Last year Gibson's remarkable first novel *Neuromancer* won the Hugo, the Nebula, and the Philip K. Dick award, and was one of the most critically acclaimed and widely talked about debut novels in more than a decade. *Count Zero* is likely to stir up even more excitement this year. A fast-paced and hard-edged tale of corporate warfare and computer piracy, set against a decadent high-tech underworld of the future and in the eerie hallucinatory expanses of "cyperspace, " *Count Zero* is sure to be one of the major novels of 1986. Catch an early look at it here, beginning in January.

Also featured in January will be Pat Cadigan's evocative "Pretty Boy Crossover," the latest George and Azazel story by Isaac Asimov, and stories by Lewis Shiner, Tim Sullivan, and Gregory Frost and John Kessel. Our January Viewpoint will consist of a number of moving memorial tributes to the late Theodore Sturgeon, by Harlan Ellison, Stephen King, Damon Knight, Isaac Asimov, Brian W. Aldiss, and Somtow Sucharitkul. Look for the January issue at your local newsstand December 17, 1985.

In months to come we will be featuring stories by Lucius Shepard, Gregory Benford, George R.R. Martin, Connie Willis, Kim Stanley Robinson, Brian W. Aldiss, Tanith Lee, Orson Scott Card, Michael Bishop, Bruce Sterling, Pat Murphy, John Kessel, James Patrick Kelly, Lisa Goldstein, Ian Watson, R.A. Lafferty, and many others. To avoid missing any of these exciting 1986 issues, why not subscribe? You can use the subscription form on page 91.

CLASSIFIED MARKET PLACE

ISAAC ASIMOV — is published 13 times a year. The rate for CLASSIFIED ADVERTISEMENTS is $2.20 per word — payable in advance — minimum ad $33.00. Capitalized words 40¢ per word additional. To be included in the next issue please send order and remittance to I. M. Bozoki, Classified Ad Manager, DAVIS PUBLICATIONS, INC., 380 Lexington Ave., New York, N.Y. 10017.

ART

MOVIE POSTERS: Vintage and "Current". Hitchcock, Sci-Fi, Mysteries: 1,000's available: ORDER IMMEDIATELY. (818) 980-1130. Catalog $2.00. Artistic Dimensions, 12115 Magnolia Blvd., North Hollywood, CA 91607.

BARGAINS

FLY FREE WORLDWIDE on Major Airlines. Drive Luxurious cars. Complete details only $5.00 (WORTH THOUSANDS) Joseph McWade, 4E Serpentine Plaza, Clinton, New Jersey 08809.

BOOKS & PERIODICALS

SCIENCE Fiction/Fantasy. Free catalog of pulps, digests, paperbacks, hardcovers. Collections also purchased. Ray Bowman, Box 5845A, Toledo, Ohio 43613.

ALL available paperbacks, hardcovers supplied quickly & efficiently. World-wide service since 1973. Quarterly catalogue, free US/CANADA; $1 elsewhere. THE SCIENCE FICTION SHOP, 56 EIGHTH AVE., N.Y., N.Y. 10014.

HOW TO publish your own book. 30 day guarantee. Send check or money order for $10.00 to: Phoenix Reader Service Inc., 10212 W. Ottawa Pl., Littleton, Colo 80127.

EDUCATION & INSTRUCTION

WITCHCRAFT Occult Miracle Power Secrets Gavin and Yvonne Frost. Now accepting students. 1502-AN Newbern, NC 28560.

EMPLOYMENT INFORMATION

OVERSEAS U.S. JOBS AVAILABLE. Unlimited Opportunities. Write for application. Employers, Box 3239-MY, Gulf Shores, AL 36542 or call 205-968-2500.

MONEYMAKING OPPORTUNITIES

"HUNDRED$ WEEKLY"! GUARANTEED PROCESSING $TAMPED ENVELOPES! $TART IMMEDIATELY! FREE DETAILS! WRITE: MJG-DPG, AMBLER, PA 19002.

CAN you stuff 1000 envelopes for $500.00 weekly? Send Six 22¢ stamps. Blumes, Box 460159, Garland, Texas 75046.

WINNING Thoroughbred handicapping method. Special reduced price $19.95. POWER PLUS, 4083-B 128th Ave. SE, #188, Bellevue, WA 98006.

THERE IS NO CHARGE FOR THE ZIP CODE: please use it when ordering merchandise from classified advertisements. You'll receive faster delivery.

$1000 thousand immediately stuffing envelopes. Free supplies. Rush stamped addressed envelope. Helen Philpott, 25072 Laurelwood Dr., San Bernardino, CA 92408.

PERSONAL

SINGLE? Widowed? Divorced? Nationwide introductions! Refined, sincere people, 18-80. Identity, Box 315-DT, Royal Oak, Michigan 48068.

CONTACT Magazine for friendship, marriage. Members worldwide. Sample issue $5. Singles World, Dept. DA, GPO Box 208, Adelaide. 5001. Australia.

WANTED TO BUY

WANTED—Books about misers. Any miser title. The Miser Buyer, 311 Walnut, Helena, Arkansas 72342.

SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

As the con(vention) season wanes into the holiday lull, now's a chance to look ahead to next year's cons. Make plans now for social weekends with your favorite SF authors, editors, artists and fellow fans. For a later, longer list, an explanation of cons, and a sample of SF folksongs, send me an SASE (addressed, stamped #10 (long) envelope) at 4271 Duke St. #D-10, Alexandria, VA 22304 (703) 823-3117 is the hot line. If a machine answers, leave your area code & number. I'll call back on my nickel. Early evening's usually a good time to call cons. Send an SASE when writing cons. Look for me at cons behind the big, iridescent "Filthy Pierre" badge, making music.

NOVEMBER, 1985

15-17—**ConTact 1985.** For info, write: **Box 3894, Evansville IN 47711.** Or phone: **(812) 858-5419** (10 am to 10 pm only, not collect). Con will be held in: Evansville (near Louisville KY) (if city omitted, same as in address) at the Airport Sheraton. Guests will include: Jack (Well of Souls) Chalker, W. A. (Bob) Tucker, Rusty Hevelin, Timothy Zahn, M. P. Kube-McDowell. Halley's Comet trip.

15-17—**ConCon.** Hotel Shattuck, Oakland CA. This is a conference by & for convention organizers.

29-Dec. 1—**LosCon, 11513 Burbank Blvd., N. Hollywood CA 91601.** Pasedena CA. Robert (Majipoor) Silverberg, editor Terry Carr, Daniel Manus Pinkwater (by phone). The LA SF Society's annual con.

29-Dec. 1—**Darkover Grand Council Meeting, Box 8113, Silver Spring MD 20907. (302) 368-9570.** Diana Wynne Jones, Marion Zimmer (Darkover) Bradley, Katherine (Deryni) Kurtz, Diana Paxson, Hannah Shapiro, Jacqueline (Zeor) Lichtenberg, Paul Edwin Zimmer, musicians Clam Chowder, Barbara Michaels, token hard-SF writer Hal Clement. Reverses the usual 3-to-1 male/female ratio at SF cons.

DECEMBER, 1985

6-8—**TropiCon, 4599 NW 5th Av., Boca Raton FL 33431.** Ft. Lauderdale FL. Robert ("Psycho") Bloch, Lee Hoffman, Brad Linaweaver, Gary Allen Ruse. Banquet & masquerade. Get away from the cold here.

27-29—**EveCon, Box 128, Aberdeen MD 21001.** Gaithersburg MD (near Washington DC). SF New Year.

JANUARY, 1986

17-19—**RustyCon, Box 47132, Seattle WA 98146.** Vonda McIntyre, artist I. Mayer, fan J. Surayan.

24-26—**ConFusion, Box 8284, Ann Arbor MI 48107.** Detroit MI. Somtow Sucharitkul. Banquet.

25-26—**ChimeraCon, 12-A Univ. Gardens, Chapel Hill NC 27514.** Orson Scott Card, Christopher Stasheff, Gregory Frost, Manly Wade Wellman, David Drake, Allen Wold, M.A. Foster, John Kessel.

FEBRUARY, 1986

7-9—**MexiCon, 24a Beech Rd., London N11, UK.** Birmingham, England. At the Strathalian Hotel.

14-16—**Boskone, Box G, MIT PO, Cambridge MA 02139.** Boston MA. Big (over 3,000 there last year).

21-23—**SFeraCon, Ivanicgradska 41A, Zagreb 41000 Yugoslavia.** Free membership to non-Yugoslavs.

21-23—**OnoCon, 6-2740 Brentwood Blvd. NW, Calgary AB T2L 1J4 Canada.** A thaw-out for frozen fans.

21-23—**WisCon, Box 1624, Madison WI 53701. (608) 251-6226 (days), 233-0326 (eves).** Feminist SF.

AUGUST, 1986

28-Sep. 1—**ConFederation, 2500 N. Atlanta #1986, Smyrna GA 30080. (404) 438-3943.** Atlanta GA. Ray Bradbury, fan/editor Terry Carr, B. (Slow Glass) Shaw. The WorldCon for 1986, back in the USA.

SYLVIA PORTER'S PERSONAL FINANCIAL PLANNER DOES MORE THAN MANAGE YOUR MONEY

IT PLANS YOUR FINANCIAL FUTURE TOO

Sylvia Porter, and the editors of Sylvia Porter's Personal Finance Magazine, now combine with all the computer tools you'll ever need to help manage your money on a day-to-day basis and plan your financial future, too. In Sylvia Porter's style, without complicated financial jargon or "computerese".

Volume I

Your Personal Financial Planner:

Helps you track your day-to-day financial data, then combines this information with your future financial objectives to produce the most comprehensive and easily-understood financial planning program available.

For Your Day-to-Day Affairs:

- Maintains your electronic checkbook and credit card system.
- Writes your checks and balances your checkbook. (We even built in a calculator and memo pad for you.)
- Prepares and monitors your budget.
- Classifies and tracks your taxable income and expenses.
- Calculates your net worth and generates customized personal financial statements.
- Tracks your financial assets – and your insurance policies.
- Graphically generates supplemental data, such as percentages, ratios and charts.
- You get our Toll-Free Hotline and our Customer Technical Support Team at no charge.
- You get Timeworks' Money Back Guarantee. (Details in each package.)

For Your Financial Future:

- You'll be led step-by-step through a series of questions regarding your life and lifestyle, your financial goals, and your current financial condition. Your answers will enable a computer to determine and print a summary of the amounts you must save each year to meet your financial objectives - in both real and inflated dollars.
- Helps you plan for protection against major medical adversities and other financial setbacks.
- Each program interfaces with others in this series. Your information can be incorporated into letters and reports produced by Timeworks' Word Writer.
- Everything is integrated. You need to enter data only once.

Available for Apple, IBM and Commodore computers.

Moderately Priced - from your favorite Dealer or contact Timeworks for the Dealer closest to you.

Next in this integrated series:
Your Personal Investment Manager.

Other Timeworks Programs: The Evelyn Wood Dynamic Reader ▪ Word Writer with Spell Checker ▪ Data Manager 2 ▪ SwiftCalc with Sideways ▪ Business Systems ▪ Swiftax ▪ Cave of the Word Wizard ▪ Wall Street

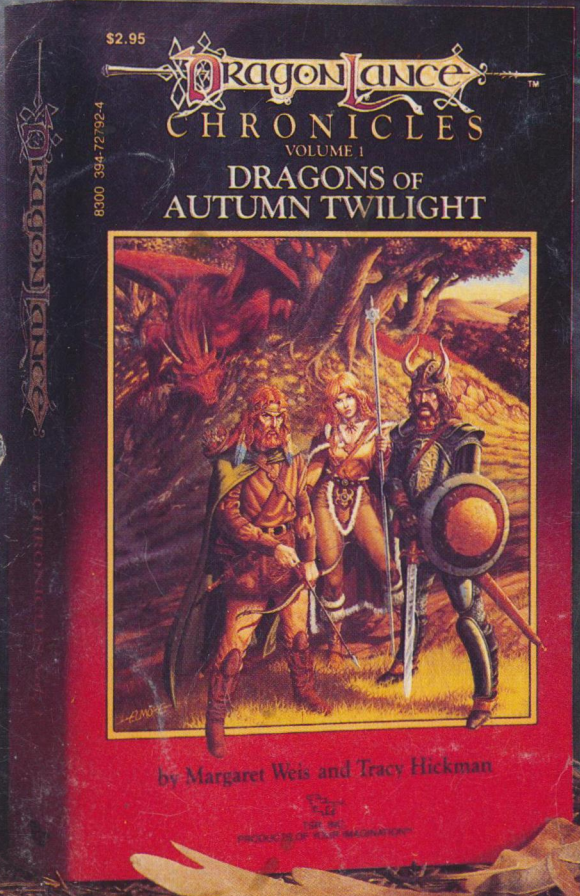
TIMEWORKS®

More power for your dollar.

TIMEWORKS, INC., 444 Lake Cook Rd., Deerfield, IL 60015, 312-948-9200

From America's #1 Financial Adviser

EXPERIENCE A LEGEND IN TSR'S FIRST AD&D™ FANTASY NOVEL!



Dragons, creatures of legend Krynn, a world of fantasy. DRAGONLANCE™ CHRONICLES, the epic quest of a small band of heroes comes alive in TSR's first full-length AD&D™ fantasy novel.

Ask for DRAGONS OF AUTUMN TWILIGHT, th first volume in the epic trilogy, at your favorite hobby, book or toy store.

448 pages of fantasy adventure for only $2.95!