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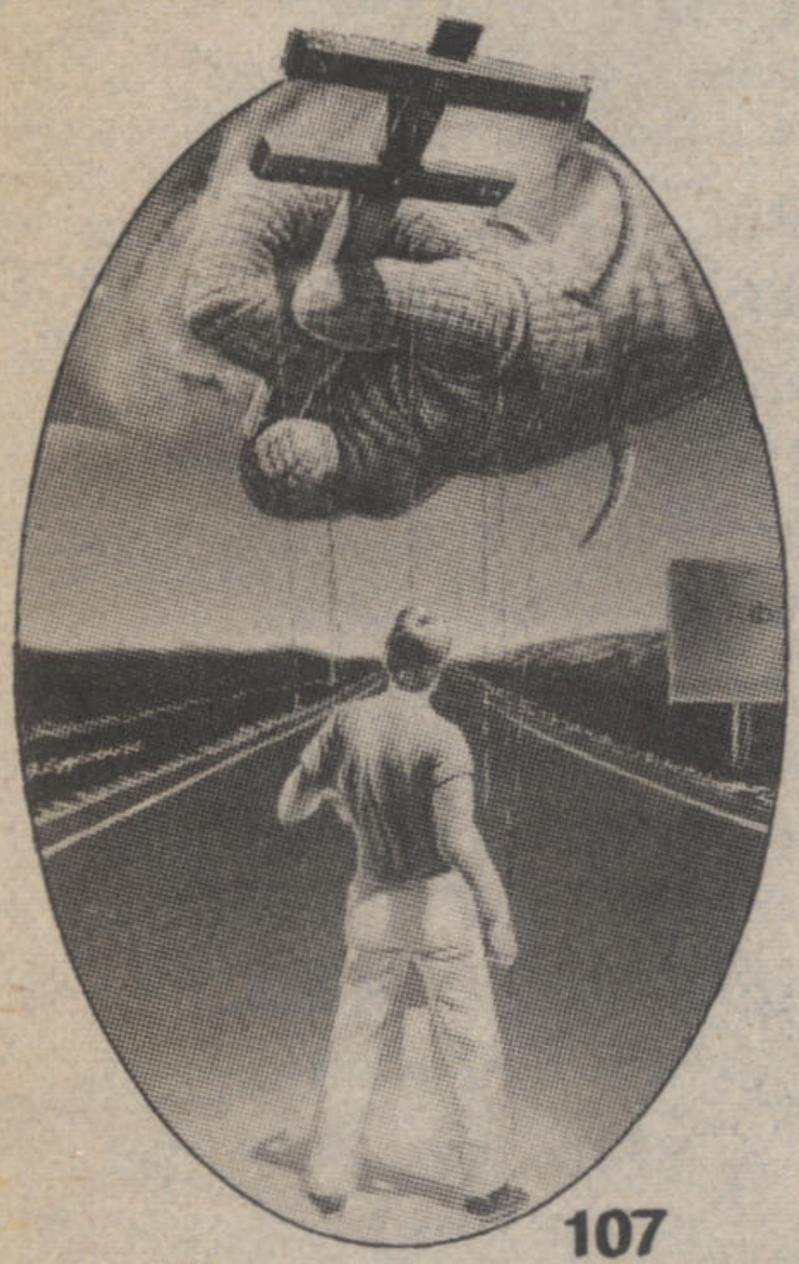

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Novelettes

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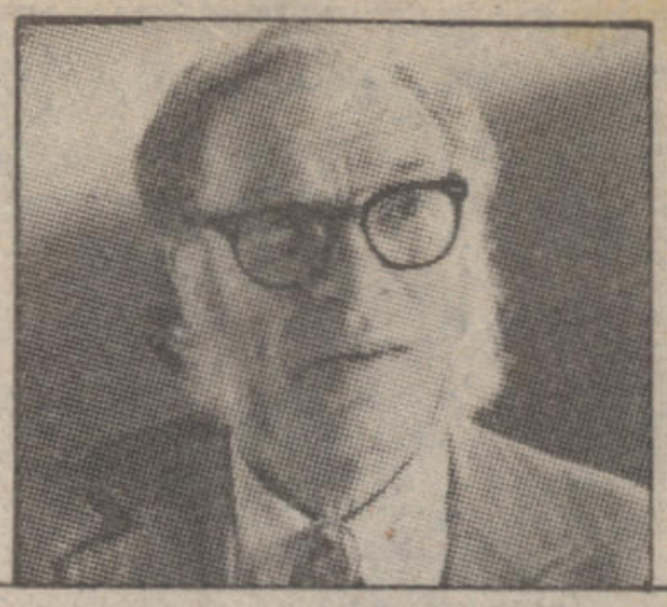
EDITORIAL



by Isaac Asimov

SPECIALIZATION

Sometimes what seems (to me) to be a harmless remark of mine will drive someone into a fury.

For instance, in the February 1986 issue of this magazine, there appeared an editorial of mine entitled "Outsiders, Insiders" which (I thought) was a model of moderation, toleration, and sanity. But in the next to the last paragraph, I said, "Why not remember that science fiction is still a relatively specialized field, that SF writers have to know a great deal more, and develop more unusual skill, than ordinary writers . . ."

I didn't think this was a terribly vicious thing to say. In fact, I thought (and I still think) that I was stating an obvious truth.

Nevertheless, I received a simply furious letter that quoted the passage I have just cited and said, "This is pure elitist flummery." (I was very interested in the use of the word "flummery," by the way. I had never seen or heard it used in this sense except by Rex Stout's creation, good old Nero Wolfe, who is carefully pictured as a particularly pure elitist—but I digress.)

The letter-writer explains why it is flummery, as follows:

"All writing fields are specialized. Many writers explore different fields."

Yes, indeed, so are all types of skilled labor. To be a good carpenter requires a great deal of skill and specialization. To be a good brain surgeon also requires a great deal of skill and specialization. However, just because both occupations are specialized ones, doesn't mean that both are equally specialized. Would I be elitist to suggest it takes a little more to be a good brain surgeon than a good carpenter?

The letter-writer also says, "Many authors spend years doing historical, cultural and social research. No modern writer can afford to ignore research without seriously compromising their [sic] work."

This is a beautiful statement that would be even more beautiful if it had anything at all to do with the point at issue. I don't for a minute think that science fiction is more demanding that other forms of writing simply because it requires research. It happens to require more than that, as I shall eventually explain.

Finally, the letter-writer says,

"What is your definition of 'ordinary' writers? Shakespeare, Plato, Melville, Hawthorne, and Mark Twain all wrote fantasy or science fiction pieces and published them in the popular press of their day. Are they 'ordinary' because they didn't attend workshops? The history of science fiction goes back much further than Heinlein, so does envy."

My definition of "ordinary writers" in the context of my editorial was "Writers who do not write science fiction." Who says that an "ordinary writer" is a bad writer, or an incompetent writer? He is simply someone who, to my mind, is not one of the specialized sort who is under discussion.

And what about the five writers mentioned by the letter-writer as having all written either "fantasy or science fiction." That's nice, but how did fantasy suddenly get into the argument? The five writers all wrote works that we would today recognize as fantasy, but not one of them wrote anything that we would today recognize as science fiction except under the very broadest terms. The history of modern science fiction does not (to my mind) go back, even broadly, any farther than Mary Shelley's *Frankenstein*, and in its narrower sense I don't think it goes farther back than Jules Verne and H. G. Wells. And as for the history of envy, I can't imagine what that has to do with anything under discussion.

But that's enough of discussing the letter. Let's go back to my

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statement that science fiction demands more of its practitioners than other forms of writing do.

First of all, how do I know it does? Eh? Who made me the authority on the subject?

Well, let me tell you something even at the risk of being considered (horrors!) conceited. I am the *only* authority on the subject.

I have written science fiction for children and for adults, but I have also written mysteries for children and for adults. I have written a large quantity of non-fiction, too, both for children and for adults. These include books on every branch of science, as well as many history books, plus a number of books on literature of one sort or another, to say nothing of books on geography, on mythology, on the Bible, and on humor. I have even written biographies, autobiographies, and comic verse.

In every one of these fields, my books have been praised and have been reasonably successful. I don't say that I am the best there is in any of the fields, but the fact is that no writer, no writer at all, has written as many books in as many different fields and done it as well as I have. That may happen to sound conceited, but it also happens to be true. I'm not going to lie to you just for the fun of sounding modest.

I want to tell you, then, from the standpoint of my unique experience, that writing science fiction is harder than writing anything else. I have to be urged to write science fiction, and browbeaten into it. I write everything else spontaneously, and for fun. Is that because I just happen to be lousy at writing science fiction? Of course not! I don't have to tell anyone that I'm a good science fiction writer. Everyone knows that.

Well, then, is it just a personal peculiarity of mine? I don't think so for a moment. I think that any *good* science fiction writer can turn his hand to any other form of writing, and produce good work. Almost every *good* science fiction writer has, at one time or another, done just that. On the other hand, any good writer who does not write science fiction, any ordinary writer, is very unlikely to be able to write good science fiction, no matter how hard he tries. They can write social satire that *sounds* to the uninitiated like science fiction but that's as far as it goes.

Why?

Once you have the necessary writing skill, you can turn to one specialized field or another —mysteries, westerns, romances, steamy sex, non-fiction, whatever you want—by doing the necessary research, as the letter-writer points out. Of course, the time spent on research might not be worthwhile, considering the nature of the result—which is why I won't do the necessary research that would enable me to write westerns or romances.

Can't you research the necessary science and then write good science fiction, even if you haven't written science fiction before?

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No! It's not the science alone that makes good science fiction. Science is necessary, for you don't want to sound like an ignoramus, but it is not sufficient. In fact, you don't even have to make the science explicit. Many a good science fiction story leaves the science in the background. And many a story that is not science fiction has a lot to say about science.

What, then, is it that is required in a *good* science fiction story, that is *not* required in anything else?

It is a *society*, based and organized on reasonable technological and scientific change so that it is quite different from the one we live in. (It has to be based on scientific principles or it becomes fantasy, which we are not discussing.) What's more, this society has to be reasonably self-consistent and it has to be sufficiently detailed to be interesting in itself—even as interesting as the plot-line.

Do you think that's easy? I can write a mystery novel (and have) in seven weeks, because I'm using our contemporary society and don't have to make it up. It takes me a minimum of seven to nine months to write a science fiction novel (and endless sleepless nights), almost all of it spent on the details of the society and virtually none of it on the plot. My new novel, *Foundation and Earth*, deals with seven different worlds, each quite different from all the others.

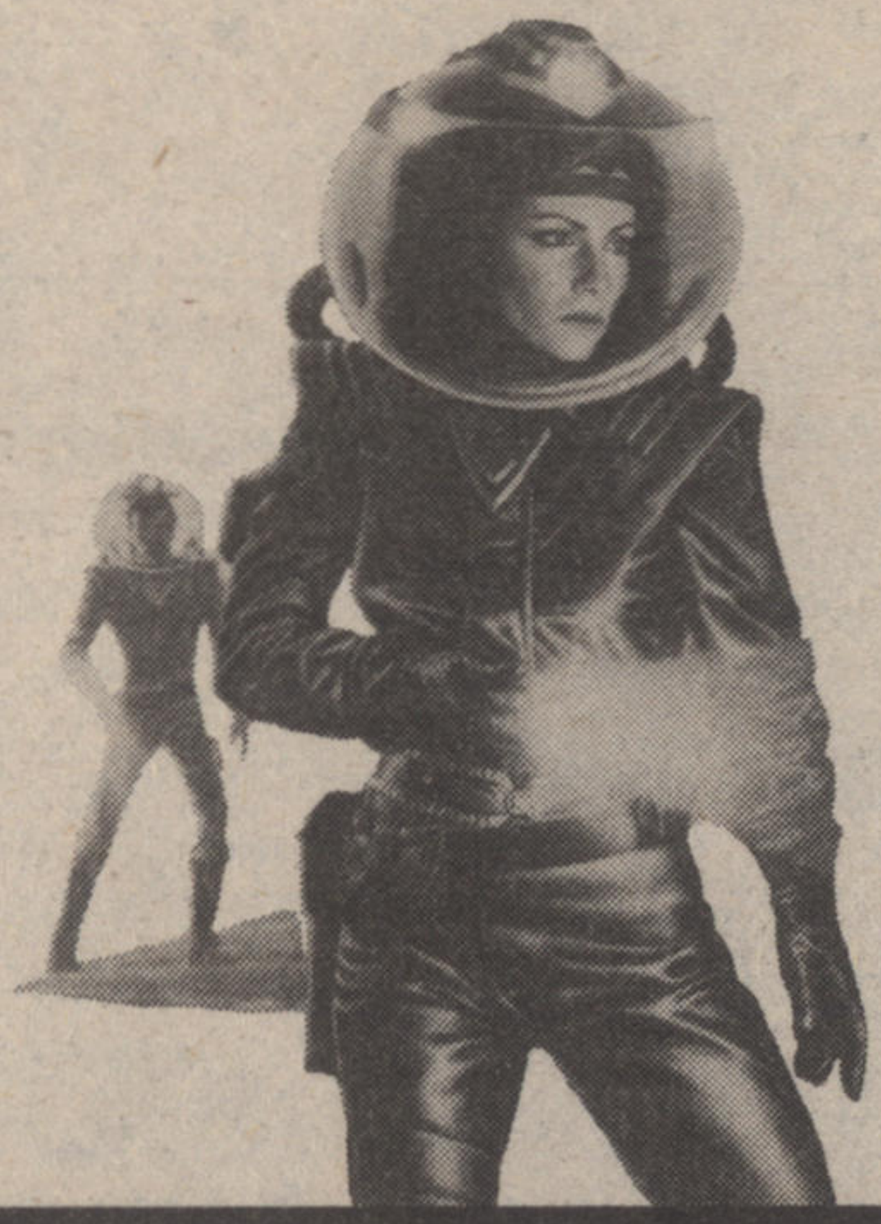
How do you learn to invent new societies? I don't know. I can only theorize.

I don't think there's any way you can learn to do so in adulthood from a cold start. The trick is either innate, or is something that you have to begin to learn as a child, before the brain tissues have started to calcify.

The great science fiction writers of today have, by and large, been devouring science fiction from childhood. (I was reading it from the age of nine.) What's more, they had the capacity to learn social futurism (if I may coin a phrase) from the masters who preceded them. The first science fiction writer to perfect the trick of describing the social milieu was Robert A. Heinlein (yes, in that respect, the history of science fiction *does* start with Heinlein, despite my letter-writer) and all good SF writers of today learned their proper craft from Heinlein or from someone who learned from Heinlein.

That is the particular specialization of science fiction, and the extra skill we must have, if we are to be good at our craft—and that's why there are so few of us.

If that be "pure elitist flummery," make the most of it. ●



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LETTERS

To the Editor:

I couldn't agree more thoroughly with Isaac Asimov's editorial on "Outsiders, Insiders" in your February issue. Of course, the "let's-be-friends" principle of civility and humanity extends beyond the rivalries and tribulations of the SF community, to encompass all groups and their relations among themselves and with "outsiders." The various cults represent collective exclusivity and closedmindedness in their distilled essence, and the disastrous consequences for personal growth and intellectual exchange are evident.

Dr. Asimov has always appeared to me to embody superlatively the humanitarian values he advocates. He proves that pursuing one's rationally construed selfish interests unstintingly is entirely compatible with benevolence and generosity toward others. Indeed, for such a busy and ambitious man, he is remarkably open and accessible. For this reason many who have never personally met him have come to know well and love the Good Doctor through his work—in particular the science essays, the editorials for *IAsfm*, and those two swell(ed) volumes of autobiography, *In Memory Yet Green* and *In Joy Still Felt*. May the magazine and its cheerful "editorial director" live long and prosper.

Sincerely,

David M. Brown
Syracuse, NY

Well, gee, this is exactly the way I have always looked at myself but I have always been far too diffident, modest, and shy to say so. As long as you *say so and insist that I print this letter—well, what can I do?*

—Isaac Asimov

Dear Dr. Asimov,

First of all, I would like to thank you for an exhilarating and entertaining year with your magazine. I have especially enjoyed the short stories, "Klein's Machine" and "Time's Rub" (I know these were both in the same month—it was a very good issue), but all of the shorts were well selected from the hundreds I'm sure you received.

I have also read two of your short story collections this year, "The Winds of Change" and "Buy Jupiter." My favorites are your conversation-type stories, "The Winds of Change" and "Darwinian Pool Room" in particular. I feel these type of stories make one think about their themes long after they are over and many more stories have been read.

Again, thank you for a great year. I'm looking forward to '86!
Sincerely,

Michael A. Zensius
San Jose, CA

Listen, I like my conversation-type stories. I've got no fewer than three long-running series (two mystery, one science fiction) that are strictly conversation-type. I have always thought I was the only one who liked them. Now that it's you and me together, let's go out there and set the world on fire.

—Isaac Asimov

Dear Editors:

I was thrilled to find a novelette by Orson Scott Card in your February issue. Even better, "Salvage" managed to be genuinely heart-wrenching, without any of that ever-so-effective ghastliness which turns up in much of his work.

Please publish Mr. Card more often, lest he be lured away by the likes of *The Atlantic Monthly*.
Very truly yours,

G.A. Perrie
Westfield, N.J.

We'll try to play our Cards correctly.

—Isaac Asimov

Dear Dr. A and Gardner,

It must have been a stroke of the kind of luck that only occurs once in a lifetime when Nolan P. Williams discovered that freezing SF magazines would allow you to remove their address labels without damaging the magazine and its cover art.

Maybe he isn't really lucky at all but a true genius, one who has those intuitive leaps that only come to the truly blessed.

Let me tell you, his idea works. Now admittedly, my friends think I'm a bit strange because I am constantly leaving my *Asimov's* and *Analogs* in the freezer overnight but who cares??? I have successfully removed all the labels from all of the magazines that have arrived at my door with the refrigerator method. No more glue streaks on the cover art. No more torn authors' names on the left side of the cover. No more obliteration of some comely SF maiden's attractive exterior by my name and address, which I am already too familiar with. Let me tell you, it has been a real blessing to be able to stare at those comely maidens (Yeah, Yeah, and the other *less* interesting artwork too) instead of my address label. It works, it truly does!!! All you have to do is put those mags in the ole freezer and let them get *good* and cold. Then pick away at the label and off it comes, along with the glue.

There's just one problem though; now I'm going to have to return the government grant I applied for and received to study the label removal problem. Maybe I can get another grant to study how changing SF magazine formats affects the reading habits of the average reader. Or maybe I could get a grant to study whether or not there really was a Golden Age of SF.

What do you think???
Sincerely,

David R. Olson
32 E. Palm st.
Altadena, CA 91001

Just hold on to the grant, my lad, and explain that it requires further studies. The government has just ordered its fifteenth study of acid rain, waiting for an answer it likes, "It's all right, Mr. President, acid rain is good *for trees and lakes." I'm sure they'll support you. You're only on your second study.*

—Isaac Asimov

Dear Sir:

I am a high school student studying Science, and I should like to respond to Barbara Koval's notion of a theory as presented in her letter in the February 1986 *IAsfm*. A theory is *not* merely a statement less certain than fact. A fact is a statement that is currently so well supported that to "withhold provisional assent would be perverse" (1); a theory is a mechanism used to explain facts. The atomic theory of gases assumes that atoms exist in order to explain why gases react as they do to temperature and pressure. In science it is necessary to posit only things that can be understood in terms of present processes, to minimize the "leaps of faith" required to understand the theory. The fault with the theory of creationism is that the mechanism it assumes for the creation of the world cannot be explained in terms of processes known to man—and hence is not testable. The big bang theory depends only on the *known* reactions of gases—compression, solidification at high pressures, etc.—which are well understood. Since we understand these processes, we can conceive of the big bang, and we can, from current evidence, determine the parameters of the event—how long ago it was, how wide the original gas cloud was, etc. The theory of creationism posits a god who created the universe by methods unknown and which are not in operation presently in the natural universe. Hence, we cannot describe the reactions undergone by atoms and the gases they composed during the event, nor the length of time taken for the earth to be formed, etc., because the processes involved are nowhere in evidence in the universe. Also, where the big bang theory does not require the assumption that any forces once existed that do not exist today, the theory of creation assumes that, at some time in the past, forces existed and operated which cannot now be duplicated or understood: this conflicts with the scientific principle of uniformitarianism.

An explanation has been defined as a "conceptual bridge between the known and the unknown" (2), intent on making the unknown understandable. If we require a theory to provide an explanation of known facts, the theory of creationism cannot be considered a theory; it explains an unknown in terms of an unknown.

Eric Schissel
30 Entrance Rd.
Roslyn, N.Y. 11577

(1) Gould, Steven J., *Hen's Teeth and Horse's Toes* (W.W. Norton and Company, 1983), pp. 254–255.
(2) Smith, George H., *Atheism: The Case Against God* (Prometheus Books, 1979), p. 229.

Thank you, Mr. Schissel. You are, in my opinion, eloquent; and what is much more important, cor-

rect. What a pity that in this world of ours, to be eloquent and correct is not enough. There is much more demand, apparently, for horse-feathers.

—Isaac Asimov

Dear Dr Asimov,

For some time I have been pondering a question about science fiction. I decided I might as well write and ask you. In most of the SF books I have read, I have yet to see a decent story in the far-future where the United States still exists. It seems that the nations of today always end in one of three basic ways: 1) a nuclear war blows away every known nation, leaving the way for a more peaceful society to rise from the old; 2) somehow, all of the world joins together into one Terran Confederation of some sort, with no similarities to the old nations; or 3) internal decay destroys the U.S., or it breaks up with states seceding from "The Union." Why isn't there a possible future for the U.S.?

Being a very patriotic American, I believe in a strong America that doesn't take any crap from Libya, Syria, the USSR, or even Cuba. As a free-time hobby, I write SF and fantasy short stories, and I must say, most of my futuristic stories have a strong, democratic United States defending our way of life throughout the galaxy and beyond. That's why I liked Frederik Pohl's *Black Star Rising*, just recently out. It's extremely rare that you find a good novel about an America of the future. The few books that have a futuristic America depict her as a corrupt, inefficient, business/corporation-dominated non-republic. What goes? Aren't there any patriotic science-fiction writers out there any more? I have one thing to say to all the SF writers out there who ignore our great country's future: when I start publishing my stories (if and when I'm good enough), I intend to see that America's future in this galaxy and beyond is treated with the fact that we will be around when inter-stellar space is traveled.

Patrick McDonald
Dallas, PA

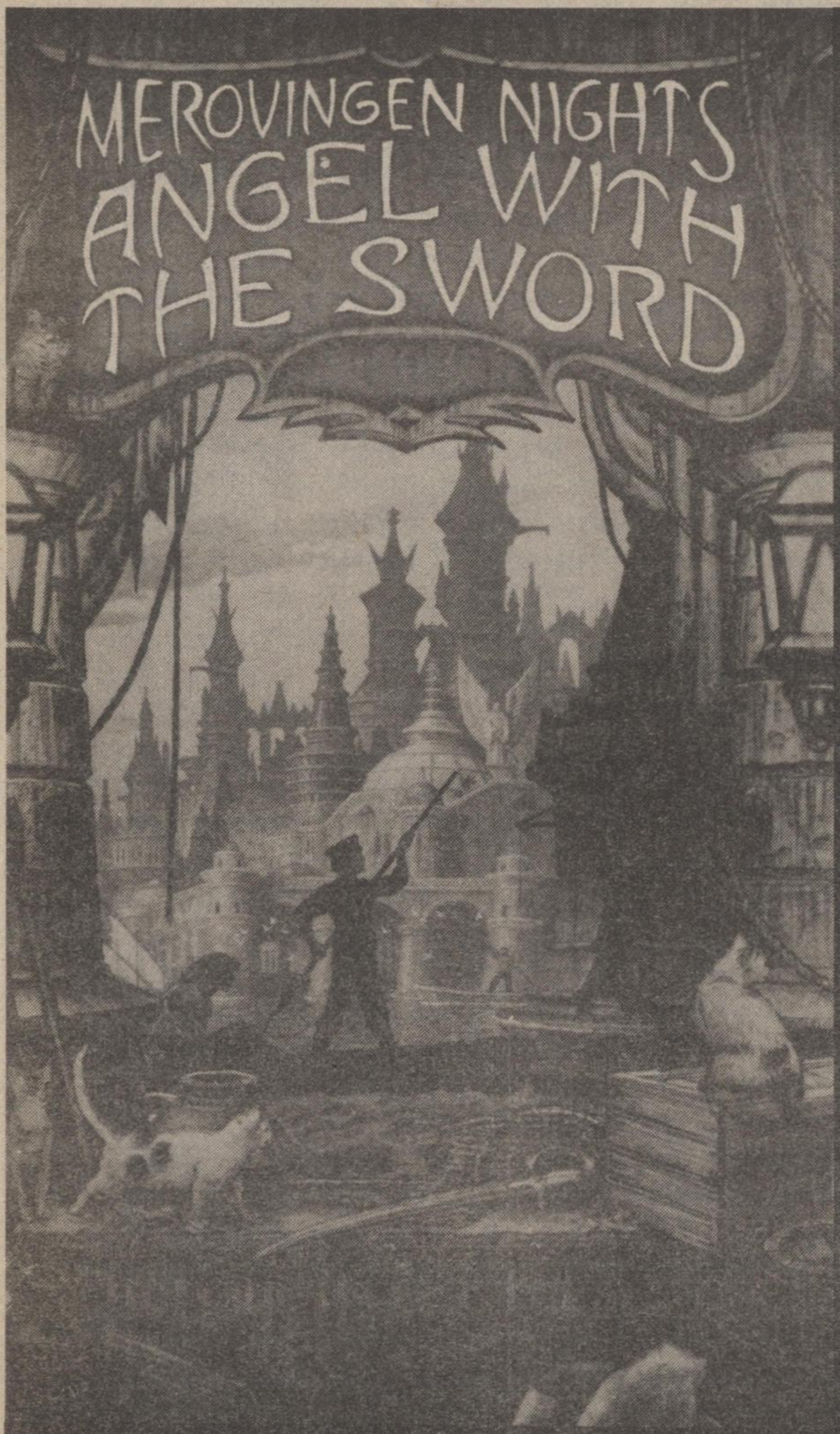
Let's pretend there was science fiction in Richmond, Virginia, in 1750. You are a patriotic Virginian reading science fiction about Virginia rebelling from the King (God bless him) and having the damned rebels win. You read science fiction about Virginia joining the other states (including those damned Puritans in Massachusetts) in some sleazy United States or something. You read about Virginia rebelling against the United States and being smashed. And you say: "Are there no patriotic Virginians who can look into the future and—"

—Isaac Asimov

Dear Dr. Asimov,

I have been reading your magazine for the past five years. I've always found it to be a superb production.

Since I have always found it to be a superb production, I dislike it when people write to you and tell you that it's a lousy magazine. Therefore, I would like to say—"Don't listen to those people; they're wrong."



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Another thing I would like to say is that I enjoy your editorials and snappy replies to stupid letters. If your personality is anything like the image I get of it through the things you write, you must be a really top-notch kind of dude.

Because I think that you are a really top-notch kind of dude, it utterly grates upon my nerves when someone writes to you to tell you (in effect) that you are a self-placating old man (if you'll excuse the expression) that prints only positive letters. Don't listen to these people either; they're probably all men who never read the so-called "ladies' magazines," and therefore don't know what it is to say that there are no negative letters in the "Letters" section. Honestly, try to find the same percentage of negative letters in those magazines as you do in *IAsfm*. Your results will either lead you to believe that *IAsfm* is a truthful magazine (or at least more truthful than "ladies' magazines," if you want to get logical about it) or that you personally are a masochist or something.

Sincerely,

Katherine Crosswhite
Superior, AZ

I can't resist publishing a letter that calls me "a really top-notch kind of dude." I've never had that phrase applied to me. "Wonderful," yes; "magnificent," of course; but this one gets me. It rings so true, if you know what I mean.

—Isaac Asimov

Dear Editors:

Thank you for the Viewpoint/Eulogy for Ted Sturgeon. I heard a brief mention of his death on the radio early one morning in May; I spent that day wondering how it could be real that a person I had so often described as one of America's finest living writers could die? And the announcement: "Theodore Sturgeon, a science fiction writer expired . . ." Library cards expire, not people, and can no one accept that some people just write, pay no heed to other folks' categories? So then I searched the next issues of *IAsfm* and *Analog*, hoping for some acknowledgment, some sense that I was not the only person feeling that something had been stolen from the world. No mentions, and it truly unnerved me—are people's memories so short as that? So, thanks again, you've restored a little of my faith in the humanity and community of SF people . . .

Sincerely,

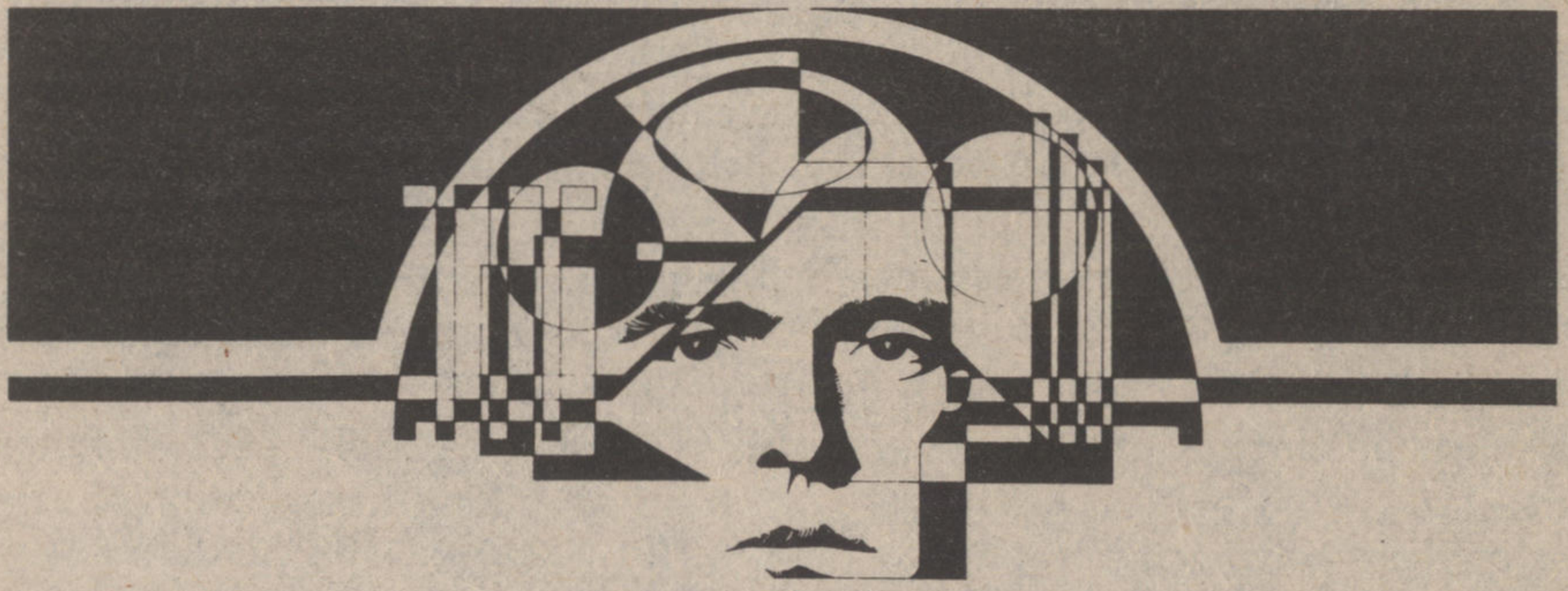
Hillevi M. Wyman

You have to understand that magazines are not newspapers. We work four to six months ahead and when something is a stop-press item, our presses can't stop. It takes time to get our feelings into print.

—Isaac Asimov

MARTIN GARDNER

THANG, THE PLANET EATER



The first story I ever had printed was a short-short fantasy about a hyperbeing called Thang, presumably living in a fourth dimension. He liked to reach into the Milky Way galaxy to pick up planets and eat them the way we eat apples. Perhaps a better analogy, because Thang is four-dimensional, would be the way we eat extremely thin pancakes.

Imagine that Thang found a solar system to his liking, and that it took him seven days to eat all the planets. On the first day he ate $\frac{1}{7}$ of the planets. On the second day he ate $\frac{1}{6}$ of the remaining planets. On the third day he ate $\frac{1}{5}$, on the fourth day he ate $\frac{1}{4}$, on the fifth day he ate $\frac{1}{3}$, on the sixth he ate $\frac{1}{2}$. On the seventh day he ate the single planet left. How many planets were in the solar system?

This is easy to answer. There were seven. Thang simply ate one planet per day.

Let's complicate matters. Thang found another solar system to eat, always eating entire planets, not fractions of planets. This time he reversed his previous procedure. On the first day he ate one planet. On the second day he ate half the remaining planets. On the third day he ate $\frac{1}{3}$, and so on to the seventh day when he ate $\frac{1}{7}$ of the planets not yet eaten.

Your problem is this. What's the smallest number of planets the solar system can have that will allow this scenario? The answer is on page 80.

GAMING

by Matthew J. Costello

Wait a second.

There, I almost caught you flipping past the gaming column, now didn't I. After all, if you don't play games why should you read this column, right?

Wrong. At least for this month. (Loyal readers, please bear with me.) The subject this month is game supplements, and all writers, aspiring or world famous, are strongly encouraged to read on.

Game supplements are a new creation, designed to give detailed background information for a gamemaster to use in planning and running a role-playing game. The first supplements were, quite naturally, for the first role-playing games, *Dungeons and Dragons* and *Advanced Dungeons and Dragons*. So there were books for these games, like *Dieties and Demigods, The Fiend Folio*, and *Monster Manual*. But role-playing games have, in the past ten years, exploded. And now there are supplements covering a wide range of interesting topics and game systems.

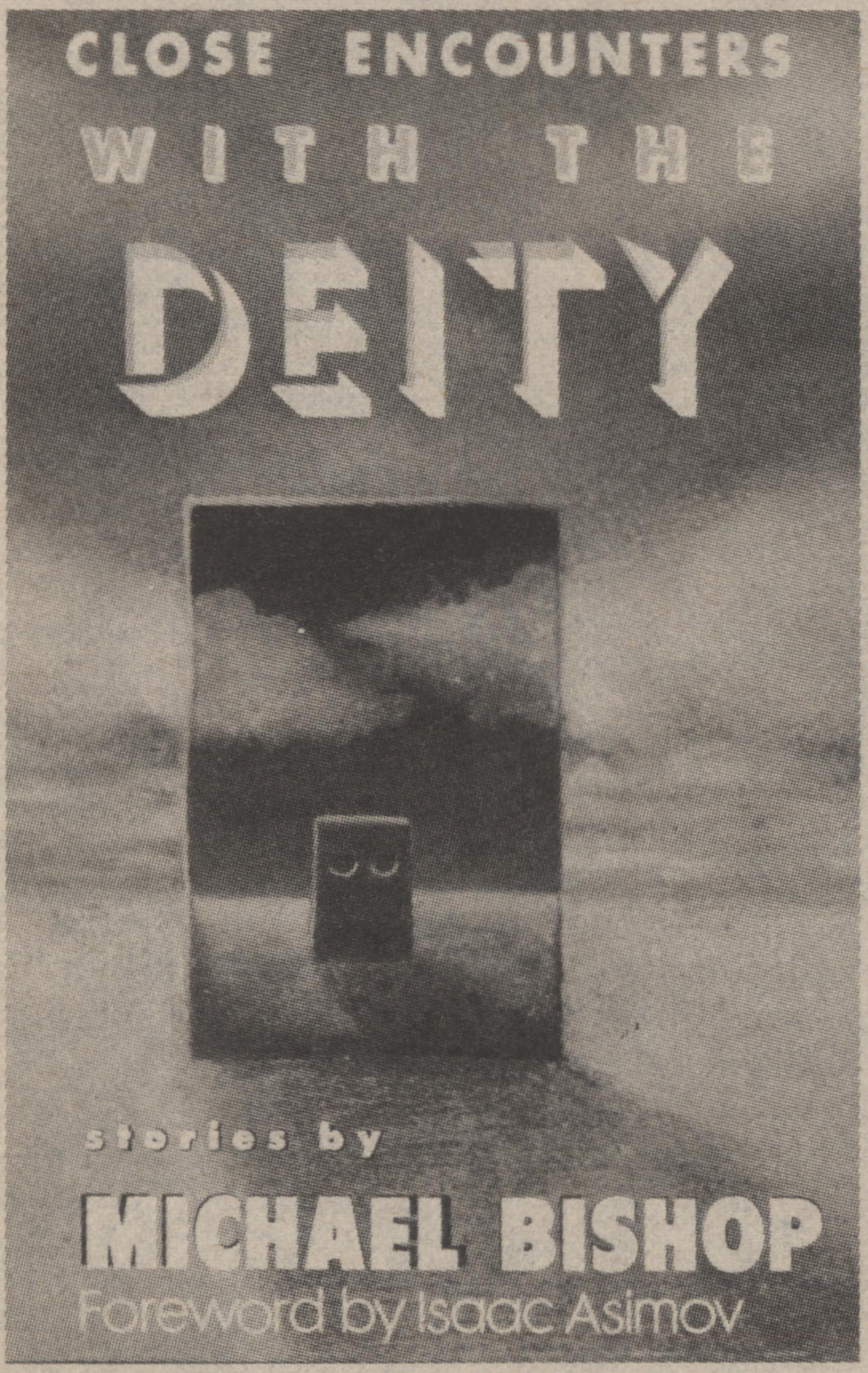
For gamers, it's wonderful. People can really see what the salon prive at Monte Carlo is like as 007 strolls in, or study the molting sequence of the twelve different dragon klans. But there's another audience for game supplements. Writers often need the kind of detailed information that supplements abound in. So, if you play fantasy or science fiction role-playing games, *or* if you write for either genre, let me recommend some valuable works for your bookshelf.

Dragons (A Role Aids product from Mayfair Games) is a beautifully produced book with a carefully created natural history of the dragon, including their nesting habits and culture. Written by Cory Glaberson, the book revels in exotic details, such as the way dragons mold their hatchlings' heads to form strange shapes. The section on dragon biology is nothing less than incredible.

Vampires (Pacesetter Ltd.) deals with that classic creature of the night, the Vampire. This 96-page book is presented as a series of scholarly reports covering such diverse bloodsuckers as rock star Jackson Jammer and that old smoothie, Count Dracula. All the accounts make for enjoyable reading, and there's a helpful index in the back for players of Pacesetter's *Chill* role-playing game.

(continued on page 56)

A spiritual tour de force of daring proportion!



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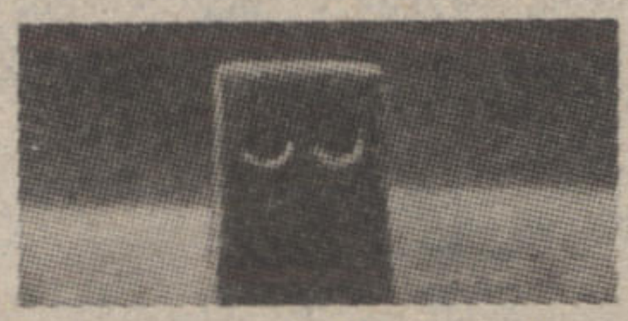
"... it would be an insult to continue to speak of Michael Bishop as one of science fiction's most promising writers. The promise has been fulfilled."
—Thomas M. Disch



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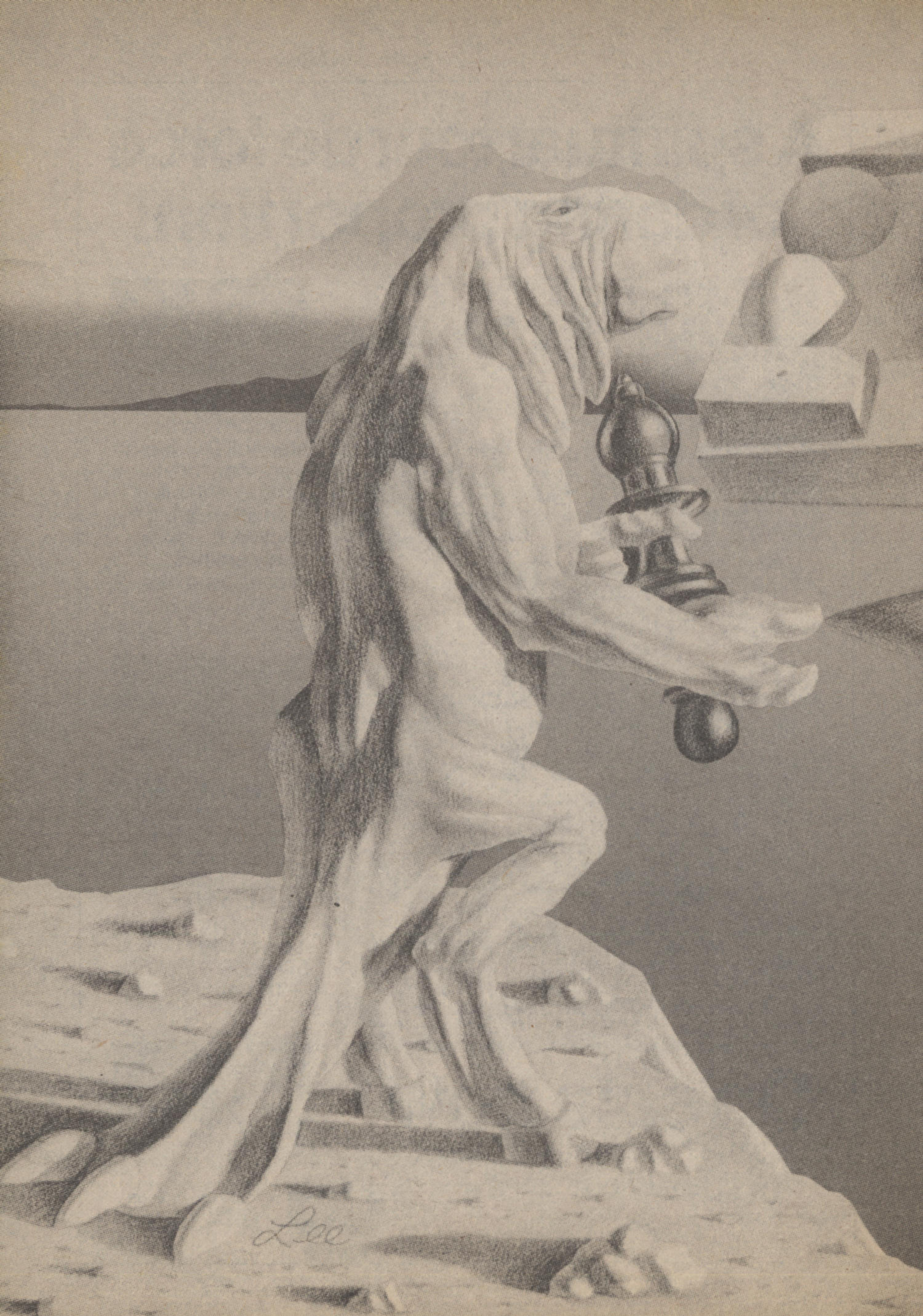
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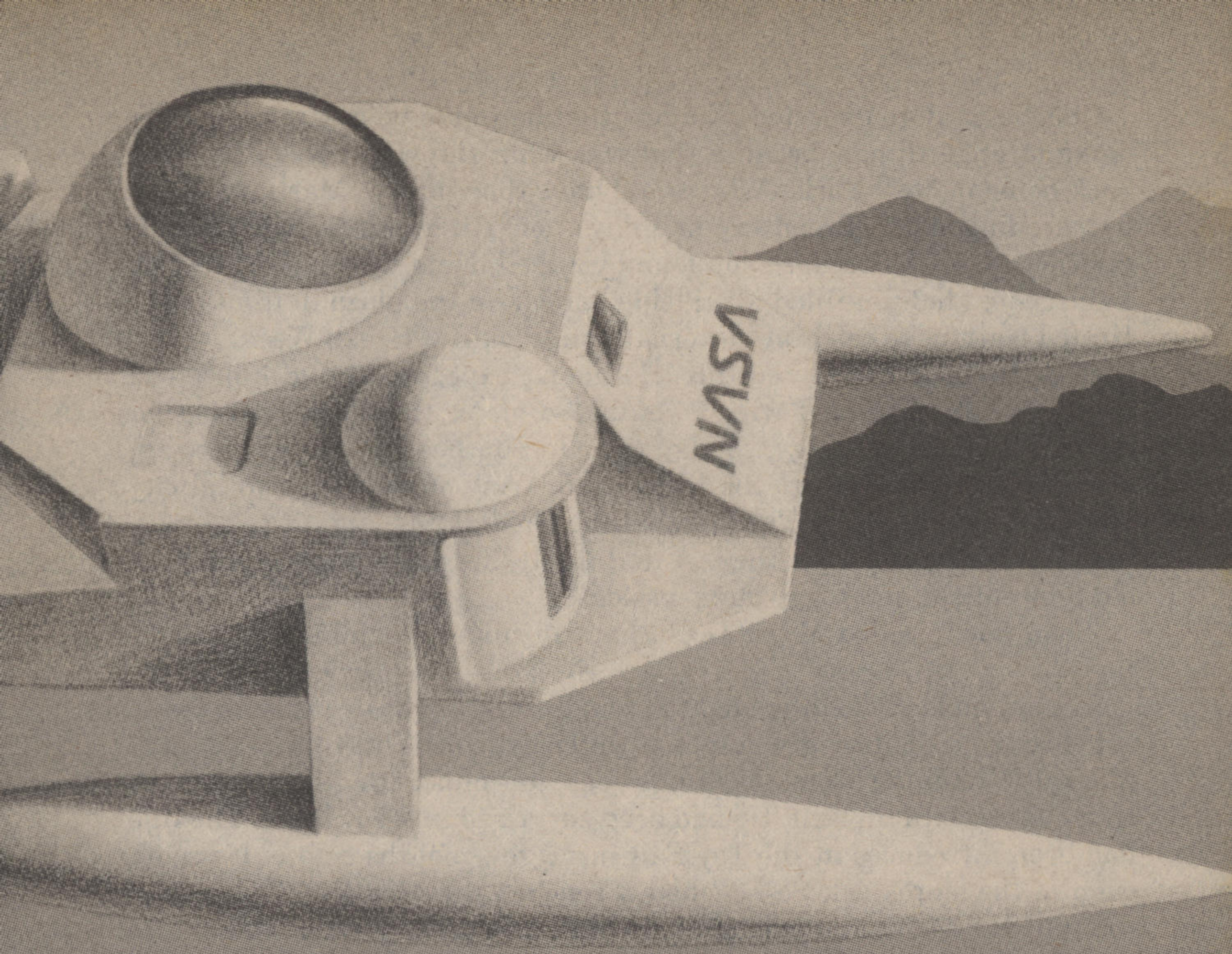

by Frederik Pohl

IRIADESKA'S MARTIANS

Art: Terry Lee

Besides being one of science fiction's most decorated and respected writers, Frederik Pohl is one of its most widely traveled. He has represented the U.S. State Department in such diverse countries as Singapore, the Soviet Union, and New Zealand, and he has attended international conferences in far flung places like the People's Republic of China, Brazil, and Yugoslavia. The flavor of his international travels lends itself well to "Iriadeska's Martians."

Charlie Sanford expected all along that he would be in strange places, doing strange things, because that was what the world was like, even back home in New York. (Who would have thought live Martians would be parading down Broadway one day soon?) It was also what public relations was like because you found yourself doing things like erecting a thirty-foot helium-filled Mr. Pickle balloon in the plaza in front of the United Nations to celebrate International Pickle & Relish Week. Nevertheless, he hadn't expected this. He hadn't expected to find himself in a narrow-bottomed boat with an outboard motor three sizes too big for it, roaring along a sludgy, squdgy river in Southeast Asia, "inspecting" a plantation belonging to the Iriadeskan Army outside the capital city of Pnik. It was very hot. The fact that the Iriadeskans said it was twenty-five degrees did not alter the fact that it felt like pushing ninety in good old Fahrenheit, and soggy damp besides.

"Soon now!" yelled Major Doolathata in his ear, grinning encouragingly.

Sanford nodded, holding onto the windscreen as the driver swerved to cut through a floating green mat of water hyacinth. There was a Mindy Mars doll hanging from the windscreen, its plush fur as soaked with spray as Sanford himself. He had been surprised to see it there. The line had been introduced at the Toy Fair just a few months before. It wasn't even in the stores yet. So how had it reached this God-forsaken part of the world so soon? And why did jolly Major Doolathata wink and glance meaningfully at it every time Sanford caught his eye?

"What I don't understand," Sanford shouted over the roar of the motor, "is why we're poking around out here when I'm supposed to get back to Pnik for my meeting?" He had arrived at the Pnik airport only at five that morning, thoroughly spaced out from the long plane ride through Hawaii, Manila, and Singapore. Jet lag was not easy for Sanford, who hadn't really had much experience of long-distance travel. The flight had not only been interminable, twenty-seven hours of interminable, it had crossed ten time zones and the International Date Line. Sanford could not keep straight in his mind what day it was.

Major Doolathata thumped the boatman, who instantly cut the motor to a purr; Major Doolathata didn't like to have to raise his voice. "General Phenoboomgarat wishes you to do this," he explained. As he had before; and that was all the explanation, it seemed, that Sanford was going to get.

Sanford closed his eyes as the boat picked up speed again. It was better if he didn't look, anyway, because the boatman's driving made him very nervous. It would have been better still if, when this whole idea came up, he had simply said to the Old Man, "Sorry, Chief, but I don't know a thing about Iriadeska, and besides I'm right in the middle of the Fall

promotion for the Pickle and Relish Packers Association"—that is, it would have been better in some respects, though it would very likely have meant that he would now be out of a job. And there weren't that many forty-thousand-dollar-a-year jobs for young public-relations executives just three years out of NYU.

"Charles," the Old Man had said benignly, "this is one of those once-in-a-lifetime chances. Grab it, boy! It's a big one for the agency, because it's our first real opportunity to go global. And it's a big one for you, because one of these days we're going to have an International Division, and who's going to be in front of you in line to head it if you lick this one?"

That was big talk from the head of a seven-person agency, whose biggest previous accounts had been a fading screen star, a toy manufacturer, and the Pickle and Relish Packers Association. But it could happen! Midgets had overnight become titans in the PR field before, and the flunkies they employed had been suddenly carried to dizzying heights.

So Sanford had packed his bag and hopped his plane, and even gone along, bright-eyed and alert after no more than a few winks of sleep, to take this "orientation tour" of the manifold aspects of the institution he was, presumably, supposed to make lovable, namely the Iriadeskan Army.

It had been quite a surprise to discover what the Iriadeskan Army was like. It wasn't just an army. It was practically a conglomerate. Like any immense corporation, it had diversified. It wasn't just a fighting force—in fact, there was no good reason to believe it was any kind of a fighting force at all because Iriadeska had never been in a war. It did possess tanks and cannons. But it was also the proprietor of a whole Fortune-500 string of business enterprises, plantations like the one he was sailing through, newspapers, radio and television broadcasting stations—even its own First, Second, and Third Military Bank and Trust Companies, all of them getting rich on American off-shore deposits that would positively never be reported to any enforcement agency of the United States or anyone else with an urge to tax. The banks and the media companies had particularly interested the Old Man. "Let them know, Charles," he instructed, "that we control the advertising budgets for many of our clients, besides we give them financial advice on investments. Say, for instance, the pickle people ever decide to expand into Southeast Asia. There's no doubt they'd be spending a big buck on radio and TV and space—and why not on the Iriadeskan Army media?"

Of course, the Old Man's agency didn't really "control" much of anything. The shop lived on crumbs the big boys didn't bother to pick up. But no one in Iriadeska, as the Old Man didn't have to point out, was likely to know that. Especially not that particular Iriadeskan who had

walked in the door with this account, the military attaché of the Iriadeskan mission to the United Nations. Sanford was quite certain that if the man had had that much smarts he would hardly have picked the Old Man's agency in the first place.

Sanford hadn't had much of a chance to spread the Old Man's gospel. He hadn't yet met anybody important enough to lie to. Major Doolathata had come to claim him at the airport, grinning and welcoming as he stood under the hanging model of the Algonquin 9 spacecraft that was on its way back to Earth, and from then on Sanford had been on the move. He had offered a polite conversational gambit, looking around at the airport's exhibit of Mars photographs and ornate red and gold banners with messages he could not read, since they were in the Iriadeskan language—it was surprising that there was more interest in Mars here in Iriadeska than back home—but the major had only grinned and said, "Yes, it's wonderful, now we must hurry because your boat is waiting." And ever since then Sanford had been exploring the rubber, sugar, and cocoa plantation the Iriadeskan Army called Camp Thungoratakma. He had watched a hundred tiny, wiry Iriadeskans in loincloths and rubber sandals slashing away at acre after acre of sugar cane, and hundreds more making their swift, spiral cuts in the multiple wounded trunks of the rubber trees, to catch the milky ooze that would ultimately be converted into automobile tires, hot-water bottles, and condoms for the world. He had putt-putted along miles of those smelly creeks, wincing as the boatman sliced through the tangles of weed, and swatting at the swarms of insects, feeling the spot at the top of his head where the hair was just a tiny bit thin get hotter and redder every minute. He had—

"What?" he asked, startled. The boatman had cut the motor and Major Doolathata was speaking to him.

"I said," giggled the major, "there is one of our Martians."

Ahead of them, in the middle of a mat of water hyacinths, a broad, stupid head was gazing placidly at them. "What the hell is *that*?" Sanford demanded.

"It is what we call a chupri," the major announced. "It is called elsewhere manatee or dugong. It is said that the chupri is the original of the mermaid myth, although I do not personally think they closely resemble beautiful women, do you?"

He giggled again as Sanford shook his head, and added slyly, "Perhaps what they most closely resemble is something you are quite familiar with, Mr. Sanford."

"And what would that be?" Sanford asked absently, staring at the creature. The head, wide as a cow's, whiskered like a cat's, turned away from them and resumed munching the weeds. It certainly did not look

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B O O K S

like a mermaid. It was even uglier than a sea elephant, and less graceful. It was a lump of water-borne blubber the size of a compact car.

The major was carefully unlocking his shiny pigskin attaché case to pull out a limp, worn copy of *Advertising Age*. "You of course remember this, Mr. Sanford," he said pleasantly.

Mr. Sanford of course did. It wasn't something he would forget. It was the very first time in his life that his picture had made the front page of anything. To be sure, the little snapshot wasn't just him; his was a single face in a group photo of the agency's entire staff, posed at the Toy Fair where they had introduced Mindy Mars and the rest of the line. The caption said, "Executives launch Mars spinoffs," and it was true enough—even the word "executives," because every employee of the agency was an executive, or at least had the title of Director of Something-or-Other or Project Manager for This-or-That—all but Christie, the receptionist, and she was just too pretty to be left out of the picture.

"Yes, that was the Toy Fair," Sanford said, remembering. They had all worked feverishly to get the Martian doll line ready for it; if you didn't exhibit at the Toy Fair you didn't get anything in the stores for Christmas. So they had all been co-opted, even Sanford, though it hadn't been his account. He was the one who stood over the artists while they airbrushed the immense blowup of a NASA photograph of a Martian that was the backdrop for the booth, with the rack of Mindy Mars and Max Mars dolls before it.

The major gave him another unfathomable wink and carefully put the paper away again. "We will say nothing more of this now," he warned. "Now we must hurry back to your appointment in Pnik."

At once the boatman jazzed up the outboard motor and though Sanford immediately asked what the sudden hurry was, the major only shrugged and winked again. Sanford craned his neck to stare after the chupri as the boat circled around and began its return dash. Something was stirring in his mind. What had it been, the major's incomprehensibly irrelevant remark about—

It clicked. He leaned over to the major and yelled, "It *does* look like a Martian!" And the major beamed, and then frowned warningly, shaking his head.

Baffled, Sanford watched the creature out of sight. Yes. Add the stilt-like legs that had been so much trouble to work into Mindy and Max (not too stiff! Children could poke their eyes out. But stiff enough to hold the damn thing—) . . . add a few changes in the facial features, especially the eyes . . . yes, it did look like the Martians, a little bit. At least Sanford thought it did, maybe. It was hard to be sure, since no one on Earth had yet seen a live Martian. The expedition that had discovered them was on its way back to Earth with half a dozen of the creatures, and of course

there had been pictures on the TV—endless pictures; in fact, they had become something of a bore.

All right; this chupri thing looked something like a Martian; but what possible difference did that make to anybody?

When they reached the dock he sprang ashore, looking around. There was nothing to see; no one was there to meet them. Major Doolathata erupted into a storm of furious, high-pitched Iriadeskan that sent the boatman off on an agitated run to the parking lot behind the palm trees. "The car will be here in a moment," he apologized. "These people! One simply can't depend on them."

"Yeah," Sanford said absently. He had a new puzzle. At the larger freight-loading pier a few yards downstream a boatload of farm workers was disembarking. As they stepped ashore in their loincloths each one marched past a long table heaped with articles of apparel. *Uniform* apparel. Each little man picked up in turn blouse, shorts, steel helmet and boots, putting them on as they progressed, so that the farm workers at the river end of the table had metamorphosized by the time they reached its far end into active-duty soldiers of the Iriadeskan Army. They filed away through the trees toward dimly visible buses; and, although Sanford could not see clearly, it appeared that as each one boarded a bus he was issued an ugly little rapid-fire carbine.

The major was watching Sanford watch the men. "You see it," said Major Doolathata proudly. "Very tough troops, these men. It is an honor to command them."

Sanford offered, "I thought they were farm workers."

The major giggled. "Farm workers of course, surely. Also combat troops, for who would be better than soldiers to work in the fields of the Iriadeskan Army?"

Sanford smiled. It took some work, but he was making the effort, however irritating Major Doolathata was, to keep on good terms with the man. "And now, I suppose, they're going somewhere to practice close-order drill or something like that?"

"Something like that," Major Doolathata agreed. "Ah, here is your car. In just a short time now we will have you in Pnik for your meeting with General Phenoboomgarat."

It did not, however, work out that way.

When they reached the Fourth Armored Army's headquarters a female officer with colonel's insignia came out and engaged in a long, feverish conversation in Iriadeskan with the major. Then the major, looking angry, strode away, and the colonel turned to Sanford. "General Phenoboomgarat has been called away on urgent business," she explained in

perfect, idiomatic American English. "I will take you to your hotel, where you can rest and enjoy an excellent lunch until you are called for."

One had to get used to Iriadeskan ways, Sanford thought with resignation. Anyway, a rest sounded good. Lunch sounded even better, because Sanford hadn't had time for breakfast and his befuddled metabolism was assuring him that, whatever number of clock hours or days had or had not elapsed, it was well past time to eat again. "What's your name?" he asked as the car turned toward the riverfront.

"I don't think you could pronounce my name, Mr. Sanford," said the girl, "but you can call me Emily. Tell me. How are things in America? What's the new music? Are there any good new films?"

Neither of those were subjects Sanford had expected to come up in Iriadeska, but the colonel's face under the uniform cap was pretty and putting on a military tunic had not kept her from adding, Sanford's nose informed him, a charming hint of Chanel. Inside the car she seemed far less an alien military officer and far more an attractive young woman. Sanford did his best to tell her about the Madison Square Garden concert he had attended the month before, and what the reviewers said about the latest batch from Hollywood; and they were at the hotel before he was ready for it.

At the registration desk she was all officer again, firm with the clerk, peremptory with the head waiter of the hotel restaurant—all of it in Iriadeskan, of course. Then she said to Sanford, "I will leave you here to enjoy your meal. All of your expenses will, of course, be met by the Iriadeskan Army, so do not allow them to ask you for any money. Not even tips! Especially not tips, because Americans always tip too much and then these people get sullen when they must serve an Iriadeskan."

"I would enjoy my meal more if you could keep me company," Sanford suggested; and when she smiled and shook her head, pressed a little harder: "I have so many questions about my responsibilities here—"

"Such as?"

"Well, there's this business about the Martians. I wondered—"

But she was suddenly stern. "Please be careful of your conversation here in the hotel! Everything will be explained, Mr. Sanford. Now I must return to my duties."

Sanford sighed and watched her leave, then allowed the head waiter to seat him.

The hotel dining room was vast, marbled, draped, and nearly empty. Sanford puzzled despairingly over the mimeographed menu for several minutes, trying to assess what might be edible among dishes like "twice-cooked fiathia with seven-moons rice" and "cinnamon perch, crayfish sauce." Then an altercation among the idling knot of waiters at the far

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end of the room at last produced a handsome menu the size of a newspaper page, in English and French.

It didn't end there, though. The waiter shook his head over Sanford's request for the breast of duck with Madagascar pepper sauce; no duck today, he indicated. Also no lamb cutlets with honey-flavored lamb gravy, also no poached filet of Iriadeskan mountain trout. When Sanford finally put his finger on the club sandwich à la Americain the waiter beamed in congratulation; the foreigner had at last struck on a winning choice.

Sanford had the good sense to order tea instead of coffee to go with the meal. The tea arrived in a pewter mug with the Lipton's tag hanging over the side; that, at least, was a known quantity. The club sandwich was less encouraging. One layer seemed to be a sort of egg salad, with unidentified red and brown things chopped into it. The other was meat on a bed of lettuce, but what the meat had been when alive Sanford could not determine.

Still, it was chewable, and not obviously decayed. Sanford's hunger overcame diffidence. He even began to relax. It was the first time in very many hours that that had been possible. What the future held was undecidable but at least, Sanford told himself, he was on an important job in a highly exotic place. He tried to remember if any of his jet-setting acquaintances had ever mentioned dropping in on Iriadeska and came up empty. If only he had brought a camera! It would have been worth doing to be able to say to a date, "Oh, listen, I've got these slides—temples, Buddhas, elephants . . . " And he had actually seen all those things, even though briefly out of the window of a moving car. Maybe if he got this job well started there would be time for sightseeing. Time to get a better look at those funny idols with Abe Lincoln stovepipe hats—if idols was what they were, and not just ornamentation—and get out into the countryside again to see some of those elephants at work . . .

He perceived he had company.

Two saffron-robed monks had entered the dining room, a skinny young one and an immensely fat older one, both holding their begging bowls before them. Six waiters materialized at once to bow to the monks, take their bowls, convoy them to Sanford's table, and race around to bring glasses, pitchers of ice water, even a vase of orchids. The monks seated themselves without invitation. The fat, old one beamed at Sanford, and the skinny young one said, in excellent English, "This is Am Sattaroothata. He bids you good morning."

"Good morning to you too," said Sanford uncertainly. Was he supposed to give them money? Would that be a terrible, unforgivable social blunder? Was this one of the categories Colonel Emily had meant to include under "tipping"?

The young monk went on, bringing the balls of his fingertips together

as he spoke the name, "Am Sattaroothata is a very wise and holy man with many, many devoted followers. He is also the brother, on both sides, of General Phenoboomgarat. Furthermore, Am Sattaroothata—" fingers pressed together—"wishes me to inform you that he is really not prejudiced against Americans at all."

Sanford was saved from having to respond to this piece of information by a pleased grunt from Am Sattaroothata. The waiters had come back, bringing the filled begging bowls. Actually, "filled" applied only to the fat monk's bowl. The younger one's contained only a few lentils, a dab of rice, and what might have been a single, thin strip of some kind of dried fish. Am Sattaroothata's, on the other hand, was a symphony. There were crisp stalks of sliced celery, carrot, and other crudites, all tastefully arranged around canapes delicately constructed of pates and bright pink tiny shrimp, topped with rosettes of cheese or scarlet pimientoes or what certainly looked a great deal like caviar. Am Sattaroothata grunted to the young monk to proceed while he waded in.

"It was Am Sattaroothata," said the young monk, resolutely not looking at his superior's bowl, "who choose your firm to assist in our public-relations situation here in Pnik, Mr. Sanford. He was greatly disappointed in the failure of your predecessors to come to terms with the urgency of the matter."

"Now, wait a minute," cried Sanford, suddenly concerned. "What urgency? For that matter, what predecessors? No one said anything to me about having some other PR people here."

The young monk looked alarmed. He turned beseechingly toward Am Sattaroothata, fingers pressed so tightly together that Sanford could see the dark skin whitening around the fingernails. He whispered urgently in Iriadeskan at some length. Am Sattaroothata heard him out, then shrugged. As the younger monk returned to Sanford, Am Sattaroothata glanced casually over his shoulders at the cluster of hovering waiters. That was all it took. They whisked away his now empty bowl and returned it in seconds, wiped spotless, now with a wine bottle in it. Sanford had barely time to read the words "Mouton Rothschild" on the label before one waiter whisked it out of the bowl to uncork,while another set a long-stemmed crystal goblet before the monk, and the remainder bore the empty bowl away.

While the wine waiter was pouring out a drop for Am Sattaroothata to taste, the other monk began to explain. "Six months ago, Mr. Sanford," he said,"even before this matter of the Martians came up—"

Explosion of wine in an angry bellow from Am Sattaroothata, and the younger monk looked up in agony. "It is not important about the Martians yet, Mr. Sanford," he said, cringing. "Allow me to say this in proper order. At that time it was decided that our valiant Iriadeskan Army,

while ever unchallenged in battle, had failed to win the hearts and minds of the Iriadeskan people to the degree properly earned by their valor, constancy, diligence, and unflagging loyalty to the state." He glanced at his superior, who seemed to have settled down, and then, longingly, at the sparse and still untouched contents of his bowl. "So therefore, Mr. Sanford, an American public-relations firm was employed to help bring this message to our people, at a cost of many tens of thousands of rupiyit."

Am Sattaroothata, absently sipping his wine, gave a peremptory grunt. The young monk flinched and spoke faster. "To make a long story short, Mr. Sanford, two weeks ago, just when they were most needed, these other Americans resigned the account and left without notice, thus greatly inconveniencing our plans at a critical juncture—"

"Now, hold it right there," Sanford snapped, putting down the remains of his tasteless sandwich. "I want to know more about this other outfit, Mr.—say, what's your name, anyway?"

The young monk turned miserably to the other for instructions, got a negligent nod.

"I am Am Bhopru, Mr. Sanford," he said, "but my name is of no importance. May I proceed? Am Sattaroothata wishes me to explain to you at once your mission and the significant state purposes it will serve."

"Hell," said Sanford, but only in a mutter. The situation was not new. He had felt just this way, back in his freshman year in college, when he had for the first time tried using a computer to whip up a synoptic report on a marketing development in his first business-management course. The thing would give him all the information he wanted. But it would do it at its own pace and after its own style, and if he tried to short-cut its processes he simply fried the program. "Go ahead," he said sulkily, his attention diverted by the waiters hurrying back with Am Sattaroothata's bowl. It now contained what Sanford was quite sure was the breast of duck with Madagascar pepper sauce, flanked by perfectly steamed broccoli and zucchini, with two orchids tastefully laid across the rim. Sanford glared at the remains of his miserable sandwich in disgust, hardly hearing Am Bhopru's long-winded explanations.

The young monk was, after a fashion, answering his question. The previous PR team, it turned out, had come from one of Mad-Ave's highest-powered public-relations firms. They had operated on the grand scale, starting with an all-out public-opinion polling survey. "That was completed within one week of commencement of operations," said Am Bhopru, "and you will be supplied, of course, with complete transcripts of their findings."

"Who did the polling?" asked Sanford.

"Oh, that was quite easy. Am Sattaroothata instructed fifty of his followers to seek enlightenment in this way."

Sanford shrugged; it was seldom a good idea to have interested parties do your polling, but he saw no point in bringing it up yet. And evidently there had been at least a sizeable effort. The monks had covered most of the neighborhoods of Pnik and even out into the fishing villages and farm communities and hill towns. "So the pulse of the Iriadeskan people has been taken," said Am Bhopru, and added proudly, "Of course, all of the data have been stored in our computer, and the printouts are here."

He pulled a thick sheaf of tractor-feed paper out of the recesses of his robe and passed it over the table. "Perhaps you will be good enough to look it over now," he said, and then, with an apologetic fingertip-touch to Am Sattaroothata, began greedily shoveling in the lentils and rice from his bowl.

Sandord struggled with the folded sheets. They were filled with tables and graphs and, although each page was neatly numbered, there was no sort of index to guide him in searching for some sort of summary or overview. In any case, he ran out of time. He had barely begun to read *Major Policy Issues, First Survey*, when Am Sattaroothata, picking duck out of his teeth, signaled the waiters. Immediately they flocked to take his bowl. It reappeared in a moment, scoured clean and filled with petit fours and fresh pineapple chunks, but the fat monk shook his head.

Am Bhopru gamely tried speaking while at the same time scooping the last of his rice into his mouth, and managed, "Is time, Mr. Sanford." (Chew, swallow.) "Is time for us to go to headquarters of General Phenoboomgarat. A car is waiting." And he managed to swallow the last mouthful and give his bowl a brisk wipe with his napkin just as four waiters, two on each side, surrounded Am Sattaroothata and helped him, grunting, to his feet.

The car was a custom-stretched Cadillac, easily fourteen feet long. The seating in it was according to rank. Am Sattaroothata got the huge rear seat to sprawl in all by himself. A jump seat was pulled down for Am Bhopru, while Sanford, with his ten yards of printout, went up front, next to the uniformed driver.

Like every Asiatic city, Pnik's streets were densely packed with human beings using every form of transport possible. There were huge tour buses, mostly empty, and garishly painted city buses, almost as big. There were the converted flat-bed trucks with wooden benches installed that they called mini-buses; there were taxicabs of the standard worldwide sort, and those of the other, three-wheeled variety called tuk-tuks, with their open seats and motorcycle engines. There were real motorbikes and scooters; there were people on bicycles, usually two on each, one impassively riding the handlebars; and, in and around all the vehicles, there were pedestrians. Millions of pedestrians. They dawdled at the open-fronted shops and ambled across the streets and haggled at the

hawker-food stands along the curbs; they were everywhere. Almost everywhere. Though the streets were narrow and the traffic nearly solid, somehow the huge limousine purred through. Channels of clear space opened around it, as if it were a water-taxi slashing through the mats of water-hyacinth on the Choomli River. Sanford could not tell exactly how that happened. The pedestrians did not seem conscious of the car. They didn't even seem to look at it, and the soldier-chauffeur never blew his horn. But wherever he chose to turn, aisles of space appeared.

Sanford spent little time looking at the scenery. His big interest was in his bale of tractor-feed, and he flipped it clumsily back and forth as he rode, searching for answers, or at least clues. It was a gift of God that it should have been there for him . . . but there was so much of it! And not just text. There were pie-charts and graphs and histograms, most of them in brilliant color; there were long tables of numerical data, and parenthetical summaries of the statistical tests, chi-squared and more sophisticated ones still, that had been carried out in support of the conclusions.

And there were conclusions.

When Sanford found them he sighed in relief. The relief didn't last. The conclusions were clear enough; his predecessors had measured Iriadeskan public opinion on many questions. It was the questions that were surprising.

The main issues polled were ten:

1. High taxes.
2. Increase in national debt.
3. Corruption in government.
4. Worsening balance of payments.
5. Urban crime and river/canal piracy.
6. Lack of appropriate employment for college graduates.
7. Iriadeskan government attitude toward Martians.
8. Failure to build additional temples.
9. Improper observance of major religious holidays.
10. Lack of sufficient funds to properly train and equip valorous soldiers of Glorious Iriadeskan Army.

Sanford gazed out the window, frowning. Peculiar! Not the first five questions, of course—they were the sort of thing the citizens of almost any country in the world, including his own, might be concerned about. But in the responses to the polls, all five of those were well down on the list of Iriadeskan worries! Even stranger, when the respondents were asked to rank their major concerns in order, the top of the charts, by a large margin, was concern that the army wasn't getting enough

money—followed closely by disapproval of the government's attitudes toward the Martians!

It was positively astonishing how often the Martians seemed to come up in this place—and positively annoying how little anyone seemed to want to talk about it.

Sanford swiveled around in his seat, waving the sheaf of papers. "Hey!" he cried. "What's all this Martian—"

He couldn't finish because Am Bhopru leaned quickly forward and pressed a palm over Sanford's mouth; it smelled of fish and cloves and cigarette smoke, and it effectively cut Sanford off in the middle of a sentence. "Please!" the monk whispered urgently. "You must not speak now. Am Sattaroothata is meditating."

It didn't look like meditating to Sanford. The fat monk seemed sound asleep, and in fact Sanford could hear gentle snores coming from the shaved, lowered head. Fuming, Sanford turned back to the printouts.

Riffling through the sheets he found—if not exactly answers—at least supplementary data. There had not been a single poll. There had been, it seemed, one every ten days, and the ranking of matters of concern had changed markedly over the time involved.

There was, for instance, a graph showing the increase in concern over the Martian question that showed almost negligible interest a few months ago, gaining steadily at every sampling until it approached the Number One money-for-the-army question in importance. While the army budget question had started strong, in third place after the two religious questions, and finished stronger, in fact all by itself at the top.

You could understand that, in a way, thought Sanford, frowning to himself. The way the army question was put was highly slanted; it forced an answer, which was bad polling practice. He was surprised that a reputable public-relations agency had phrased it that way, in violation of all established procedures . . . though, no doubt, they had been subject to a certain amount of pressure, since it was the Glorious Iriadeskan Army who had been their, as well as his own, employers. Certainly it meant that there was a substantial chance of error in the numbers generated . . .

But not enough of a chance to alter the fact that Iriadeskans seemed very much to want more money given to their army.

And that did not in any way explain the Martian vote.

Sanford folded the sheets and gazed unseeingly out at the hordes around him. Something drastic had been going on in Iriadeska. But what?

He tried to calculate. The earliest polls had been taken four months earlier. That took him back to June. Had something special happened with the Iriadeskan Army in June?

If so, he realized, no amount of cudgeling his brains would tell him what it had been, since he had barely heard of Iriadeska in June. Maybe someone would tell him if he asked the right questions, but that would have to wait until he was allowed to open his mouth.

All right, then, what about the Martians. Had something special happened with the Martians in June?

He couldn't think of anything. They had taken off in January. One of them had died a month later. The expedition was due to land fairly soon—within the next week or two, if he remembered correctly. But how could any of that account for a sudden surge of interest four months back, while they were doing nothing more interesting than dawdling through space on their interminable return flight?

There was one thing that could account for sudden interest in any subject. He knew what that was because it was what he did for a living. It was called "publicity."

Had the Iriadeskan Army, for reasons not known, hired the PR firm to whip up Iriadeskan interest in the Martians as well as in itself? And, if so, for God's sake, *why*?

"Mr. Sanford?"

He turned, blinking. It was Am Bhopru, leaning forward to whisper urgently in his ear. "We are almost there," he said, contriving to watch worriedly the sleeping older monk while whispering to Sanford. "When we pass the sentries at the entrance to the compound, please be sure not to make any sudden movements."

Sudden movements?

Sanford had another of those nasty, shrinking feelings. What kind of place was he going to, where something might go wrong if he moved the wrong way? He blinked out the window. They were still moving through narrow streets, but most of the traffic was gone. No more buses of any kind, a handful of pedal-bicyclists scattering away out of sight as fast as they could go, pedestrians vanishing into buildings. The big Cadillac limousine had the streets almost to itself, except for an occasional hurrying tuk-tuk.

And, funnily, all the tuk-tuks seemed to have several things in common. They were all going in the same direction—toward the Army compound, along with Sanford's own vehicle. And every one of the tuk-tuk drivers had an identical expression of worry on his face and identically carried a single passenger—an Iriadeskan Army soldier—and each one had one of those nasty carbines across his knees.

The young woman with the colonel's insignia on her uniform conducted Sanford wordlessly into the headquarters building. She did not respond to his greeting. She didn't even smile. She simply led the way to a door

and threw it open. Pressing her fingertips together, she said, "General Tupalakuli and General Phenoboomgarat, this is Mr. Charles Sanford."

Sanford wondered if he should bow—or kneel, or crawl on his belly like a worm; he compromised by nodding his head briefly, looking at his employers. General Tupalakuli was short and skinny, General Phenoboomgarat was short and fat. They wore identical gold-braided officers' uniforms of the Iriadeskan Army and sat at identical teak desks the size of billiard tables. Each desk was angled slightly, so that they converged on the spot where Sanford was standing, in the center of the room. On a staff between them was the Iriadeskan flag, three broad bars of green, white, and violet, with twenty-seven stars that represented the twenty-seven islands of the Iriadeskan archipelago.

The colonel—had she said her name was Emily?—pressed her fingertips respectfully together before her breast and said, "This is Mr. Charles Sanford." Then, to Sanford, "General Phenoboomgarat and General Tupalakuli welcome you to the cause of the Glorious Iriadeskan Army. General Tupalakuli and General Phenoboomgarat wish you to know that you will be given every possible assistance in the accomplishment of your mission. General Phenoboomgarat and General Tupalakuli ask how long it will take you to draft your first proclamation, expressing the need of the Glorious Iriadeskan Army for a fifty-five percent increase in its annual budget, with escalator clauses for inflation?"

Sanford swallowed and glanced around. What he had not at first noticed was that there was another door to the room. It was half open, and through it he could see the two monks, the fat one reclining on a love seat, the skinny one hovering nervously behind him. Am Sattaroothata beamed encouragingly at Sanford. Am Bhopru merely looked frightened at being present at this meeting taking place at the highest of all levels.

Sanford returned to Colonel Emily. He licked his lips and did his best with the question she had asked. "Well," he said, "if I had a typewriter and some paper, and someone to fill me in on the issues—maybe a couple of hours, I guess."

The colonel looked scandalized. She glanced at the two generals and lowered her voice, though neither of them showed any signs of comprehension, much less concern. "You do not have hours, Mr. Sanford! There are many, many proclamations and that is only the first. Can't you type fast? Remember, what you write I then have to translate into Iriadeskan and submit it to General Phe—General Tupalakuli and General Phenoboomgarat," she corrected herself, tardily remembering where she had been in the rotation to give each one equal eminence. "No, hours are out of the—"

She stopped before the word "question" because, evidently, there was even less time than she had thought. The phones on the desks of the two

generals rang simultaneously. Each general picked up his phone and listened silently for a moment, then they gazed at each other. "Yom?" General Phenoboomgarat asked. "Yom," General Tupalakuli confirmed. They both said, "Yom!" into their telephones and slammed them down in unison.

"It is starting," the colonel whispered.

Outside, in the courtyard of the Army compound, there was a sudden racket of engines starting: deep thudding diesels, yapping little put-puts. In the room still a third door opened, and a lieutenant entered bearing a folded cloth. With an apologetic salute to each of the two generals, the lieutenant began to take down the Iriadeskan flag from its staff.

Sanford said desperately, "What's going on?"

The colonel glanced at the two generals, and then said, "Why, the Iriadeskan people are about to take back power from the corrupt bureaucrats under the wise leadership of General, uh, Phenoboomgarat and General Tupalakuli, of course. See for yourself." And she indicated the window looking out on the courtyard.

Dazedly, Sanford stared out at the scene. The throbbing basso-profundo motors belonged to tanks—big ones, at least twenty of them, with wicked-looking cannon snaking back and forth from their turrets as they began to grumble forward. The higher-pitched noises were tuk-tuks. There seemed to be hundreds of the little three-wheeled vehicles. Each one was driven by a soldier, with three more soldiers crammed into the passenger seat behind him, and all of them armed with the rapid-fire weapons.

"Oh my God," Sanford whispered.

The colonel said crossly, "Now you see why things must be done at once. Please stand at attention!"

Sanford blinked at her. She was standing militarily erect. So were the two generals at their desks. Through the open door he could see Am Bhopru helping his fat superior to struggle to his feet, and all of them raising their right hands in salute.

The lieutenant had taken down the old flag and a new one hung in its place.

At first Sanford thought there had been no change; the broad bars were the same, and the design in the ensign was hidden in the folds of the cloth.

Then the lieutenant reverently pulled it taut, holding his salute.

The twenty-seven stars were gone. In their place, woven in threads of silver, was the image of—a manatee? A Mindy Mars doll?

No. It was the image of a seal-like creature with spindly legs like those of a newborn racehorse, just like the ones that were slowly coasting toward their landing on Earth in the returning spacecraft of the Seer-seller expedition.

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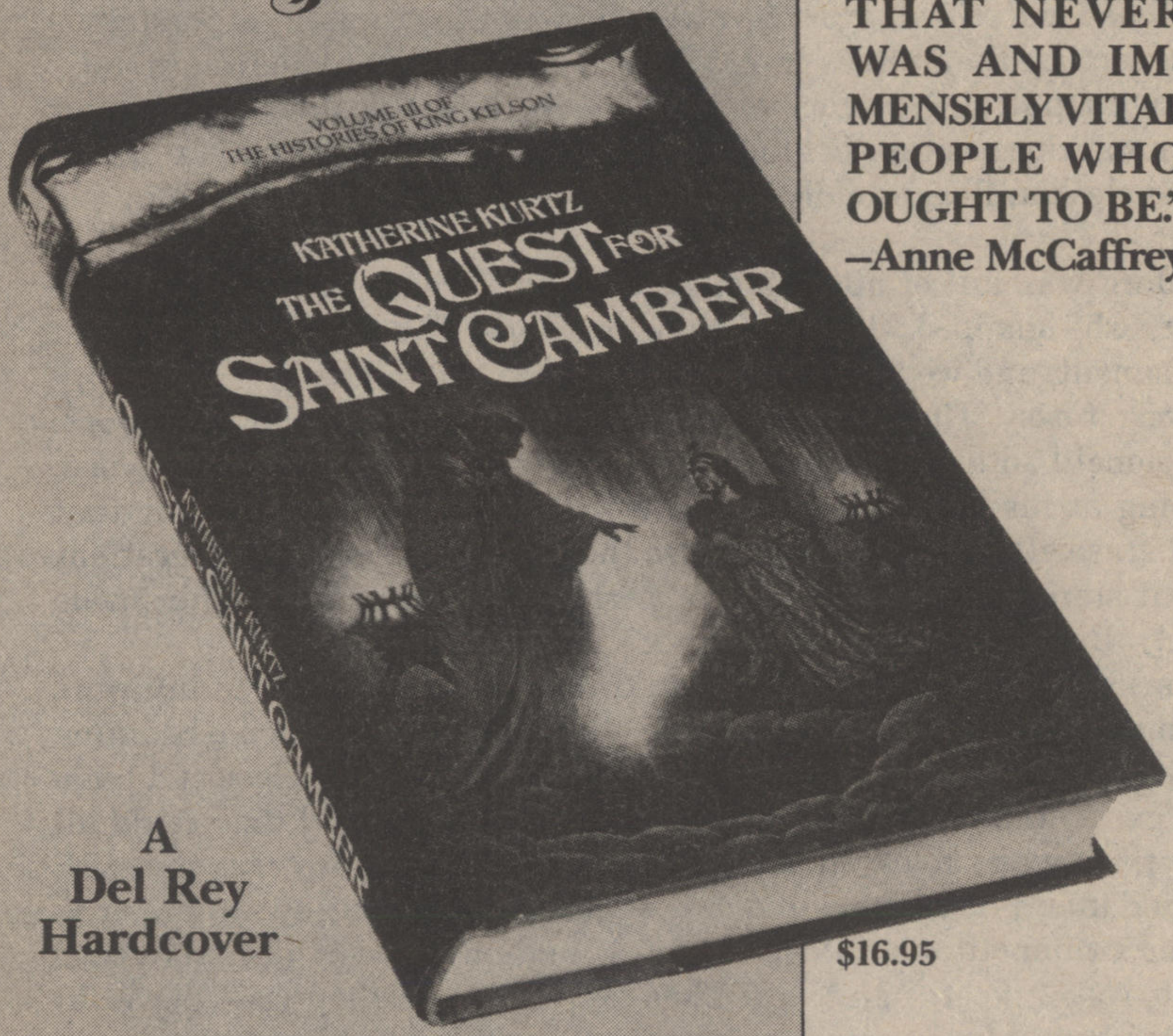

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It was a Martian.

The typewriter was not a typewriter. It was a word processor, and the room it was in was not an office. It was a television studio. The TV station was located in the heart of the military compound, red lights flashing from the tops of its antennae. It was in the tallest building of the lot, surrounded by squat barracks and armories and headquarters buildings; it was a good seven stories tall, not counting the skeletal antenna structure that added another hundred feet.

Crossing the parade grounds to the television studio, Sanford and the colonel had had to dodge for their lives between the columns of ponderous tanks, sorting themselves into a line of march toward the main gate, with the supporting motorized infantry in their tuk-tuks racing their motors to take position behind the armor. Every vehicle bore a brand-new Iriadeskan flag, proudly displayed. And every flag bore the Martian design.

Sanford was full of questions. The colonel forbade him to ask them. "Later," she snapped. "First the proclamations! The march will begin at any moment, and we must have the broadcast ready!"

It wasn't easy. The word processor was a brand unfamiliar to Sanford. The colonel had to set it up for him and stand over him while he typed, grabbing at his hand when he seemed to be reaching for the key that would erase all he had done, or cause the program to suspend operations while it stored a backup record, or perhaps switch to some other mode entirely. But once he had the hang of it, he typed fast.

This sort of thing was in the best traditions of his craft. Many were the times when the Old Man, or some other Old Man, had come beaming and gently deprecating into the copywriters' room at the close of a business day, to announce there was a fire to be put out and they could all phone their wives to say that dinner would be late. Many was the stick of copy Sanford had hammered out, under the gun of a newsbreak, or to counter a competitor's sudden thrust. It had never been quite like this, though. Never before had Sanford had to create powerful prose—powerful *translation-proof* prose, since he knew nothing of the Iriadeskan language his words were to be translated into, and could not risk word-play or jokes—on a subject of which he knew nothing, for an audience he had never encountered, on a machine he had never used before. When he had managed to hit a *Cancel* key a moment before the colonel's hand could stop him, and wiped out three lines, she gritted her teeth and pushed him away from the chair. "Just dictate," she ordered. "I will type. What you must say is that the New People's Reform Government, responding to the righteous needs and wishes of the Iriadeskan masses, has taken over the functions of the corruption-ridden and entrenched old power

elite, for the purpose of inaugurating a new era of peace, prosperity and reform for the proud Iriadeskan nation, under the wise leadership of the Glorious Iriadeskan Army."

"Hey," said Sanford,"that's fine the way it is. What do you need me for?"

"Just dictate," she ordered, and after a few false starts they had produced Communiqué No. 1:

People of Iriadeska!

This is the dawn of a new day for Iriadeska! The New People's Reform Movement, wisely responding to the just needs and aspirations of the Iriadeskan people, has kicked from office the petty bureaucrats and corrupt officials of the scandal-ridden and incompetent usurpers of power. This is the first day of the triumphant rebirth of the Iriadeskan nation, moving promptly and surely to a time of peace, prosperity, freedom, and reform for all Iriadeskans. Long live the Glorious Iriadeskan Nation and its beloved allies from afar!

"What's that about allies from afar?" Sanford asked, peering over the colonel's shoulder.

"Later, later," she said absently, beginning to translate it into Iriadeskan. He backed away to leave her to it, not dissatisfied. It wasn't sparkling prose. It wasn't even *his* prose, or most of it wasn't, because the colonel had edited as she typed. But it was, after all, a pretty fair first try for a man whose major recent work had been devoted principally to the task of persuading American consumers that no table was properly set for a meal without the presence of a jar of pickles and at least one kind of preserved condiment.

The colonel gnawed a knuckle as the printer zipped the words onto paper. Then, without speaking, she rushed out of the room with the copy.

Only minutes later, Sanford had the satisfaction of seeing Am Sattaroothata himself on the desk TV, reading the proclamation àloud in Iriadeskan. He listened attentively to the unfamiliar words that had come, at least partly, out of his own brain. It sounded, he decided, very Iriadeskan. When the old monk stopped reading he gazed benignly into the camera for a few minutes, while music played—no doubt the Iriadeskan national anthem.

Then the screen went to black.

Tardily, Sanford wondered how the revolution was going. In the soundproofed TV studio there was no hint of what went on outside.

But there was a hall just outside the door, and a window at the end of the hall.

There was also a pair of Iriadeskan soldiers standing there with guns

at the ready, Sanford discovered when he opened the door. They only glanced at him, though, and turned back to the stairwell, perhaps ready to repel any scandal-ridden and incompetent corrupt bureaucrats who might attack. Sanford walked cautiously to the window and glanced out at the courtyard.

He had supposed that the tank column had already left to fulfill its mission. It hadn't. All the tanks and tuk-tuks were still right there, just as before, except that now they were all motionless and their engines seemed to have been turned off.

The guards stiffened to present arms. Sanford turned apprehensively, just in time to see Colonel Emily appear on the stairs. "Oh, there you are," she said breathlessly. "I just came to tell you that there is a policy matter that must be decided. Study the former proclamations. I will return shortly." And she turned and hurried back out again.

"Shortly" turned out, in fact, to be rather longly. Sanford spent twenty minutes or so puzzling over the last batch of communiques, issued by some previous "New People's Revolutionary Something-or-other Government," trying to find out just what he was expected to do. Many of them had to do with the questions his predecessors had polled—more money for the army, jobs for the unemployed college graduates, temples, subsidies for young men when they put in their customary year of monkhood. But some were quite odd, notably one that said:

> Humble and reverential Iriadeskans! The Elephant is our Mother and our Beloved! All revere the Elephant for its wisdom, gentleness, and grace! In the symbol of the Elephant lies our strength and our glory. Let no one dare defame the precious Creature, for just as the Elephant is the loving preserver of Man, so will the Holy National Reform Enlightenment Movement be the loving servant, teacher, and ever-righteous guide to the reverential and obedient masses of the Iriadeskan people.

Perhaps, he decided, it sounded better in Iriadeskan, but it didn't seem to move him very much. And the colonel still had not returned.

Sanford risked another look out the hall window. Nothing had changed. Nothing looked as though it ever would change. The tanks seemed fixed to the parade ground as firmly as war memorials. The soldiers were squatting in groups about the courtyard, smoking fat yellow cigarettes and chatting desultorily among themselves.

And Sanford's physical exhaustion was beginning to catch up with him.

He glanced at his wristwatch, still on U.S.A. Eastern time. He despaired of trying to convert it to whatever they used in Iriadeska, but

the watch told him unequivocally enough that it had been either twenty-nine or forty-one hours since he had boarded his first plane at Kennedy, his head full of the Old Man's last-minute instructions. "The first thing you do," he had ordered, "is send me a full situation report. Don't leave out a thing, and don't let them put you on anything that will keep you from doing that *first*." Well, that certainly hadn't happened the way it was supposed to. Would there be trouble over that when he got back? Could he have done any different? The Old Man had gone on: "This could be The Big One, Charlie, so make sure I know what's what. I want to know everything there is to know about the situation in Irano—Iderian—"

"Iriadeska," Sanford had supplied. "Right, Chief!"

But yessing the Old Man and carrying out the Old Man's orders were two different things, and no one had said anything about Martians, elephants, or an armed revolution. What possible situation report could Sanford now file, assuming he would be allowed to file any, that would convey to the Old Man, sitting in the Old Man's big, bare office overlooking the noisy traffic of Fifty-seventh Street, just what sort of can of worms Sanford was being required to untangle on the steamy opposite side of the world? He wouldn't believe it! Sanford managed a wry grin, thinking of the Old Man's expression if he got such a report—If a truthful report could be filed without once and for always breaching the mutual cozy agency-client relationship the Old Man prized—If any report at all could be filed, anyway, without some potentially very unpleasant consequences to Sanford himself—

He stiffened, staring down at the parade ground.

There in the floodlights, picking his way daintily among the troops and vehicles, was a short, skinny man in a general's uniform. Behind him were two Iriadeskan soldiers. Their carbines were at the ready, and as they followed they watched the general's every move.

If the man in the general's uniform was under arrest, as it certainly seemed he was, it did not appear to disturb his disdainful poise.

But it certainly disturbed Sanford's poise. Quite a lot. Because, even at that distance, and with the lighting as chancy as it was, he was quite sure that the man being taken away under guard was the co-leader of this coup, or revolution, or spontaneous people's uprising against the corrupt bureaucrats, or whatever it was he had stumbled into. Specifically, it was General Tupalakuli.

Although there was no casting couch in the studio, the armchairs were not hopelessly uncomfortable. Certainly they were a lot better than the airplane seats Sanford had spent so much of his recent past in. When Colonel Emily at last returned he was fast asleep.

"Wake up, wake up," she said crossly, and Sanford did. She helped the process a little by providing coffee—what she called coffee, anyway. She

had cups, and a jar of some Asiatic brand of instant, and a huge thermos of nearly boiling water.

By the time he had forced half of the first scalding cup down, Sanford was awake enough to ask questions. The answers he got, though, were not very illuminating. Yes, Emily admitted, the man under guard was in fact General Tupalakuli. Why was he arrested? Why, she parroted, he had revealed himself an enemy of the Iriadeskan masses; therefore the New People's Reform Government had been forced to remove him from his position of trust. But that would not prevent the successful accomplishment of the coup, she explained. General Phenoboomgarat and his brother, the monk Am Sattaroothata, were even now engaged in high-level policy discussions which would in fact have the effect of strengthening still further the invincible New People's Reform Government—

And then she stopped and took a sip of coffee, watching Sanford over the rim of the cup, and finally grinned. "Well," she said, "that's more or less true. Actually it was mostly a question of leadership posts."

"Meaning what?" demanded Sanford.

"General Tupalakuli wanted his wife's uncle to be appointed Iriadeskan Ambassador to the United Nations because it's in New York and he has always been fond of Broadway musicals. General Phenoboomgarat, however, had already promised it to his second son's mother-in-law's brother."

"Are you serious?" asked Sanford, startled. The colonel shrugged, and at last he laughed out loud. "When in Rome," he said, and thought for a minute. He frowned. "General Tupalakuli's wife's uncle sounds like a closer relative," he pointed out.

"Oh, surely. But there are other considerations. Mainly, General Phenoboomgarat's second son's mother-in-law's brother has three estates in California and part of a condo development in Connecticut. He wants to keep an eye on them. It's always useful to have something like that," she explained. "If a coup goes sour and somebody has to go into exile, it's nice to have somewhere to go to."

Sanford opened his mouth to speak, and then closed it again. He looked at her wonderingly, and caught her glancing at her watch. "These high-level discussions," he said. "How long are they likely to take?"

"At least a couple of hours yet," she told him. "Air Chief Marshal Pittikudaru has to helicopter in from his base at the Choomli River delta, but he won't leave until he is assured that the general of either the Fourth or the Seventh Paratroop Brigade is supporting the coup. And they're waiting to see if His Majesty is going to take a position."

"Will he?"

"His Majesty? Oh," she said thoughtfully, "probably not. He's got about

as many relatives on one side as he has on the other. But no one is sure because he's on a state visit to America and he hasn't yet said anything. If he turned out to be for us, or neutral, then everything can go ahead as planned—not counting General Tupalakuli, although then he might come back in. But if the king is against, then that's all different. It might mean almost anything. Probably at least somebody from the royal family may have to be included because, you see, General Tupalakuli's father-in-law used to be His Majesty's father's first prime minister, and so he was close to the court. On the other hand, His Majesty *does* have strong feelings now and then."

"So he might intervene for one side or the other?" Sanford offered, trying to keep up.

"No, no! Not for a *side*. His Majesty doesn't get into *politics*. He is—oh, I don't know how to explain this to you—the king is like supreme in matters of *tradition*, and *religion*, and, well, good taste, do you see?"

"I don't see," Sanford said despairingly. "Start from the beginning, won't you?"

Fortunately, Colonel Emily didn't take him at his word. Iriadeskan history went back seventeen hundred years, and all of them were full of plots, conspiracies and coups-d'etat. She went back only as far as World War II, when the then king had been an unusually popular—which was to say, fairly popular—and relatively secure monarch who had made one little mistake. He thought that when the Japanese took over from the French and British, who had divided Iriadeska between them for a couple of hundred years, the Japanese would stay. The 1945 surrender was a crushing blow. He didn't think the returning Europeans would like keeping him on the throne, and he was right. They didn't. So the collaborator king abdicated and spent the rest of his life, happily enough, in Antibes. A nephew was crowned. The boy had been in Oxford when the war broke out. He spent the entire war there, in the uniform of the R.A.F., safely assigned to ground duties. He had developed into a loyal subject of the British crown.

Unfortunately for the dynasty, that didn't work out either. Independence came. The young king didn't get deposed. He was simply required to turn the governance of Iriadeska over to a Council of Ministers. There it had remained ever since, with continual ebb and flow of members in and out as factions jockeyed for power. Or at least for plunder.

Iriadeska was not handicapped by many confusing notions of democracy. They did quite frequently have elections, but the candidates were always from the small list of the elite. No one not at least marginally a member of the Royal Family ever served as police chief or diplomat or military commander in Iriadeska, much less as a member of the Council

of Ministers. However, that still left a large pool of available talent for every imaginable government office because over seventeen hundred years the Iriadeskan royal family had come to include many thousands of its citizens.

Still, it was an arithmetical fact that there were, altogether, something like twenty-odd million Iriadeskan nationals. Most of the millions were not related to royalty in any detectable way. They were the ones who chopped the cane, slashed the rubber trees, clerked in the banks for off-shore trading, worked in a few factories and staffed the tourist hotels, as well as doing everything else in Iriadeska that produced wealth. Some of them produced quite a lot of it. This was especially true among the Chinese community, where there were many privately owned wholesale establishments, brokerages, and shipping companies. None of these people, even the rich ones, could ever hold any really responsible role in the Iriadeskan government, but that did not make them unimportant. Indeed, the Iriadeskan government always had a very important part for these citizens to play, regardless of who made up the Iriadeskan government of that moment.

They could be taxed.

Sanford, listening to all this, shook his head, uncertain whether to laugh or lose his temper. He said, "So after forty years some people want a redistribution of the loot?"

Emily looked at him in puzzlement. "Forty years? What do you mean, forty years? It has been, let me see, yes, twenty-two months since the last coup attempt, not forty years. That was when two wing commanders of the Royal Iriadeskan Air Force and the Admiral of the Iriadeskan Navy combined to take over the government. They failed because they couldn't get any ground troops to occupy the Palace. In the last forty years there have been, let me see, oh, I think about thirty-three or thirty-four attempts."

"My God," said Sanford. "It sounds like a regular annual event, like the Rose Bowl Parade."

"I think," Emily said stiffly, "that our national struggles are quite a bit more important than that. Anyway, I'll bet more people are probably hurt in your parade."

"Really? Bloodless coups? How many of them are successful?"

"Ah, but don't you see? That's why you're here. None of them are, usually. So this time Am Sattaroothata persuaded General Phenoboom-garat that we could establish a stable regime with good public-relations management, so they hired you."

Briskly she rose, dumped the remnants of his coffee and refilled it from the jar of instant and the thermos of still very hot water. "Can we now

get back to work?" she asked. "Many of the communiqués can be used whichever way the discussions go, so let us write them."

"The one about the fifty-five per cent raise in Army allocations?"

"Oh, yes," she agreed. "That and many others. Balancing the budget. Cutting the trade deficit. Limiting the police powers of arbitrary arrest and imprisonment to no more than six months without filing charges. And by all means something about finding work for college graduates; you have no idea how many of our people go off to Europe or America to study and have nothing to do when they come home. Why, I myself—"

She stopped, looking embarrassed. "Yes?" Sanford encouraged. "Were you one of those—or are you part American, with a name like Emily?"

She looked surprised. "My parents named me Arragingamauluthiata, Mr. Sanford. But yes, I was one of those. When I was an English major at Bennington we put on a play. It was *Our Town*, by Thornton Wilder. I played the part of Emily, the young wife who dies and is buried in the graveyard, and as most of my college friends had difficulty in pronouncing Arragingamauluthiata, they generally called me Emily. My years in Vermont made me quite fond of Americans, Mr. Sanford, and I have kept the name ever since."

"And when you came back to Iriadeska you couldn't get a job?" Sanford persisted.

"Not one for an English major specializing in the Lake poets, no. In fact, nothing at all, at first." She looked around the Army television studio without enjoyment. "Then the opportunity came for a commission in the Army, and this sort of work. Which, actually, we had better get busy and do."

"Oh, right," said Sanford agreeably, not quite meaning it; it was distinctly more pleasurable to sit and talk with this rather pretty young woman, who mellowed considerably as you got to know her. "Explain one thing to me, though."

"Certainly, Mr. Sanford."

"Charlie, please?" She smiled and inclined her head. "It's about this elephant release. Communique Number Seven."

She took it from him and he watched with pleasure as she bent her head over it. Actually, he was feeling fairly good, everything considered. The revolution did not seem to be turning violent. His short nap had revived him—or perhaps the coffee had; Emily had been making it progressively stronger, so that now it seemed she was barely dampening the crystals.

She looked up. "Yes," she said, "that was Air Chief Marshal Pittikudaru's idea, two coups ago. What about it?"

"I don't see what elephants have to do with revolutions," Sanford said apologetically.

"Because you aren't Iriadeskan. You do understand that this is an old proclamation? It has nothing to do with what's going on now."

"Well, yes, but still, elephants—"

"Elephants are very important in Iriadeska! That coup attempt adopted the symbol of the elephant because the elephant was the servant of man, just as the new government proposed to be the servant of the Iriadeskan people. They bought it, as a matter of fact, even though Marshal Pittikudaru himself pulled out of the attempt when the others wouldn't agree to make him an admiral as well. Only," she sighed, "some of the hill people thought elephants were holy. They didn't want them used in politics."

Sanford was surprised. "I didn't realize what people thought was that important to an, uh, excuse me, a more or less self-appointed government."

"Not what they *thought*," she explained. "What they *did*. The hill tribes made up most of the Eighth and Tenth Armored Divisions, and they all just ran off, tanks and all, until it was over. So it failed, and Admiral Pilatkatha and General Muntilasia are still in Switzerland over that one." She sighed and stretched. She added sorrowfully, "Anyway, his majesty agreed with the hill people. And in matters of religion or good taste, what His Majesty says is, how would you say it? Conclusive. That's why we chose the Martians this time. No one thinks they're holy."

Sanford said doubtfully, "I still don't see the reasoning there. I mean for putting the Martians on the flag."

"Because they so closely resemble our chupri, of course. The chupri, or manatee, is strong, peaceful, kind, and gentle. It helps keep our canals and waterways clear of weed by grazing on water hyacinth. It is a friend to the Iriadeskans, just as our New People's Reform Movement will be, not to mention it is very newsworthy just now."

"I guess I didn't realize that Iriadeskans were so interested in space," Sanford apologized.

"In space? Oh, hardly at all. But that is what His Majesty is doing, you see. He is in America for that purpose."

"You said he was on a state tour!"

"Yes, exactly. He will address the United Nations tomorrow. Then he will visit Atlantic City, where he has investments in several casinos. Then he has been promised a day in Disney World, and then he goes to Cape Canaveral as a guest of your President to welcome the Seerseller expedition back to Earth. I mean," Emily said sharply, "if the *king* can travel thousands of miles to see the Martians come in, that makes them important, doesn't it?"

"I suppose. I don't know much about Martians," he apologized, and blinked when he saw the effect that had on her.

"You *what*?"

"I said I don't know much about Martians," he repeated deprecatingly.

"But you—Your picture was on page one of the newspaper! Your agency chief claimed you were very familiar with the campaign—"

"Oh, you mean Max Mars and Mindy Mars. Yes, I did help out on that, but only for a week or two. And I don't know anything about Martians. That was just dolls, not the real thing."

"Holy shit," whispered the former Bennington student. Sanford blinked. "Oh, Charlie," she said sorrowfully, "do you have any idea what you're *saying*?"

He said defensively, "Well, I certainly never said anything to give anyone the idea that I was claiming to be an expert on Martians."

"What you claimed? What does *that* matter? Am Sattaroothata told General Phenoboomgarat to hire you because we needed a Martian expert. Do you know, do you have any idea at all, what it would mean to say that Am Sattaroothata was *wrong*?"

Sanford said apologetically, "Well, gosh, Emily, I'm sure it would be pretty embarrassing—"

"Embarrassing? *Embarrassing?* Oh, no, Charlie, it wouldn't be embarrassing. I'll tell you what it would be. It would be—it would be—"

Colonel Emily faltered in mid-tirade. She was listening. So, suddenly, was Sanford, because at long last, and even through the soundproofing of the television studio, there was something to listen to. The building itself was shaking with the steady seismic throb of the tanks.

They were on their way. For better or worse, the coup was launched at last.

From the top of the television tower the whole city of Pnik was spread out before them in the steamy Iriadeskan morning. Off to the west there was the River Choomli with its fringe of high-rise tourist hotels and the bright green mats of water hyacinth swirling upstream as the canal dams were opened for the morning traffic, flushing the weed out into the river. To the north the tall government buildings, all new, all shiny in the glass-sided style of every city in the world. To the east the old city with its temples and towers; glints of gold struck the eye as the sunlight bounced off gilded Buddhas and mortuary columns. To the south the airport, its jumbo jets and private planes all motionless. And in all directions, wherever you looked, it looked empty. When the assault column moved out of the compound it seemed to suck all the life of Pnik after it. There was no one in any street Sanford could see.

Nor was there any sound, either, neither from the streets nor from the airport with its interdicted planes. Least of all was there any sound of cannonfire, or tank engines, or screaming casualties or any of the things

twenty years of war movies had trained Sanford to expect. "Shouldn't they be fighting?" he asked Colonel Emily and she looked at him in some surprise.

"The attack is under way," she assured him, "probably. Anyway, Air Chief Marshal Pittikudaru has practically promised to overfly the Supreme Court building as soon as the Seventh Paratroop Brigade takes position around it. So we ought to see the airplanes from here, anyway."

"I don't."

"Well, I don't either!" she stormed at him. "We just have to be patient until we find out what's going on. And don't start again about radio contact; we don't keep in radio contact because then everybody would listen in, since we're all on the same command frequencies."

"I was only trying to say—"

"Don't say it!" Then she peered over the parapet of the building. "That's funny," she said, mostly to herself.

Sanford gripped the hot tile edging of the parapet and leaned forward to see what she was looking at. There was something going on. Down on the parade ground a military figure, erect and sober in its braided uniform and cap, stood waiting. It was General Tupalakuli, and he was surrounded by a smart-looking squad of shoulders with carbines at the ready. From the opposite side of the quad another general stepped out, marching smartly toward him.

It was General Phenoboomgarat. The whole comic-opera scenario suddenly turned ugly for Sanford because it looked very much as though he were about to witness his first execution by firing squad. "He shouldn't kill him," he snapped at Emily. "He's his prisoner! He's entitled to the conventions of war, isn't he?"

She turned to look at him with uncomprehending eyes. "What in the world are you talking about?"

"That's a firing squad for General Tupalakuli, can't you see? Listen, this is carrying things too far! I want to—"

He did not finish saying what he wanted. On the quadrangle below a little drama was being acted out. General Tupalakuli saluted General Phenoboomgarat ceremoniously. General Phenoboomgarat returned the salute. The squad of armed men detached themselves from General Tupalakuli and reformed in a hollow square around General Phenoboomgarat. They marched away with him . . . directly to the door of the military prison Tupalakuli just left.

"Oh, *hell*," moaned Colonel Emily; and behind them on the roof a door opened. The same lieutenant who had changed flags in the room of the two generals, when the two generals seemed temporarily both to be on the same side, appeared again. He saluted Emily perfunctorily and went to the flagpole.

Down came the Martian-bearing flag of the New People's Reform Government. Up went the old twenty-seven-starred banner of the corrupt blood-suckers and tyrants.

Sanford turned a horrified glance on Emily. "Does this mean what I think it means?" he demanded.

"What do you think it means?" she sobbed. "It means we lost."

The limousine was as big as ever, but now it was a lot more crowded. Am Sattaroothata and General Phenoboomgarat shared the back seat, Am Bhopru was in front, Emily and Sanford in the jump seats.

All around them, the city of Pnik was returning to its normal status. The metal shutters were raised again and the cubbyhole stores were doing their nickel-and-dime business in inches of fabric and ounces of meat or poultry. The tuk-tuks had civilian passengers again. Even a great gaudy tour bus rumbled ahead of them, its exhaust choking them, until it turned off to the Temple of the Ten Thousand Golden Buddhas.

General Phenoboomgarat was talking to Am Sattaroothata as though discussing the results of a recent tennis match. Sanford understood not a word, but Emily gave him a running translation. "The government promised to surrender as soon as the Air Force flew over the Supreme Court building," she said, "but Air Chief Marshal Pittikudaru was waiting for the Seventh Paratroop Brigade to surround the building, and the general didn't go because he'd heard a report that His Majesty had said it was insulting to the proud traditions of Iriadeska to put a child's toy on the flag."

"And did the king really say that?" Sanford asked.

"Oh, who knows that? It's the kind of thing he might have said, and just *thinking* he could have said that was enough to make everybody think a second thought, because in matters of taste and religion—"

"I know," Sanford nodded. "His Majesty's word is, what did you say? Definitive."

"Exactly," she said gloomily. "So General Phenoboomgarat released General Tupalakuli and turned the command of the troops over to him . . . and here we are."

"On the way to the airport and exile," Sanford finished. Emily nodded, pleased with his quick understanding. "Hoping we can sneak out of the country before anyone notices," he added, and she looked indignant.

"Sneak? Who is sneaking anywhere? The airport officials never require exit visas until twelve hours after a coup attempt. Otherwise," she explained, "how would the leaders get away?"

"Get away to where?"

She shrugged. "Wherever they're going. Am Sattaroothata, of course, will only have to stay away for a few months, until things quiet down—he

said he wanted to visit Singapore anyway. General Phenoboomgarat has a part interest in the Atlantic City casinos, along with His Majesty. That's probably where he'll go."

"And you?"

"Oh, I'll go to Atlantic City, too. No doubt they'll need some sort of personnel manager . . . and maybe I can go back to school and get my master's degree. What about yourself? Back to the agency?"

"If I still have a job," Sanford grumbled. "I haven't exactly covered myself with glory on this one."

Emily looked sympathetic. Sanford drank it up; sympathy wasn't either a success or a job, but it was the best he'd had that day.

Then Emily looked thoughtful. "Chuck," she said absently. "Does your agency have any casino accounts?"

"You mean gambling? Oh, no. I don't know anything about that, and I don't think the Old Man does, either, and besides he has some funny moral attitudes—"

He stopped because she wasn't listening any more. Her fingertips pressed together, she was whispering deferentially to Am Sattaroothata and the general. They listened absently. Then the monk shrugged and the general said, as though the subject bored him, "Yom."

Emily bowed and turned back to Sanford. "Three hundred million dollars a year," she said, smiling.

"What?"

"That's the handle of our casinos. So there's money for promotion, wouldn't you say? Enough money so that your employer might be interested in the account—with you handling it?"

Sanford said at once, "I think I could learn about casinos very rapidly."

"I think you could, too," Emily said. "I even think I might be able to help teach you." ●

GAMING

(continued from page 18)

Thrilling Locations (from Victory Games) is a handy book that I used while working on my recently-completed novel. While designed for the James Bond 007 role-playing game, *Thrilling Locations* is crammed full of facts and photos of places that most of us would love to visit. Places like the Hotel Cipriani in Venice and the interior of a Burger 125′ Cruiser are presented for your delectation. Ah, wealth.

Cthulhu by Gaslight (Chaosium Inc.) is a supplement for the terrific game set in H.P. Lovecraft's 1920s world of horror. It's a strange world where unnameable creatures slither out of the night air to snatch the foolish who brave the dark. *Gaslight* turns the clock back to the England of Sherlock Holmes, with a nicely atmospheric map of London and a wealth of Victorian trivia. Author William A. Barton brings the late nineteenth century period to life, even as Lovecraft's ghastlies move it considerably in the other direction.

The Batman Reference Book (Mayfair Games) is a tour-de-force of Bat-information, from what's on the famous utility belt to an oversized map of the Wayne Foundation and the Batcave. While designed for the DC Heroes game, it's fun to read about the Dark Knight and his strange menagerie of foes.

Lankhmar (TSR) is a source book developed from the stories of Fritz Leiber, featuring the roguish heroes Fafhrd and the Grey Mouser. While the supplement is filled with pages of non-playing characters for AD&D, it also comes with a separate booklet featuring geomorphic map sections and district maps of the city. A colorful wall map of all Lankhmar is also included.

Monsters and Animals and *Weapons and Castles* (Palladium Books) are two straightforward books that I keep close at hand. *Monsters* gives fast, intriguing information about a host of well-illustrated beasties, as well as more mundane creatures. *Castles* features Kevin Siembieda's detailed line drawings and floor plans of a variety of European castles.

Oriental Adventures (TSR) is the latest in the series of hardcover AD&D books, but it aspires to more than supplement status. It contains a tremendous amount of information about bushi, samurai, and ninja, not to mention the cultural and social background of the Orient. And while part of the AD&D system, *Oriental Adventures* can really stand on its own, with specialized game rules.

Now you can, of course, use these books for games. That is, after all, what they were created for. But in my home they sit on my reference shelf, next to my Random House Dictionary, Roget's Thesaurus and the Concise Columbia Encyclopedia. Whether as reference works, game play aids, or entertaining reading, these supplements are well worth adding to your library. ●

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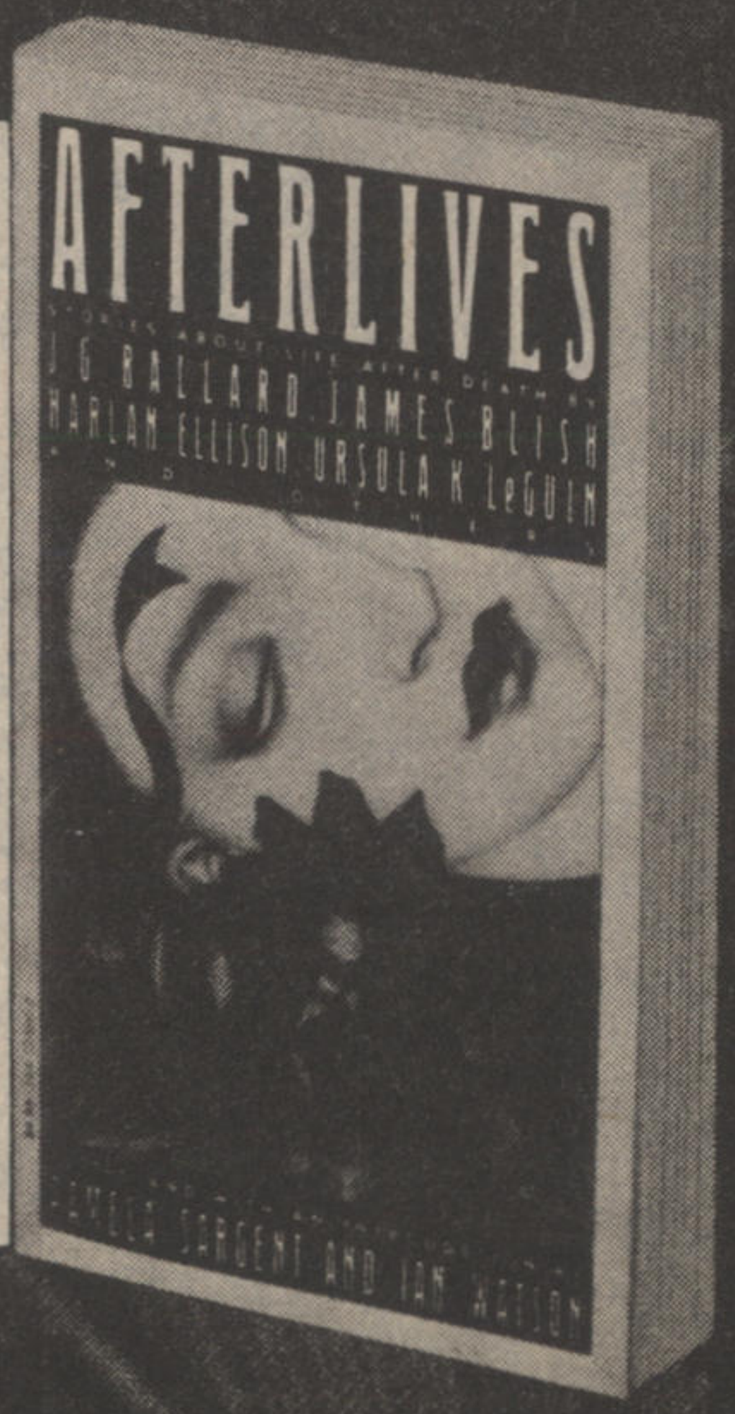

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FIRE ZONE EMERALD

by Lucius Shepard

art: J.K. Potter

"Fire Zone Emerald" is a powerful story set in the same war-torn universe as the author's stunning novella, "R&R" (April 1986). Once again, Mr. Shepard draws upon his war experiences in Viet Nam to create a truly convincing portrait of the horrors of future war.

"Ain't it weird, soldier boy?" said the voice in Quinn's ear. "There you are, strollin' along in that little ol' green suit of armor, feelin' all cool and killproof . . . and wham! You're down and hurtin' bad. Gotta admit, though, them suits do a job. Can't recall nobody steppin' onna mine and comin' through it as good as you."

Quinn shook his head to clear the cobwebs. His helmet rattled, which was not good news. He doubted any of the connections to the computer in his backpack were still intact. But at least he could move his legs, and that was very good news, indeed. The guy talking had a crazed lilt to his voice, and Quinn thought it would be best to take cover. He tried the computer; nothing worked except for map holography. The visor display showed him to be a blinking red dot in the midst of a contoured green glow: eleven miles inside Guatemala from its border with Belize; in the heart of the Peten Rain Forest; on the eastern edge of Fire Zone Emerald.

"Y'hear me, soldier boy?"

Quinn sat up, wincing as pain shot through his legs. He felt no fear, no panic. Though he had just turned twenty-one, this was his second tour in Guatemala, and he was accustomed to being in tight spots. Besides, there were a lot worse places he might have been stranded. Up until two years before, Emerald had been a staging area for Cuban and guerrilla troops; but following the construction of a string of Allied artillery bases to the west, the enemy had moved their encampments north and—except for recon patrols such as Quinn's—the fire zone had been abandoned.

"No point in playin' possum, man. Me and the boys'll be there in ten–fifteen minutes, and you gonna have to talk to us then."

Ten minutes. Shit! Maybe, Quinn thought, if he talked to the guy, that would slow him down. "Who are you people?" he asked.

"Name's Mathis. Special Forces, formerly attached to the First Infantry." A chuckle. "But you might say we seen the light and opted outta the service. How 'bout you, man? You gotta name?"

"Quinn. Edward Quinn." He flipped up his visor; heat boiled into the combat suit, overwhelming the cooling system. The suit was scorched and shredded from the knees down; plastic armor glinted in the rips. He looked around for his gun. The cable that had connected it to the computer had been severed, probably by shrapnel from the mine, and the gun was not to be seen. "You run across the rest of my patrol?"

A static-filled silence. "'Fraid I got bad tidin's, Quinn Edward. 'Pears like guerrillas took out your buddies."

Despite the interference, Quinn heard the lie in the voice. He scoped out the terrain. Saw that he was sitting in a cathedral-like glade: vaults of leaves pillared by the tapering trunks of ceibas and giant figs. The ground was carpeted with ferns; a thick green shade seemed to be welling

from the tips of the fronds. Here and there, shafts of golden light penetrated the canopy, and these were so complexly figured with dust motes that they appeared to contain flaws and fracture planes, like artifacts of crystal snapped off in mid-air. On three sides, the glade gave out into dense jungle; but to the east lay a body of murky green water, with a forested island standing about a hundred feet out. If he could find his gun, the island might be defensible. Then a few days rest and he'd be ready for a hike.

"Them boys wasn't no friends of yours," said Mathis. "You hit that mine, and they let you lie like meat on the street."

That much Quinn believed. The others had been too wasted on the martial arts ampules to be trustworthy. Chances were they simply hadn't wanted the hassle of carrying him.

"They deserved what they got," Mathis went on. "But you, now . . . boy with your luck. Might just be a place for you in the light."

"What's that mean?" Quinn fumbled a dispenser from his hip pouch and ejected two ampules—a pair of silver bullets—into his palm. Two, he figured, should get him walking.

"The light's holy here, man. You sit under them beams shinin' through the canopy, let 'em soak into you, and they'll stir the truth from your mind." Mathis said all this in dead-earnest, and Quinn, unable to mask his amusement, said, "Oh, yeah?"

"You remind me of my ol' lieutenant," said Mathis. "Man used to tell me I's crazy, and I'd say to him, 'I ain't ordinary crazy, sir. I'm crazy-gone-to-Jesus.' And I'd 'splain to him what I knew from the light, that we's s'posed to build the kingdom here. Place where a man could live pure. No machines, no pollution." He grunted as if tickled by something. "That's how you be livin' if you can cut it. You gonna learn to hunt with knives, track tapir by the smell. Hear what weather's comin' by listenin' to the cry of a bird."

"How 'bout the lieutenant?" Quinn asked. "He learn all that?"

"Y'know how it is with lieutenants, man. Sometimes they just don't work out."

Quinn popped an ampule under his nose and inhaled. Waited for the drugs to kick in. The ampules were the Army's way of insuring that the high incidence of poor battlefield performance during the Vietnam War would not be repeated: each contained a mist of pseudo-endorphins and RNA derivatives that elevated the user's determination and physical potentials to heroic levels for thirty minutes or thereabouts. But Quinn preferred not to rely on them, because of their destructive side-effects. Printed on the dispenser was a warning against abuse, one that Mathis—judging by his rap—had ignored. Quinn had heard similar raps

from guys whose personalities had been eroded, replaced in part by the generic mystic-warrior personality supplied by the drugs.

" 'Course," said Mathis, breaking the silence, "it ain't only the light. It's the Queen. She's one with the light."

"The Queen?" Quinn's senses had sharpened. He could see the spidery shapes of monkeys high in the canopy and could hear a hundred new sounds. He spotted the green plastic stock of his gun protruding from beneath a fern not twenty feet away; he came to his feet, refusing to admit to his pain, and went over to it. Both upper and lower barrels were plugged with dirt.

"'Member them Cuban 'speriments where they was linkin' up animals and psychics with computer implants? Usin' 'em for spies?"

"That was just bullshit!" Quinn set off toward the water. He felt disdain for Mathis and recognized that to be a sign of too many ampules.

"It ain't no bullshit. The Queen was one of them psychics. She's linked up with this little ol' tiger cat. What the Indians call a *tigrillo*. We ain't never seen her, but we seen the cat. And once we got tuned to her, we could feel her mind workin' on us. But at first she can slip them thoughts inside your head without you ever knowin'. Twist you 'round her finger, she can."

"If she's that powerful," said Quinn, smug with the force of his superior logic, "then why's she hidin' from you?"

"She ain't hidin'. We gotta prove ourselves to her. Keep the jungle pure, free of evildoers. Then she'll come to us."

Quinn popped the second ampule. "Evildoers? Like my patrol, huh? That why you wasted my patrol?"

"Whoo-ee!" said Mathis after a pause. "I can't slide nothin' by you, can I, Quinn Edward?"

Quinn's laughter was rich and nutsy: a two-ampule laugh. "Naw," he said, mocking Mathis' cornpone accent. "Don't reckon you can." He flipped down his visor and waded into the water, barely conscious of the pain in his legs.

"Your buddies wasn't shit for soldiers," said Mathis. "Good thing they come along, though. We was runnin' low on ampules." He made a frustrated noise. "Hey, man. This armor ain't nothin' like the old gear . . . all this computer bullshit. I can't get nothin' crankin' 'cept the radio. Tell me how you work these here guns."

"Just aim and pull." Quinn was waist-deep in water, perhaps a quarter of the way to the island, which from that perspective—with its three towering vine-enlaced trees—looked like the overgrown hulk of an old sailing ship anchored in a placid stretch of jade.

"Don't kid a kidder," said Mathis. "I tried that."

"You'll figure it out," Quinn said. "Smart peckerwood like you."

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"Man, you gotta attitude problem, don'tcha? But I 'spect the Queen'll straighten you out."

"Right! The Invisible Woman!"

"You'll see her soon enough, man. Ain't gonna be too long 'fore she comes to me."

"To *you?*" Quinn snickered. "That mean you're the king?"

"Maybe." Mathis pitched his voice low and menacing. "Don't go thinkin' I'm just country pie, Quinn Edward. I been up here most of two years, and I got this place down. I can tell when a fly takes a shit! Far as you concerned, I'm lord of the fuckin' jungle."

Quinn bit back a sarcastic response. He should be suckering this guy, determining his strength. Given that Mathis had been on recon prior to deserting, he'd probably started with around fifteen men. "You guys taken many casualties?" he asked after slogging another few steps.

"Why you wanna know that? You a man with a plan? Listen up, Quinn Edward. If you figgerin' on takin' us out, 'member them fancy guns didn't help your buddies, and they ain't gonna help you. Even if you could take us out, you'd still have to deal with the Queen. Just 'cause she lives out on the island don't mean she ain't keepin' her eye on the shore. You might not believe it, man, but right now, right this second, she's all 'round you."

"What island?" The trees ahead suddenly seemed haunted-looking.

"Little island out there on the lake. You can see it if you lift your head."

"Can't move my head," said Quinn. "My neck's fucked up."

"Well, you gonna see it soon enough. And once you healed, you take my advice and stay the hell off it. The Queen don't look kindly on trespassers."

On reaching the island, Quinn located a firing position from which he could survey the shore: a weedy patch behind a fallen tree trunk hemmed in by bushes. If Mathis was as expert in jungle survival as he claimed, he'd have no trouble in discovering where Quinn had gone; and there was no way to tell how strong an influence his imaginary Queen exerted, no way to be sure whether the restriction against trespassing had the severity of a taboo or was merely something frowned on. Not wanting to take chances, Quinn spent a frantic few minutes cleaning the lower barrel of his gun, which fired miniature fragmentation grenades.

"Now where'd you get to, Quinn Edward?" said Mathis with mock concern. "Where *did* you get to?"

Quinn scanned the shore. Dark avenues led away between the trees, and staring along them, his nerves were keyed by every twitching leaf, every shift of light and shadow. Clouds slid across the sun, muting its

glare to a shimmering platinum gray; a palpable vibration underscored the stillness. He tried to think of something pleasant to make the waiting easier, but nothing pleasant occurred to him. He wetted his lips and swallowed. His cooling system set up a whine.

Movement at the margin of the jungle, a shadow resolving into a man wearing olive-drab fatigues and carrying a rifle with a skeleton stock . . . likely an old AR-18. He waded into the lake, and as he closed on the island, Quinn trained his scope on him and saw that he had black shoulder-length hair framing a haggard face; a ragged beard bibbed his chest and dangling from a thong below the beard was a triangular piece of mirror. Quinn held his fire, waiting for the rest to emerge. But no one else broke cover, and he realized that Mathis was testing him, was willing to sacrifice a pawn to check out his weaponry.

"Keep back!" he shouted. But the man kept plodding forward, heaving against the drag of the water. Quinn marveled at the hold Mathis must have over him: he *had* to know he was going to die. Maybe he was too whacked out on ampules to give a shit, or maybe Mathis' Queen somehow embodied the promise of a swell afterlife for those who died in battle. Quinn didn't want to kill him, but there was no choice, no point in delaying the inevitable.

He aimed, froze a moment at the sight of the man's fear-widened eyes; then he squeezed the trigger.

The hiss of the round blended into the explosion, and the man vanished inside a fireball and geysering water. Monkeys screamed; birds wheeled up from the shoreline trees. A veil of oily smoke drifted across the lake, and within seconds a pair of legs floated to the surface, leaking red. Quinn felt queasy and sick at heart.

"Man, they doin' wonders with ordinance nowadays," said Mathis.

Infuriated, Quinn fired a spread of three rounds into the jungle.

"Not even close, Quinn Edward."

"You're a real regular army asshole, aren't you?" said Quinn. "Lettin' some poor fucker draw fire."

"You got me wrong, man! I sent that ol' boy out 'cause I loved him. He been with me almost four years, but his mind was goin', reflexes goin'. You done him a favor, Quinn Edward. Reduced his confusion to zero"—Mathis' tone waxed evangelic—"and let him shine forevermore!"

Quinn had a mental image of Mathis, bearded and haggard like the guy he'd shot, but taller, rawboned: a gaunt rack of a man with rotting teeth and blown-away pupils. Being able to fit even an imaginary face to his target tuned his rage higher, and he fired again.

"Awright, man!" Mathis' voice was burred with anger; the cadences of his speech built into a rant. "You want bang-bang, you got it. But you stay out there, the Queen'll do the job for me. She don't like nobody

creepin' 'round her in the dark. Makes her crazy. You go on, man! Stay there! She peel you down to meat and sauce!"

His laughter went high into a register that Quinn's speakers distorted, translating it as a hiccuping squeal, and he continued to rave. However, Quinn was no longer listening. His attention was fixed on the dead man's legs spinning past on the current. A lace of blood eeled from the severed waist. The separate strands looked to be spelling out characters in some oriental script; but before Quinn could try to decipher them, they lost coherence and were whirled away by the jade green medium into which—staring with fierce concentration, giddy with drugs and fatigue—he, too, felt he was dissolving.

At twilight, when streamers of mist unfurled across the water, Quinn stood down from his watch and went to find a secure place in which to pass the night: considering Mathis' leeriness about his Queen's nocturnal temper, he doubted there would be any trouble before morning. He beat his way through the brush and came to an enormous ceiba tree whose trunk split into two main branchings; the split formed a wide crotch that would support him comfortably. He popped an ampule to stave off pain, climbed up and settled himself.

Darkness fell; the mist closed in, blanketing moon and stars. Quinn stared out into pitch-black nothing, too exhausted to think, too buzzed to sleep. Finally, hoping to stimulate thought, he did another ampule. After it had taken effect, he could make out some of the surrounding foliage—vague scrolled shapes that each had their own special shine—and he could hear a thousand plops and rustles that blended into a scratchy percussion, its rhythms providing accents for a pulse that seemed to be coming up from the roots of the island. But there were no crunchings in the brush, no footsteps.

No sign of the Queen.

What a strange fantasy, he thought, for Mathis to have created. He wondered how Mathis saw her: Blond, with a ragged Tarzan-movie skirt? A black woman with a necklace of bones? He remembered driving down to see his old girlfriend at college and being struck by a print hung on her dorm room wall. It had shown a night jungle, a tiger prowling through fleshy vegetation, and—off to the side—a mysterious-looking woman standing naked in moonshadow. That would be his image of the Queen. It seemed to him that the woman's eyes had been glowing. . . . But maybe he was remembering it wrong, maybe it had been the tiger's eyes. He had liked the print, had peered at the artist's signature and tried to pronounce the name. "Roo-see-aw," he'd said, and his girl had given a haughty sniff and said, "Roo-sō. It's Roo-sō." Her attitude had made clear what he had suspected: that he had lost her. She had experienced a new

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world, one that had set its hooks in her; she had outgrown their little North Dakota farming town, and she had outgrown him as well. What the war had done to him was similar, only the world he had outgrown was a much wider place: he'd learned that he just wasn't cut out for peace and quiet anymore.

Frogs chirred, crickets sizzled, and he was reminded of the hollow near his father's house where he had used to go after chores to be alone, to plan a life of spectacular adventures. Like the island, it had been a diminutive jungle—secure, yet not insulated from the wild—and recognizing the kinship between the two places caused him to relax. Soon he nodded out into a dream, one in which he was twelve years old again, fiddling with the busted tractor his father had given him to repair. He'd never been able to repair it, but in the dream he worked a gruesome miracle. Wherever he touched the metal, blood beaded on the flaking rust; blood surged rich and dark through the fuel line; and when he laid his hands on the corroded pistons, steam seared forth and he saw that the rust had been transformed into red meat, that his hands had left scorched prints. Then that meat-engine shuddered to life and lumbered off across the fields on wheels of black bone, ploughing raw gashes in the earth, sowing seeds that overnight grew into fiery stalks yielding fruit that exploded on contact with the air.

It was such an odd dream, forged from the materials of his childhood yet embodying an alien sensibility, that he came awake, possessed by the notion that it had been no dream but a sending. For an instant he thought he saw a lithe shadow at the foot of the tree. The harder he stared at it, though, the less substantial it became, and he decided it must have been a hallucination. But after the shadow had melted away, a wave of languor washed over him, sweeping him down into unconsciousness, manifesting so suddenly, so irresistibly, that it seemed no less a sending than the dream.

At first light, Quinn popped an ampule and went to inspect the island, stepping cautiously through the gray mist that still merged jungle and water and sky, pushing through dripping thickets and spiderwebs diamonded with dew. He was certain that Mathis would launch an attack today. Since he had survived a night with the Queen, it might be concluded that she favored him, that he now posed a threat to Mathis' union with her . . . and Mathis wouldn't be able to tolerate that. The best course, Quinn figured, would be to rile Mathis up, to make him react out of anger and to take advantage of that reaction.

The island proved to be about a hundred and twenty feet long, perhaps a third of that across at the widest, and—except for a rocky point at the north end and a clearing some thirty feet south of the ceiba tree—was

choked with vegetation. Vines hung in graceful loops like flourishes depended from illuminated letters; ferns clotted the narrow aisles between the bushes; epiphytes bloomed in the crooks of branches, punctuating the grayness with points of crimson and purple. The far side of the island was banked higher than a man could easily reach; but to be safe, Quinn mined the lowest sections with frags. In places where the brush was relatively sparse, he set flares head-high, connecting them to trip-wires that he rigged with vines. Then he walked back and forth among the traps, memorizing their locations.

By the time he had done, the sun had started to burn off the mist, creating pockets of clarity in the gray, and, as he headed back to his firing position, it was then he saw the tiger cat. Crouched in the weeds, lapping at the water. It wasn't much bigger than a housecat, with the delicate build and wedge-shaped head of an Abyssinian, and fine black stripes patterning its tawny fur. Quinn had seen such animals before while on patrol, but the way this one looked, so bright and articulated in contrast to the dull vegetable greens, framed by the eddying mist, it seemed a gateway had been opened onto a more vital world, and he was for the moment too entranced by the sight to consider what it meant. The cat finished its drink, turned to Quinn and studied him; then it snarled, wheeled about and sprang off into the brush.

The instant it vanished, Quinn became troubled by a number of things. How he'd chosen the island as a fortress; how he'd gone straight to the best firing position; how he'd been anticipating Mathis. All this could be chalked up to common sense and good soldiering . . . yet he had been so assured, so definite. The assurance could be an effect of the ampules; but then Mathis had said the Queen could slip thoughts into your head without you knowing. Until you became attuned to her, that is. Quinn tasted the flavors of his thoughts, searching for evidence of tampering. He knew he was being ridiculous, but panic flared in him nonetheless and he popped an ampule to pull himself together. Okay, he told himself. Let's see what the hell's going on.

For the next half hour he combed the island, prying into thickets, peering at treetops. He found no trace of the Queen, nor did he spot the cat again. But if she could control his mind, she might be guiding him away from her traces. She might be following him, manipulating him like a puppet. He spun around, hoping to catch her unawares. Nothing. Only bushes threaded with mist, trembling in the breeze. He let out a cracked laugh. Christ, he was an idiot! Just because the cat lived on the island didn't mean the Queen was real; in fact, the cat might be the core of Mathis' fantasy. It might have inhabited the lakeshore, and when Mathis and his men had arrived, it had fled out here to be shut of them . . . or maybe even this thought had been slipped into his head.

Quinn was amazed by the subtlety of the delusion, at the elusiveness with which it defied both validation and debunking.

Something crunched in the brush.

Convinced that the noise signaled an actual presence, he swung his gun to cover the bushes. His trigger-finger tensed, but after a moment he relaxed. It was the isolation, the general weirdness, that was doing him in. Not some bullshit mystery woman. His job was to kill Mathis, and he'd better get to it. And if the Queen *were* real, well, then she did favor him and he might have help. He popped an ampule and laughed as it kicked in. Oh, yeah! With modern chemistry and the Invisible Woman on his side, he'd go through Mathis like a rat through cheese. Like fire through a slum. The drugs—or perhaps it was the pour of a mind more supple than his own—added a lyric coloration to his thoughts, and he saw himself moving with splendid athleticism into an exotic future wherein he killed the king and wed the shadow and ruled in Hell forever.

Quinn was low on frags, so he sat down behind the fallen tree trunk and cleaned the upper barrel of his gun: it fired caseless .22 caliber ammunition. Set on automatic, it could chew a man in half; but wanting to conserve bullets, he set it to fire single shots. When the sun had cleared the treeline, he began calling to Mathis on his radio. There was no response at first, but finally a gassed, irascible voice answered, saying, "Where the fuck you at, Quinn Edward?"

"The island." Quinn injected a wealth of good cheer into his next words. "Hey, you were right about the Queen!"

"What you talkin' 'bout?"

"She's beautiful! Most beatiful woman I've ever seen."

"You seen her?" Mathis sounded anxious. "Bullshit!"

Quinn thought about the Rousseau print. "She got dark, satiny skin and black hair down to her ass. And the whites of her eyes, it looks like they're glowin' they're so bright. And her tits, man. They ain't too big, but the way they wobble around"—he let out a lewd cackle—"it makes you wanna get down and frolic with them puppies."

"Bullshit!" Mathis repeated, his voice tight.

"Unh-uh," said Quinn. "It's true. See, the Queen's lonely, man. She thought she was gonna have to settle for one of you lovelies, but now she's found somebody who's not so fucked up."

Bullets tore through the bushes on his right.

"Not even close," said Quinn. More fire; splinters flew from the tree trunk. "Tell me, Mathis." He supressed a giggle. "How long's it been since you had any pussy?" Several guns began to chatter, and he caught sight of a muzzle flash; he pinpointed it with his own fire.

"You son of a bitch!" Mathis screamed.

"Did I get one?" Quinn asked blithely. "What's the matter, man? Wasn't he ripe for the light?"

A hail of fire swept the island. The cap-pistol sounds, the volley of hits on the trunk, the bullets zipping through the leaves, all this enraged Quinn, touched a spark to the violent potential induced by the drugs. But he restrained himself from returning the fire, wanting to keep his position hidden. And then, partly because it was another way of ragging Mathis, but also because he felt a twinge of alarm, he shouted, "Watch out! You'll hit the Queen!"

The firing broke off. "Quinn Edward!" Mathis called.

Quinn kept silent, examining that twinge of alarm, trying to determine if there had been something un-Quinnlike about it.

"Quinn Edward!"

"Yeah, what?"

"It's time," said Mathis, hoarse with anger. "Queen's tellin' me it's time for me to prove myself. I'm comin' at you, man!"

Studying the patterns of blue-green scale flecking the tree trunk, Quinn seemed to see the army of his victims—grim, desanguinated men—and he felt a powerful revulsion at what he had become. But when he answered, his mood swung to the opposite pole. "I'm waitin', asshole!"

"Y'know," said Mathis, suddenly breezy. "I got a feelin' it's gonna come down to you and me, man. 'Cause that's how she wants it. And can't nobody beat me one-on-one in my own backyard." His breath came as a guttural hiss, and Quinn realized that this sort of breathing was typical of someone who had been overdoing the ampules. "I'm gonna overwhelm you, Quinn Edward," Mathis went on. "Gonna be like them ol' Jap movies. Little men with guns actin' all brave and shit 'til they see somethin' big and hairy comin' at 'em, munchin' treetops and spittin' fire. Then off they run, yellin', 'Tokyo is doomed!' "

For thirty or forty minutes, Mathis kept up a line of chatter, holding forth on subjects as varied as the Cuban space station and Miami's chances in the AL East. He launched into a polemic condemning the new statutes protecting the rights of prostitutes ("Part of the kick's bein' able to bounce 'em 'round a little, y'know."), then made a case for Antarctica being the site of the original Garden of Eden, and then proposed the theory that every President of the United States had been a member of a secret homosexual society ("Half them First Ladies wasn't nothin' but guys in dresses."). Quinn didn't let himself be drawn into conversation, knowing that Mathis was trying to distract him; but he listened because he was beginning to have a sense of Mathis' character, to understand how he might attack.

Back in Lardcan, Tennessee or wherever, Mathis had likely been a charismatic figure, glib and expansive, smarter than his friends and willing to lead them from the rear into fights and petty crimes. In some ways he was a lot like the kid Quinn had been, only Quinn's escapades had been pranks, whereas he believed Mathis had been capable of consequential misdeeds. He could picture him lounging around a gas station, sucking down brews and plotting meanness. The hillbilly con-artist out to sucker the Yankee: that would be how he saw himself in relation to Quinn. Sooner or later he would resort to tricks. That was cool with Quinn; he could handle tricks. But he wasn't going to underestimate Mathis. No way. Mathis had to have a lot on the ball to survive the jungle for two years, to rule a troop of crazed Green Berets. Quinn just hoped Mathis would underestimate him.

The sun swelled into an explosive glare that whitened the sky and made the green of the jungle seem a livid, overripe color. Quinn popped ampules and waited. The inside of his head came to feel heavy with violent urges, as if his thoughts were congealing into a lump of mental plastique. Around noon, somebody began to lay down covering fire, spraying bullets back and forth along the bank. Quinn found he could time these sweeps, and after one such had passed him by, he looked out from behind the tree trunk. Four bearded, long-haired men were crossing the lake from different directions. Plunging through the water, lifting their knees high. Before ducking back, Quinn shot the two on the left. Saw them spun around, their rifles flung away. He timed a second sweep, then picked off the two on the right; he was certain he had killed one, but the other might only have been wounded. The gunfire homed in on him, trimming the bushes overhead. Twigs pinwheeled; cut leaves sailed like paper planes. A centipede had ridden one of the leaves down and was still crawling along its fluted edge. Quinn didn't like its hairy mandibles, its devil's face. Didn't like the fact that it had survived while men had not. He let it crawl in front of his gun and blew it up into a fountain of dirt and grass.

The firing stopped.

Branches ticking the trunk; water slopping against the bank; drips. Quinn lay motionless, listening. No unnatural noises. But where were those drips coming from? The bullets hadn't splashed up much water. Apprehensions spidered his backbone. He peeked up over the top of the tree trunk . . . and cried out in shock. A man was standing in the water about four feet away, blocking the line of fire from the shore. With the mud freckling his cheeks, strands of bottomweed ribboning his dripping hair, he might have been the wild mad king of the lake. Skull-face; staring eyes; survival knife dangling loosely in his hand. He blinked at Quinn. Swayed, righted himself, blinked again. His fatigues were plas-

tered to his ribs, and a big bloodstain mapped the hollow of his stomach. Fresh blood pumped from the hole Quinn had punched. The man's cheeks bulged: it looked as if he wanted to speak but was afraid more would come out than just words.

"Jesus . . . shit," he said sluggishly. His eyes half-rolled back, his knees buckled. Then he straightened, glancing around as if waking somewhere unfamiliar. He appeared to notice Quinn, frowned and staggered forward, swinging the knife in a lazy arc.

Quinn got off a round before the man reached him. The bullet seemed to paste a red star under the man's eye, stamping his features with a rapt expression. He fell atop Quinn, atop the gun, which—jammed to automatic—kept firing. Lengths of wet hair hung across Quinn's faceplate, striping his view of branches and sky; the body jolted with the bullets tunneling through.

Two explosions nearby.

Quinn pushed the body away, belly-crawled into the brush and popped an ampule. He heard a *thock* followed by a bubbling scream: somebody had tripped a flare. He did a count and came up with nine dead . . . plus the guy laying down covering fire. Mathis, no doubt. It would be nice if that were all of them, but Quinn knew better. Somebody else was out there. He felt him the way a flower feels the sun—autonomic reactions waking, primitive senses coming alert.

He inched deeper into the brush. The drugs burned bright inside him; he had the idea they were forming a manlike shape of glittering particles, an inner man of furious principle. Mattes of blight-dappled leaves pressed against his faceplate, then slid away with underwater slowness. It seemed he was burrowing through a mosaic of muted colors and coarse textures into which even the concept of separateness had been subsumed, and so it was that he almost failed to notice the boot: a rotting brown boot with vines for laces. Visible behind a spray of leaves about six feet off. The boot shifted, and Quinn saw an olive-drab trouserleg tucked into it.

His gun was wedged beneath him, and he was certain the man would move before he could ease it out. But apparently the man was playing bird dog, his senses straining for a clue to Quinn's whereabouts. Quinn lined the barrel up with the man's calf just above the boottop. Checked to make sure it was set on automatic. Then he fired, swinging the barrel back and forth an inch to both sides of his center mark.

Blood erupted from the calf, and a hoarse yell was drawn out of Quinn by the terrible hammering of the gun. The man fell screaming. Quinn tracked fire across the ground, and the screams were cut short.

The boot was still standing behind the spray of leaves, now sprouting a tattered stump and a shard of bone.

Quinn lowered his head, resting his faceplate in the dirt. It was as if all his rectitude had been spat out through the gun. He lay thoughtless, drained of emotion. Time seemed to collapse around him, burying him beneath a ton of decaying seconds. After a while a beetle crawled onto the faceplate, walking upside-down; it stopped at eye-level, tapped its mandibles on the plastic and froze. Staring at its grotesque underparts, Quinn had a glimpse into the nature of his own monstrosity: a tiny armored creature chemically programmed to a life of stalking and biting, and between violences, lapsing into a stunned torpor.

"Quinn Edward?" Mathis whispered.

Quinn lifted his head; the beetle dropped off the faceplate and scurried for cover.

"You got 'em all, didn'tcha?"

Quinn wormed out from under the bush, got to his feet and headed back to the fallen tree trunk.

"Tonight, Quinn Edward. You gonna see my knife flash . . . and then fare-thee-well." Mathis laughed softly. "It's me she wants, man. She just told me so. Told me I can't lose tonight."

Late afternoon, and Quinn went about disposing of the dead. It wasn't something he would ordinarily have done, yet he felt compelled to be rid of them. He was too weary to puzzle over the compulsion and merely did as it directed, pushing the corpses into the lake. The man who had tripped the flare was lying in some ferns, his face seared down to sinew and laceworks of cartilage; ants were stitching patterns across the blood-slick bone of the skull. Having to touch the body made Quinn's flesh nettle cold, and bile flooded his throat.

That finished, he sat in the clearing south of the ceiba and popped an ampule. The rays of sunlight slanting through the canopy were as sharply defined as lasers, showing greenish-gold against the backdrop of leaves. Sitting beneath them, he felt guided by no visionary purpose; he was, however, gaining a clearer impression of the Queen. He couldn't point to a single thought out of the hundreds that cropped up and say, that one, that's hers. But as if she were filtering his perceptions, he was coming to know her from everything he experienced. It seemed the island had been steeped in her, its mists and midnights modified by her presence, refined to express her moods; even its overgrown terrain seemed to reflect her nature: shy, secretive, yet full of gentle stirrings. Seductive. He understood now that the process of becoming attuned to her was a process of seduction, one you couldn't resist because you, too, were being steeped in her. You were forced into a lover's involvement with her, and she was a woman worth loving. Beautiful . . . and strong. She'd needed that strength in order to survive, and that was why she couldn't help

him against Mathis. The life she offered was free from the terrors of war, but demanded vigilance and fortitude. Though she favored him—he was sure of that—his strength would have to be proved. Of course Mathis had twisted all this into a bizarre religion . . .

Christ!

Quinn sat up straight. Jesus fucking Christ! He was really losing it. Mooning around like some kid fantasizing about a movie star. He'd better get his ass in gear, because Mathis would be coming soon. Tonight. It was interesting how Mathis—knowing his best hope of taking Quinn would be at night—had used his delusion to overcome his fear of the dark, convincing himself that the Queen had told him he would win . . . or maybe she *had* told him.

Fuck that, Quinn told himself. He wasn't that far gone.

A gust of wind roused a chorus of whispery vowels from the leaves. Quinn flipped up his visor. It was hot, cloudless, but he could smell rain and the promise of a chill on the wind. He did an ampule. The drugs withdrew the baffles that had been damping the core of his anger. Confidence was a voltage surging through him, keying new increments of strength. He smiled, thinking about the fight to come, and even that smile was an expression of furious strength, a thing of bulked muscle fibers and trembling nerves. He was at the center of strength, in touch with every rustle, his sensitivity fueled by the light-stained brilliance of the leaves. Gazing at the leaves, at their infinite shades of green, he remembered a line of a poem he'd read once: "*. . . green flesh, green hair, and eyes of coldest silver . . .*" Was that how the Queen would be? If she were real? Transformed into a creature of pure poetry by the unearthly radiance of Fire Zone Emerald. Were they all acting out a mythic drama distilled from the mundane interactions of love and war, performing it in the flawed heart of an immense green jewel whose reality could only be glimpsed by those blind enough to see beyond the chaos of the leaves into its precise facets and fractures? Quinn chuckled at the wasted profundity of his thought and pictured Mathis dead, himself the king of that dead man's illusion, robed in ferns and wearing a leafy crown.

High above, two wild parrots were flying complicated loops and arcs, avoiding the hanging columns of light as if they were solid.

Just before dusk, a rain squall swept in, lasting only a few minutes but soaking the island. Quinn used it for cover, moving about and rigging more flares. He considered taking a stand on the rocky point at the north end: it commanded a view of both shores, and he might get lucky and spot Mathis as he crossed. But it was risky—Mathis might spot *him*—and he decided his best bet would be to hide, to outwait Mathis. Waiting wasn't Mathis' style. Quinn went back to the ceiba tree and climbed past

the crotch to a limb directly beneath an opening in the canopy, shielded by fans of leaves. He switched his gun to its high explosive setting. Popped an ampule. And waited.

The clouds passed away south, and in the half-light the bushes below seemed to assume topiary shapes. After fifteen minutes, Quinn did another ampule. Violet auras faded in around ferns, pools of shadow quivered, and creepers looked to be slithering like snakes along the branches. A mystic star rose in the west, shining alone above the last pink band of sunset. Quinn stared at it until he thought he understood its sparkling message.

The night that descended was similar to the one in the Rousseau print, with a yellow globe moon carving geometries of shadow and light from the foliage. A night for tigers, mysterious ladies, and dark designs. Barnacled to his branch, Quinn felt that the moonlight was lacquering his combat gear, giving it the semblance of ebony armor with gilt filigree, enforcing upon him the image of a knight about to do battle for his lady. He supposed it was possible that such might actually be the case. It was true that his perception of the Queen was growing stronger and more particularized; he even thought he could tell where she was hiding: the rocky point. But he doubted he could trust the perception . . . and besides, the battle itself, not its motive, was the significant thing. To reach that peak moment when perfection drew blood, when you muscled confusion aside and—as large as a constellation with the act, as full of stars and blackness and primitive meaning—you were able to look down onto the world and know you had outperformed the ordinary. Nothing, neither an illusory motive or the illusion of a real motive, could add importance to that.

Shortly after dark, Mathis began to chatter again, regaling Quinn with anecdote and opinion, and by the satisfaction in his voice, Quinn knew he had reached the island. Twenty minutes passed, each of them ebbing away, leaking out of Quinn's store of time like blood dripping from an old wound. Then a burst of white incandescence to the south, throwing vines and bushes into skeletal silhouette . . . and with it a scream. Quinn smiled. The scream had been a dandy imitation of pain, but he wasn't buying it. He eased a flare from his hip pouch. It wouldn't take long for Mathis to give this up.

The white fire died, muffled by the rain-soaked foliage, and finally Mathis said, "You a cautious fella, Quinn Edward."

Quinn popped two ampules.

"I doubt you can keep it up, though," Mathis went on. "I mean, sooner or later you gotta throw caution to the winds."

Quinn barely heard him. He felt he was soaring, that the island was soaring, arrowing through a void whose sole feature it was and ap-

proaching the moment for which he had been waiting: a moment of brilliant violence to illuminate the flaws at the heart of the stone, to reveal the shadow play. The first burn of the drugs subsided, and he fixed his eyes on the shadows south of the ceiba tree.

Tension began to creep into Mathis' voice, and Quinn was not surprised when—perhaps five minutes later—he heard the stutter of AR-18: Mathis firing at some movement in the brush. He caught sight of a muzzle flash, lifted his gun. But the next instant he was struck by an overpowering sense of the Queen, one that shocked him with its suddenness.

She was in pain. Wounded by Mathis' fire.

In his mind's eye, Quinn saw a female figure slumped against a boulder, holding her lower leg. The wound wasn't serious, but he could tell she wanted the battle to end before worse could happen.

He was mesmerized by her pervasiveness—it seemed if he were to flip up his visor, he would breathe her in—and by what appeared to be a new specificity of knowledge about her. Bits of memory were surfacing in his thoughts; though he didn't quite believe it, he could have sworn they were hers: a shanty with a tin roof amid fields of tilled red dirt; someone walking on a beach; a shady place overhung by a branch dripping with orchids, with insects scuttling in and out of the blooms, mining some vein of sweetness. That last memory was associated with the idea that it was a place where she went to daydream, and Quinn felt an intimate resonance with her, with the fact that she—like him—relied on that kind of retreat.

Confused, afraid for her yet half-convinced that he had slipped over the edge of sanity, he detonated his flare, aiming it at the opening in the canopy. An umbrella of white light bloomed overhead. He tracked his gun across eerily lit bushes and . . . there! Standing in the clearing to the south, a man wearing combat gear. Before the man could move, Quinn blew him up into marbled smoke and flame. Then, his mind ablaze with victory, he began to shinny down the branch. But as he descended, he realized that something was wrong. The man had just stood there, made no attempt to duck or hide. And his gun. It had been like Quinn's own, not an AR-18.

He had shot a dummy or a man already dead!

Bullets pounded his back, not penetrating but knocking him out of the tree. Arms flailing, he fell into a bush. Branches tore the gun from his grasp. The armor deadened the impact, but he was dazed, his head throbbing. He clawed free of the bush just as Mathis' helmeted shadow—looking huge in the dying light of the flare—crashed through the brush and drove a rifle stock into his faceplate. The plastic didn't shatter, webbing over with cracks; but by the time Quinn had recovered, Mathis was straddling him, knees pinning his shoulders.

"How 'bout that?" said Mathis, breathing hard.

A knife glinted in his hand, arced downward and thudded into Quinn's neck, deflected by the armor. Quinn heaved, but Mathis forced him back and this time punched at the faceplate with the hilt of the knife. Punched again, and again. Bits of plastic sprayed Quinn's face, and the faceplate was now so thoroughly cracked, it was like looking up through a crust of glittering rime. It wouldn't take many more blows. Desperate, Quinn managed to roll Mathis onto his side and they grappled silently. His teeth bit down on a sharp plastic chip and he tasted blood. Still grappling, they struggled to their knees, then to their feet. Their helmets slammed together. The impact came as a hollow click over Quinn's radio, and that click seemed to switch on a part of his mind that was as distant as a flare, calm and observing; he pictured the two of them to be black giants with whirling galaxies for hearts and stars articulating their joints, doing battle over the female half of everything. Seeing it that way gave him renewed strength. He wrangled Mathis off-balance, and they reeled clumsily through the brush. They fetched up against the trunk of the ceiba tree, and for a few seconds they were frozen like wrestlers muscling for an advantage. Sweat poured down Quinn's face; his arms quivered. Then Mathis tried to butt his faceplate, to finish the job he had begun with the hilt of the knife. Quinn ducked, slipped his hold, planted a shoulder in Mathis' stomach and drove him backward. Mathis twisted as he fell, and Quinn turned him onto his stomach. He wrenched Mathis' knife-arm behind his back, pried the knife loose. Probed with the blade, searching for a seam between the plates of neck armor. Then he pressed it in just deep enough to prick the skin. Mathis went limp. Silent.

"Where's all the folksy chit-chat, man?" said Quinn, excited.

Mathis maintained his silent immobility, and Quinn wondered if he had snapped, gone catatonic. Maybe he wouldn't have to kill him. The light from the flare had faded, and the moon-dappled darkness that had filled in reminded Quinn of the patterns of blight on the island leaves: an infection at whose heart they were clamped together like chitinous bugs.

"Bitch!" said Mathis, suddenly straining against Quinn's hold. "You lied, goddamn you!"

"Shut up," said Quinn, annoyed.

"Fuckin' bitch!" Mathis bellowed. "You tricked me!"

"I said to shut up!" Quinn gave him a little jab, but Mathis began to thrash wildly, nearly impaling himself, shouting, "Bitch!"

"Shut the fuck up!" said Quinn, growing angrier but also trying to avoid stabbing Mathis, beginning to feel helpless, to feel that he would have to stab him, that it was all beyond his control.

"I'll kill you bitch!" screamed Mathis. "I'll . . ."

"Stop it!" Quinn shouted, not sure to whom he was crying out. Inside his chest, a fuming cell of anger was ready to explode.

Mathis writhed and kicked. "I'll cut out your fuckin' . . ."

Poisonous burst of rage. Mandibles snipping shut, Quinn shoved the knife home. Blood guttered in Mathis' throat. One gauntleted hand scrabbled in the dirt, but that was all reflexes.

Quinn sat up feeling sluggish. There was no glory. It had been a contest essentially decided by a gross stupidity: Mathis' momentary forgetfulness about the armor. But how could he have forgotten? He'd seen what little effects bullets had. Quinn took off his helmet and sucked in hits of the humid air. Watched a slice of moonlight jiggle on Mathis' faceplate. Then a blast of static from his helmet radio, a voice saying, ". . . you copy?"

"Ain't no friendlies in Emerald," said another radio voice. "Musta been beaners sent up that flare. It's a trap."

"Yeah, but I got a reading like infantry gear back there. We should do a sweep over that lake."

Chopper pilots, Quinn realized. But he stared at the helmet with the mute awe of a savage, as if they had been alien voices speaking from a stone. He picked up the helmet, unsure what to say.

Please, no . . .

The words had been audible, and he realized that she had made him hear them in the sighing of the breeze.

Static fizzling. ". . . get the hell outta here."

The first pilot again. "Do you copy? I repeat, do you copy?"

What, Quinn thought, if this had all been the Queen's way of getting rid of Mathis, even down to that last flash of anger, and now, now that he had done the job, wouldn't she get rid of him?

Please, stay . . .

Quinn imagined himself back in Dakota, years spent watching cattle die, reading mail order catalogues, drinking and drinking, comparing the Queen to the dowdy farmgirl he'd have married, and one night getting a little too morbidly weary of that nothing life and driving out onto the flats and riding the forty-five caliber express to nowhere. But at least that was proven, whereas this . . .

Please . . .

A wave of her emotion swept over him, seeding him with her loneliness and longing. He was truly beginning to know her now, to sense the precise configurations of her moods, the stoicism underlying her strength, the . . .

"Fuck it!" said one of the pilots.

The static from Quinn's radio smoothed to a hiss, and the night closed down around him. His feeling of isolation nailed him to the spot. Wind seethed in the massy crown of the ceiba, and he thought he heard again

the whispered word *Please*. An icy fluid mounted in his spine. To shore up his confidence, he popped an ampule, and soon the isolation no longer troubled him, but rather seemed to fit about him like a cloak. This was the path he had been meant to take, the way of courage and character. He got to his feet, unsteady on his injured legs, and eased past Mathis, slipping between two bushes. Ahead of him, the night looked to be a floating puzzle of shadow and golden light: no matter how careful he was, he'd never be able to locate all his mines and flares.

But she would guide him.

Or would she? Hadn't she tricked Mathis? Lied to him?

More wind poured through the leaves of the ceiba tree, gusting its word of entreaty, and intimations of pleasure, of sweet green mornings and soft nights, eddied up in the torrent of her thoughts. She surrounded him, undeniable, as real as perfume, as certain as the ground beneath his feet.

For a moment he was assailed by a new doubt. God, he said to himself. Please don't let me be crazy. Not just ordinary crazy.

Please . . .

Then, suffering mutinies of the heart at every step, repelling them with a warrior's conviction, he moved through the darkness at the center of the island toward the rocky point, where—her tiger crouched by her feet, a ripe jungle moon hanging above like the emblem of her mystique—either love or fate might be waiting. ●

MARTIN GARDNER (from page 17)

SOLUTION TO THANG, THE PLANET EATER

The smallest number of planets that permits Thang's eating procedure is the lowest common multiple (LCM) of integers 1 through 7, with one planet added to be eaten on the first day. The LCM of the seven numbers is 420. Thus there were 420 + 1 = 421 planets at the start. Thang ate them in the sequence 1, 210, 70, 35, 21, 14, 10. The total is 361. Taking this number from 421 we get 60, the number of planets left uneaten.

Our next problem is not harder, but certainly trickier and more confusing. Again, Thang found another solar system he liked. Again he feasted each day for a week. On the first day he ate half the planets plus half a planet. The second day he ate half the remaining planets plus half a planet. Each succeeding day he did exactly the same, eating half the planets left plus half a planet. After his seventh meal, all the planets were consumed.

How many planets did the solar system have at the start? The solution is simple once you have the right insight. See page 87 for the answer.

by Susan Palwick

ELEPHANT

art: Janet Aulisio

Susan Palwick's most recent story in *IAsfm* was "Ways to Get Home." She is currently at work on her first novel.

The contractions have started. They hurt as much as everyone said they would, and they'll be worse before it's over. Between spasms, which are about ten minutes apart now, I find myself wondering if this is the child's revenge for all the pain she's already suffered.

During the contractions I can't think about anything except the pain. Pain has always done that to me, making me oblivious to anything else, so that now I can't even be properly grateful for Joni, with her oranges and sponges and constant reassurance, who's seen me through all this, who would think I was insane if she knew the whole story. Maybe I am. During contractions or between them, I find it hard to tell.

Somebody in one of the childbirth classes asked me once if I could pinpoint the moment of conception. "Yes," I said, but no one would have believed me if I'd talked about it, not even Joni who unwittingly started it during that phone conversation.

Oh, God, that horrible day—it was raining and cold, one of those days when I hated the city and my job and myself, myself even worse than usual because I hadn't done anything right at work and I couldn't seem to do anything to get anyone to smile at me, or say hello, or be pleasant—all day it was like that, like being in a vacuum, and then I got home and went to put out the garbage and the bag broke, spilling coffee grounds and tuna cans and wadded-up paper towels all over the floor . . . so I called Joni, out in the suburbs, because I was terrified that if I didn't talk to someone I'd really go mad, right there; and she listened, two-year-old Joshua squealing in the background, as I poured out everything. It was a lousy connection on top of everything else and even as I talked I hated myself for calling her, for going through the old routine both of us know so well, for taking her away from her happy child and her considerate husband and her white clapboard house with the garden and the car and the two cats.

"I'm sorry," I said when I was done with all of it, and my voice was shaking because I'd started crying again. "Oh, shit, I'm sorry, why am I bothering you with this—I don't know how you put up with it anyway. I don't know how I can ask people to like me when I'm like this."

Joni sighed. "Cara, whatever happened to the little kid in you who *expects* to be liked?" She couldn't have expected an answer, because we both knew what had happened.

"Dead," I said, anyway, and Joni grunted; I could imagine her shaking her head on the other end of the phone in New Jersey.

"Cara, that never dies. Never. It just doesn't. Everybody's got that inside, somewhere."

Bullshit, I thought. I didn't say anything and she tried to tell me about

Joshua's nursery school, except Joshua himself interrupted again, wanting juice, and then she had to go because dinner was ready.

I saw the commercial later that night. I was sitting on the couch in front of the Late Late Show, because I was afraid that if I went to sleep I'd have nightmares. I'd finished crying but I had a splitting headache, which always happens after I cry. I dozed off a little bit and all of a sudden there's the sound of a blow and a child's wail, and I yelled myself and came awake tense, ready to run away, every nerve wired. It was only a commercial, one of those "prevent child abuse" things, with a number to call if you knew a kid who was being hurt, but it didn't matter that it was just TV, because of the kid's scream.

That scream was echoing inside me somewhere, and I sat there shaking and remembered Joni talking about the kid inside me, the one who expects to be liked, and I suddenly realized no, no, that kid isn't dead, she's the one who's screaming, dear God, she's in me now—and I saw her. I saw her face, which had been mine when I was six or seven, very pale and tense, and I felt her huddling away inside me somewhere, trying to keep from being hurt, cowering against my ribcage. She was covered with bruises—bruises dealt out brutally, methodically, in places where they'd hurt like hell but wouldn't show, the way it was before Daddy died, and I knew who was beating her up, that skinny kid inside me.

I was.

I was, because you can't expect to be liked without getting hit for it, without getting stomped on and hurt, and she was the reason I'd suffered so much, gone through so much hell; she was the part of me that kept expecting life to be decent despite all the evidence, that kept putting me in a position to have people spit in my face and ignore me. She wasn't dead at all.

She was dying, though, and in pain, and I sat on the couch and cried again, harder this time, because I'd done it to her and I'd had it done to me and knew what it felt like, and I just sat there, crying, hugging myself, thinking, I'm sorry, oh, God, I'm sorry. I didn't know; I never meant to hurt you. I'll get you out of there, I promise. You don't deserve that. Nobody should have to be in such a lousy place. I'm sorry! I'll set you free if I can. I promise. I promise.

Five weeks later, after a routine pelvic exam, the Ob/Gyn told me I was pregnant. He swore it up and down and sideways, said both the urinalysis and the pelvic proved it conclusively. I told him he was crazy, that it was impossible, and he told me I hadn't been careful enough, or maybe I'd been careful and had gotten pregnant anyway because it can always happen, can't it?

And I thought, not to me, you bastard, not to Cara who hasn't had sex for four years because every unmarried man in New York is gay and I can't stand intercourse unless I'm dead drunk, anyway.

The doctor started talking about abortions and I was listening until I remembered the TV commercial and the kid cowering inside my gut and the promise I'd made to it. and even though being pregnant was still impossible it might make sense, I went home to get drunk, but I got sick first, and then I remembered that morning sickness doesn't have to happen in the morning, and I panicked. Just panicked, dead cold sweaty fear, but there'd been something in some psych course I'd had in school about how sometimes women who want to be pregnant get all the symptoms except the baby. I couldn't remember if they could get symptoms except the baby. I couldn't remember if they could get symptoms convincing enough to fool a doctor, and I had to know, so I dug into the old cartons in my closet trying to find the textbook.

It wasn't there—maybe I'd given it to Joni, maybe it had gotten thrown out—but I found a poetry book from some lit. class and remembered there was a poem I liked in it, one of the few things I'd liked in school, and flipped through the pages until I found it. It was a poem about an elephant, by somebody named Carlos Drummond de Andrade. It starts out, "I make an elephant from the little I have," and talks about how he builds the elephant out of glue and wood from old furniture, and how the elephant goes out into the world looking for friends and nobody pays any attention to it and finally it comes back home, exhausted, and falls apart, just "collapses like paper," because it's been searching for something it can't find. It lies there in a messy heap on the rug, "like a myth torn apart," with feathers and cotton and everything else that had been stuffed into it spilling all over the place.

The last line is "Tomorrow I begin again."

God, that last line! No wonder I'd liked that poem—it sounded like what coming home from work had been every day I could remember, every single shitty day. I remembered the kid and thought, hey, hey, are you still in there? I couldn't feel her cowering any more, just myself feeling sick and swollen and horrible, like when I'm about to get my period except it really was too late, at that point. And I realized that I wanted to be pregnant, that I wanted to get the kid out of me, send her into the world so she could find people who'd know how to love her—even if she wasn't real, even if she was just something I'd invented out of goddamn paper towels and coffee grounds.

I switched Ob/Gyns, because after I'd said being pregnant was impossible the first one wouldn't have believed my new story, which was that

I wanted to be a single mother and had paid a stranger to get me pregnant.

I invited Joni into the city one weekend, and didn't even have to tell her because she knew when she looked at me, God knows how because I wasn't showing at that point. But she knew, Joni who'd been my best friend since first grade and had always known everything.

She knew better than to believe the story I told, though. "You want to have a baby?" she asked gently, shaking her head. "Cara? You never said anything about it. You've never even liked kids—"

"I changed my mind," I told her. It hurt to swallow. I'd never consciously lied to Joni about anything, but if I told her the truth I'd lose her, too—Joni who was the only person I'd ever completely trusted.

"You *paid* someone? How do you find someone for that?"

"Ad in the *Voice*."

"Jesus, Cara, that's got to be illegal—do you have a lawyer?"

"No."

"Who's the father?"

"We didn't use real names. That was part of it. We met at a hotel."

"Oh, my God." Joni rubbed her eyes, shook her head again, said, "Why didn't you tell me about this? Why didn't you say anything?" And, a moment later, with morbid curiosity, "How much did you pay him?"

I made up a figure. I couldn't tell Joni that I was planning to give the baby up for adoption because that would blow the *Voice* story to hell. But I could tell she still didn't believe me; she sounded worried all the time, and when I was ten weeks along she finally said, "Cara, are you sure about this? There's still time to change your mind . . . it's not easy to make a good home for a kid, even when you're married and everything."

"I'm sure," I said. After I'd had the baby I'd tell her I'd changed my mind, that I'd thought about it and she was right, I couldn't give it a good enough home. How could I tell Joni I was having a child precisely because I couldn't give it a home at all, couldn't give anything or anyone a home, couldn't make a home for myself?

She appointed herself my surrogate partner. She enrolled me in exercise and natural childbirth classes, nagged me about nutrition, made me swear by anything I'd ever believed in not to drink, not to smoke, not to take even the most innocent drugs. She went with me for my check-ups, for the sonagram and the amniocentesis and the monitors which picked up a steady, thriving fetal heartbeat. I don't know how she afforded the time away from Dave and Joshua then, how she can afford it now; but I went along with all of it, because I owed the beaten child at least that much.

When the results from the amniocentesis came back the doctor asked me if I wanted to know the sex of my baby. "It's a girl," I told him.

He laughed. "Bingo. You had a fifty-fifty chance of being right."

Even with the heartbeat and all the tests, every night before I went to sleep I became convinced that I was playing a huge hoax, that the symptoms were fake and there was no baby at all—even though I felt it kicking, even though my belly was growing like that of any pregnant woman.

And I found myself, to my horror, beginning to want the child. The charade of setting up a nursery pleased me as nothing has done in years. I began noticing children everywhere I went—infants in strollers, toddlers in playgrounds, women with babies in stores. When I talked to Joni on the phone I'd listen to hear what Joshua was doing in the background. I started reading baby books and worrying about chicken pox.

I love this unseen baby more than I've ever loved anything, and I don't know what to do with that, I who have always been so afraid to love. I'm afraid that at the last minute I'll waver and keep the child instead of giving it up—for all the wrong reasons, for the attention it will bring me—and that sooner or later I'll subject it to the very torment from which I'm trying to free it, just because I don't know any other way to act. I don't know if the promise I made, that night in front of the television, is one I can keep.

Yesterday I asked Joni if she remembered our telephone conversation about the child inside us who expects to be liked. "You can't separate yourself from it?" I asked her. "You can't send it away?"

"Never," she said with a smile, and I closed my eyes because I knew she was trying to be reassuring, and I had no way of making her understand that she was being just the opposite.

The contractions are closer together now and I've been moved into the delivery room, Joni by my side telling me how to breathe, when to push, all the doctors and nurses looking down at me with cheer and encouragement. Their faces are shining. I can only imagine what mine looks like. I'm so afraid.

Soon it will all be over, and I don't know how it will end, what will happen to me and what I've created. When the baby comes out I wonder if she'll look like me; I wonder if she'll be covered with bruises and will never be able to trust anyone. I'm afraid to let her go, to dismiss the only part of me which has ever been good, and I'm afraid that if I don't give her away I'll destroy her and myself.

And there's the other possibility, although all the facts argue against it, although Joni and the nurses are urging me to push one last time because the doctor just announced that he can see the baby's head: that when she comes out she'll collapse like paper, a myth torn apart, and tomorrow I'll have to begin again. ●

(from page 80)

SECOND SOLUTION TO THANG, THE PLANET EATER

The needed insight is that half of any odd number added to one-half is an integer. It is never necessary, therefore, for Thang to eat just half a planet. If you started by assuming he did that, you probably got hopelessly lost.

We are told that at the end of the seventh day all the planets had been eaten. This could happen only if Thang ate a single planet on the last day (one-half plus one-half makes one.) We now work backward by doubling and adding one. On the sixth day there would be $2 + 1 = 3$ planets. Doubling and adding 1 at each step generates the sequence 1, 3, 7, 15, 31, 63, 127. There were 127 planets at the start. Thang ate them all in a descending sequence of the powers of 2: 64, 32, 16, 8, 4, 2, 1.

Observe that the numbers in the sequence of planets available for eating each day (1, 3, 7, ...) are each one less than a power of 2. Numbers of this type, expressed by the formula $2^n - 1$, are called Mersenne numbers. If the number is also a prime (divisible only by itself and 1) it is called a Mersenne prime. The total number of planets eaten by Thang, 127, is the fourth Mersenne prime. Only 30 such primes are known, and no mathematician knows whether their number is infinite or finite. The largest known prime, $2^{216091} - 1$, is a Mersenne prime. It was discovered in 1985 by a Cray supercomputer owned by Chevron Geosciences, in Houston, using a program written by David Slowinski, of Cray Research, in Chippewa Falls, Wisconsin. The new Mersenne prime has 65,050 digits.

Now try your skill on one more problem. Finding still another solar system, Thang threw away one planet (he didn't like the way it smelled), then ate $\frac{1}{11}$ of those that remained. On the second day he threw away two planets and ate $\frac{1}{11}$ of those that were left. On the third day he tossed away three planets, and so on, each time eating $\frac{1}{11}$ of what remained. In other words, on each nth day he threw away n planets before eating his fraction of $\frac{1}{11}$. Eventually, all the planets were gone.

How many planets were there in the solar system, and how many days did it take to eliminate them? (Hint: $\frac{1}{11}$ of zero is zero.) The answer is on page 191.

THE HOUND OF MAC DATHO

by Gregory Frost

Gregory Frost is the author of three fantasy novels: *Lyrec, Tain,* and *Remscela,* the latter two comprising a retelling of the Irish epic saga Táin Bo Cuailnge. "The Hound of Mac Datho" is set in the same milieu as these two books. Mr. Frost is presently at work on a collaboration with author Tim Sullivan, tentatively titled *The Nostalgia War.*

art: Bryn Barnard

1. The Mastew

In the southern province of Leinster, a renowned minor king named Mac Datho lived. He controlled a wide area of land within the province, measuring his moderate wealth by the fifty-four members of his *tuath*. Mac Datho was a *ri tuaithe*, the king of a single *tuath*, and though this placed him in the class of rulers, the distinction was the least distinguished form of kingship there was. What gave him his reputation, setting him above the others of his class, was that he maintained a hostel. This honor he shared with only six others in all of Eriu.

In those days hostelers opened their doors to every traveler: to the poets; to the aristocracy, from other *ri tuaithe* all the way up to the *ri cóicid*, the rulers of the five provinces; and especially to the satirists, who constantly wandered the roads in search of gossip to weave their clever lampoons around.

Inside the circular wooden hostel, Mac Datho ensured that two cooking fires were maintained at all times. The first of these kept boiling a cauldron of beef. The other, a heated pit of coals, slowly cooked a spitted boar. Dozens of long forks hung along the walls between the two fires, in keeping with ancient tradition. The rule of all hostels stated that whatever a guest caught on his first stab, that was to be his meal; Mac Datho let his hungry travelers take their fork and their chances accordingly, but he ensured their success by keeping the cauldron full and the glazed boar turning on the spit. This was his duty and he performed it well. However, his greatest joy in life was not hosteling. It was his hound, Ailbe.

At the shoulders, Ailbe stood as high as the rim of a chariot wheel. Mac Datho had acquired him from traders across the sea in Alba, where they called such hounds *mastews*. Ailbe guarded the hostel and all the land around it, and everyone in Leinster had seen or heard of him because, although the hosteler was normally quiet and unassuming, when hounds entered the discussion, he grew loud and boastful and proud. He knew full well that no animal on the isle could better his Ailbe. Proof of this lay in Mac Datho's other prize possession—the enormous wild boar he kept penned beside the hostel. Ailbe had driven the boar out of the woods and into the yard, then held it at bay while the excited hosteler had frantically fabricated a pen around it.

The danger in having a thing you're proud of is that others become envious of your good fortune. The danger in being a hosteler while owning such a treasure is that your guests might carry word of it to all the other provinces, where someone might be envious enough to act, someone who needed such a unique symbol of power for her own, and someone who did not concern herself with the cost, whether it was counted in cattle

or in lives. The someone was Maeve, Queen of Connacht, and she heard the story from a novice satirist one night in the feast hall of the vast twin-ringed fortress called Cruachan.

Seven years earlier, the queen had placed her hopes for supremacy over all of Eriu—including her own husband, Ailell—in the acquiring of the Brown Bull of Ulster. To say that the Ulstermen were less than enthused to part with their infamous bull would have been understating the matter considerably; but Maeve knew of a curse placed on the men of Ulster by their goddess, Macha, that would lay them out for nine days when a major crisis struck. In that way she had eliminated Conchovor and all of his interfering warriors . . . except for a creature called Cú Chulainn, a hero whose father was no less than the great god Lugh himself. This powerful ephemeron had slaughtered her amassed armies one by one, besmirched her name, and left her finally with no bull, less warriors than when she had begun the raid, and the unreasonable but ever-present terror that he would one day seek her out and kill her when she least expected it. As a result she kept a ring of warriors around her whenever she went outside the walls of Cruachan and seethed with the desire to breathe vengeance over Ulster. She had sought for some time for an appropriate prize to flaunt, but had found nothing so far.

It was a spring night, and a cool breeze danced through the hall, whipping up the fires. Dressed in a tunic of burgundy embellished with woven gold designs, the queen sat amid blankets and a half dozen sleeping terriers and listened to the dwarfish, thick-featured young satirist spin what news he had picked up into the long rhythmic paean he had composed for her. She ate slices of marinated apples, nuts, and cuts of cheese at the same time as she idly selected interesting tidbits of fact from the satirist's long-winded performance. He described the hospitality of Leinster as scant compared to her own beneficence, and interjected a brief comment on the horrible, fierce hound that a hosteler had owned, the most terrifying beast he had ever seen tamed.

Without thinking, Maeve replied, "Then you have never seen the Hound of Culann, have you?"

"No, but I tell you there's no hound fiercer or cleverer than this man's. It can circle the whole province of Leinster in a day—he told me. And it captures boars—he had one in a pen that was the size of a tumulus. Of course, their cattle," he added hastily, "are nowhere *near* as fine as yours, and cattle are worth so much more than pigs, as anyone would agree."

Maeve threw down her apple and sat straight up. She tossed a terrier from her lap, leaned forward and grabbed the unsuspecting satirist by

the front of his tunic. Her white hair closed around him like a web and he thought he would suffocate. It was as if the shining, sweet-smelling strands were alive.

"Repeat everything you have told me about this hound, then tell me all that you know. Every detail."

He complied in stuttering terror, filling in details about its jaws, its jutting dome, its height and wiry black hair, the skill with which it brought down prey. The inclosing silvery strands vanished from around him then, and the queen called for a messenger named MacRoth. While she awaited his arrival, she took a twisted gold bracelet from her wrist and gave it to the satirist

This MacRoth was a short, dark and powerful-looking man. In his presence the satirist had to repeat his descriptions of this hound without embroidery. Some unspoken message passed from Maeve to her messenger once the story had ended, because he gently lifted the man up and walked him out of the feast hall and the circular fort, across the dark yard and into a large cooking house. The messenger ordered that the satirist was to have anything he wanted—the largest meal he could eat, then a room in the second circular fort for the night, to be spent in the company of a skilled *cumal.* MacRoth spoke with refinement and no breath of threat, but the satirist could tell that these orders would be carried out in every respect. MacRoth left him. The satirist, knowing a good thing when it hit him in the face, rubbed his hands together, smiling, and said, "So, what have you got that's fresh today, hmm?"

The next morning, revived and so satisfied that his stubby knees trembled, the novice of satire set off from Cruachan. He had no inkling of why the tale of Ailbe had reaped him so glorious a remuneration, but he figured that what played well in one province should get him a standing ovation in another. He wandered northeast into the hilly lowlands around Lough Boderg, choosing for his next success the province of Ulster. Over the three day journey he polished his act, retelling it every night in the houses of his hosts, all of whom listened courteously out of the fearful respect they had for satirists' power—even young satirists with little awareness of local politics. Of course, he reminded himself, these people were at best lesser nobility. Their lack of excitement simply reflected their lack of brains. The king of Ulster, reputed to be exceedingly generous, would find so elegant a satire worth paying for, and paying well at that.

Late in the third day, the hill of Emain Macha came into view, the three large houses like huge dolmens or barrows grown out of its side. The people on the ramparts welcomed him warmly and promised him a fine reception from Conchovor, who loved biting satire and a good fantasy.

He spent the afternoon watching the traffic inside the cochleate fortress of Craebruad, the "red house," where Conchovor conducted most of his business and threw his feasts. He watched the people come for judgments to the center of law; the bands of Druids come to study with Conchovor's father, Cathbad; the servants who hauled sacks of vegetables and grain from their sodden fields on the endless plains that surrounded Emain Macha on three sides to the three cooking houses on top of the walled hill; the warriors who laughed and played like giant children, stopping to wrestle or argue or compare weaponry and biceps. Nearby he found the charred remains of another fortress and inquired after the story of how a madness had seized Conchovor and had driven him to acts that tore his province apart, how an internecine war had set in, and how the original fortress, called Ard Macha, had been burned to the ground. Though he had built a much greater fort afterwards, Conchovor had left the ruins standing to remind him of what had happened. Yes, the satirist thought, Emain Macha was rife with good material, if material to be used in some other province on some other night.

At dinner, he dispensed with all of the other tales and lampoons he had honed for and about the warriors and immediately began aggrandizing Mac Datho and his *mastew*: the dog stood taller than some men and certainly taller than a stunted satirist, smoke steamed from its nostrils because its heart was formed of fire, and it had eyes cast from a *ban-sidhe*'s cloak—all opalescent green and orange that spangled in the night light of a fire. He described how it had brought down horses and devoured warriors whole. Some of the more credulous listeners gaped at him over their dripping food. He hid his smile as he announced that the only hound greater than this Ailbe was Ulster's own dogged Cú Chulainn.

The warriors bellowed their agreement and pounded the hilts of their knives on the boards.

Conchovor said, "This fellow Mac Datho must be a great ogre himself to run such a hound as that."

"No, not really. He's a good hosteler and a generous one with his food. Your first stab always comes up with enough to feed you."

"Really. Then I'd think he would want to rid himself of such a monster."

Here, thought the satirist, was a golden opportunity to get in a few jabs at Connacht for the Ulstermen's benefit and, hopefully, his own. "I don't think he'd care to do that, and I said as much to your neighbor Maeve the witch-queen, but she's so infernally greedy that she's already making pointless overtures to acquire the dog. Not surprising, since all she seemed to have were little dogs so small that an Ulsterman would squish them underfoot on his way to relieve himself."

That was a sure laugh, but the room remained dead quiet, and tension

filled it like smoke. The satirist pursed his lips and glanced warily at the king. Conchovor had set down his cup. He turned to a young man at his side and said, "You will please leave the room, Sencha." The young man got up, an armed escort at his side, and left the hall, but not without a sharp glance back at the teller of tales.

"That's Sencha, the son of Ailell and Maeve, who is a token of Cruachan's pact for peace with us. We foster him, but soon enough he'll be going home and beyond a point I expect no loyalty from him. Now, I've shared a fact with you, and you must share the facts surrounding Ailbe and Maeve with us, else I will donate you to my Druids for a Beltain sacrifice."

The satirist looked around the room but found no friendly faces there. No threat of a satire or a curse would work here—he would be dead before he had finished the threat. As asked, he stammered out his story, everything he knew about the hound, precisely as he had done for Maeve. He was careful not to use any rhymes or nonce-words that might even vaguely sound like an incantation. They might yet reward him, he hoped. He finished by saying, "And when I had told the queen what I just told you, she sent for her personal messenger named MacRoth and I had to tell him. I heard the next morning someone say that he was going to go down to Leinster to the hosteler with an offer for the dog. I can't say why all this interest."

"You needn't. I can. She intends to pit her hound against ours."

"You have a hound that can do all those things, too?"

"Of course we have. Cú Chulainn, you idiot."

"Oh, yes—I knew that."

"Any good satirist would." He got to his feet. "Now, while I go and pursue this matter, why don't you finish entertaining my warriors?"

The satirist scrutinized the sea of faces, most of them scarred, not one of them offering the friendliness they had all worn only minutes earlier. This would require a skillful satire, his best piece, and he knew just what to use—it even involved their goddess. "So," he said, "anyone here ever heard the story of the horse goddess and the chariot race?" A knife whizzed past his ear and stuck in a post behind him. This was going to be a tough audience.

2. A Plethora of Messengers

The last time that MacRoth had made overtures such as these on Maeve's behalf, he had tried to acquire the Brown Bull of Cuailnge in Ulster. That time he had taken a full entourage with him and just when he had the bargain in his hands, his retainers had cocked it up. Because

of that single incident, Connacht had invaded Ulster and lost many of its grandest heroes; and because of *that*, MacRoth had gone to Mac Datho's alone.

The offer for the hound, he saw, left his host in scarcely veiled trepidation. He observed critically how Mac Datho began to drink cup after cup of wine to steady himself. Obliged by the custom of hostel hospitality to match his host, MacRoth downed the wonderful Estremnidean brew, but he remained so intent upon securing his host's answer, that he took no joy in the sweetness, no satisfaction from the bouquet, no notice of when he had surpassed his limit. And with Estremnidean wine (as his queen had once learned while bribing a warrior to battle Cú Chulainn) the drinker passed directly from mildly flushed to utterly stupefied with no intermediate steps. Mac Datho had in fact deceived him, sipping only half of his cup, pouring the remainder into the straw beside him—a great waste but a necessary one. MacRoth remained in his stupor for four murky days while his host vacillated like the tail of a happy dog. Every time MacRoth showed signs of regaining consciousness, Mac Datho, with equivocal resolve—the one place he had any—poured more wine down the messenger's throat.

The offer had been six hundred milk cows and a chariot; Mac Datho already had more cattle in his district than in any other single district in Eriu; as for the chariot, it was useless to him—nobody ever attacked a hostel. Such stupidity would have called down the most ancient and direst supernatural consequences upon the attacker. The great, grand, glorious offer of Queen Maeve meant nothing. He wrung his hands and continued to fret. His troubles had barely begun.

When the wanderer from Ulster arrived, Mac Datho hardly paid him any mind, leaving him to be tended by his wife, Clota. He noticed that the man was tall and slender, with a very short dark beard going gray and a perpetual look of mild disgruntlement about his round face, as if his bowels were out of order.

Mac Datho had no care for this man's troubles and would have ignored him if the man had not taken his stabbed portion of meat and come looking for the hosteler.

"Excuse me," he said, "my name's Fergus, called Fergus the Messenger. I'm a special envoy for Conchovor, king of Ulster and all else that suits him, former messenger to the far-famed Fergus mac Roich."

"King Conchovor used to be a messenger for Fergus mac Roich?"

"No, you thick—" The Messenger caught himself. He made a wide, agreeable grin, then said, "Ha-ha, right. Now, the king has sent me to visit your proud hostel with an offer to purchase your *mastew*, which he's heard so much about that it—hello? Good gods, he's fainted!" He called for help, and Clota came running out of the cooking house next door.

Together, she and Fergus revived her husband, who immediately got up, clutching his chest, and galloped off into the nearby woods.

Clota turned a diffident smile to Fergus and said, "Won't you excuse us for *just* a minute. Why don't you take another stab at your dinner?"

In a clearing where they often went to be alone, Clota found her husband. He was pounding the bark off a yew tree with his forehead. Angry wrens in a nest up the tree were shrieking at him. At Clota's approach, he yelled, "Go away from me, I'm cursed," and sat down against the same tree to begin sprinkling its needles into his receding hair.

"You can't do this," Clota continued. "Your Connacht messenger will come around pretty soon and need more wine."

"As if that mattered now. The queen from Cruachan wants my hound, and refused she turns from bright silver to a black darker than a starless night. Once, a man called Dairé denied her his bull but lost it to her just the same. In return for refusal he gained a farmland where grass grew red and the animals grazed between corpses."

"Then give her the hound."

The hosteler patted the lumps rising on his forehead. "It's a fine conclusion but no longer practicable. Now the worst enemy Maeve has wants my Ailbe, too. That Dairé lived in *his* province and he'll reward me foully if I spurn him. His messenger carries that word home and two nights later a Druid will be drinking wine from my skull, and *you* will—"

"Enough!" Clota commanded. She sat with him. "You can't split the poor *mastew* . . . but you could give it away twice."

Mac Datho looked at the ground, then up at his wife. He nodded, hugged her; then, fingering the bumps on his head, he glanced around. "I think I'll try the oak next." He hoisted his tunic, took half a step. His wife grabbed onto his cloak and yanked him over backwards.

As he lay in the needles, she leaned over him and said, "Listen, give the hound to both of them, but don't tell the one about the other. Let them come together here and hack at each other over him. Maybe, if we're lucky, they'll slaughter themselves to nothing. If not, then give Ailbe to the victor and be glad of it."

"That's not very hospitable."

"So? Insist they take their fighting outside. So long as you stay inside no harm can befall you. No one would go against Druid law and slaughter anyone at a feast, *and* in a hostel. They'd have to be crazy."

"You think the queen of Cruachan isn't crazy?"

"You know what I'm saying."

He had to admit that her plan was a vast improvement over smashing his head against trees all day. He cupped his hands to her wide face and said affectionately, "You are the wisest counselor in the whole world."

* * *

MacRoth had to be dipped head first in a pine barrel of cold water to sober him up. They let him sit by the cooking fires while Mac Datho explained, "This has been most difficult for me. My *mastew* is my whole world. Still, your queen's offer is generosity itself. I cannot ignore her, but I would add to the bargain that she and Ailell and an entourage come to my hostel for a feast where I'll bid my Ailbe farewell."

Muddle-headed, barely able to remember what he was doing there, MacRoth readily agreed to the conditions of the pact. He selected a date for this, and then let the hosteler walk him outside, point him in the right direction, and give him a shove to send him off. MacRoth shambled along the road for a ways but paused to glance back; he saw that he had not emerged from the feasthall, but from one of the small beehive huts behind the hall.

He tried to remember when he had gone there, finally shrugged off the hole in his memory and stumbled on towards Connacht.

Fergus the Messenger, stone cold sober, had reached the end of his patience by the time Mac Datho returned to him. "Did you have a good meal?" asked the hosteler.

"No, I didn't have a good meal. It's not been my experience to be so ill-treated when I come to a hostel."

"Please, forgive me—I swooned."

"Swooned?" Fergus screeched. "*Swooned*? You screamed and ran away!"

"I did—but it was a terrifically hard decision for me to give up Ailbe. I raised him, you know, from when he was a tiny pup. He had the hugest feet I'd ever seen on a pup, which is not surprising now when you see him, is it? But I'm wasting your time with my reminiscences. No matter what's come before—I've decided to part with him. I should be honored if your king could journey here for a feast—say three *noinden* after Beltain?"

"Well, yes, all right," replied Fergus, somewhat mollified by hard facts in his favor. "But, look here, it won't do for you to go sprinting into the trees when Conchovor greets you."

"I'll remember."

"And make it a big feast. We of Ulster like a good feast almost as much as we like a good fight."

"Really? I never knew. I'll try to cater to your inclinations. Now, why don't you come in and have some food, rest before you return home."

"Yes, all right. And wine—we like good wine. You have wine?"

"Certainly," Mac Datho replied as he led Fergus over to the spitted boar.

"And those candied apples like they make in the south."

"I know just what you mean."

3. The Gathering

The festival of Beltain arrived a week after Fergus went home. Mac Datho oversaw the celebration in his district, leading his *tuath* onto a hillside where they greeted the sun at dawn: "Good day for us if you show your eye, warmth to the animals, good life to the plants." The appearance of the sun always forecast a successful Beltain. They danced—the men around a SunStone, the women around a Maypole—to ensure their own fertility. They ate and danced and sang throughout the day, playing games, drinking to blissful excess, tumbling, kissing, wrestling, loving. At night, Mac Datho lit two bonfires and his people drove all of their cattle and sheep between the two, causing all of the errant spirits that had lodged in the beasts after the hallowed Samain eve to vacate the animal hosts and return to the afterworld where they belonged. Now the cattle and sheep were cleansed of evil for the harvest feast of Lugnasad. They would serve as pure sacrifices. The celebration ended with a Druid's prayer to Brennos, their god, to grant these people fecundity, followed by the lighting of a small wicker figure stuffed with letters to the dead, supplications transcribed by the Druids in their secret language. As he walked down the slope, the stick-man burning above him, Mac Datho lurched to a halt—he now had twenty-seven days left to prepare for the feast he had promised, and he had just remembered it.

The time passed too quickly. He gathered necessary supplies from his people to supplement the store of food at the hostel. This feast would surpass any he had ever thrown, a *ri tuaithe* being in charge of but a small unit of society. The quantity of heroes who would sit together in the hall staggered his imagination. There would have to be an immense pig slaughtered to feed so many champions; he saw sadly that only one pig could accommodate them, and that was the mammoth boar Ailbe had caught.

As the day drew near, Mac Datho tried to look at the sacrifice of his boar philosophically as the dispensing of one treasure in order to keep the other. He asked the black-clothed Druid who performed the slaughter to make a prayer so that the gods would appreciate this. The night before the event, despite all of his rationalizing, he could not sleep, and he sat up beside his sleeping hound, watching Ailbe twitch and quiver in a dream of prey pursued. Near dawn, he got up and wandered out to where members of his *tuath* roasted the enormous boar over slow coals. It pained him to watch, so he drifted into the hall, absent of travelers that night. More of his people carried in casks of wine, stacked them in the corner, stirred two cauldrons of thick soup made from vegetables out of three kitchen gardens, piled up loaves and cakes of steaming honey-glazed

bread, and added clean straw to the floor around the line of boards that made up the narrow table stretching from the doorway at one end to the dais where the boar would be suspended at the other. Slowly, he became aware of a low, distant thunder. It grew louder as he strained to hear it. A knot tightened in his bowels. The day of the feast had arrived.

Leaving the hall, he stood aside for the group who carried on the heavy spit between them the succulent carcass of Ailbe's pig.

They appeared through the trees to the west, cloaks and tunics like splashes of autumnal color in the forest—a small army of chariots, which burst out onto the road. The cheerless, bearded king led the way. Of his silver-haired wife, Mac Datho could see just the hair: she had surrounded herself with a ring of nine tightly packed chariots. The rest of the small force trailed loosely behind her cluster, like hounds. They drew up directly outside the feasthall, their bright cloaks swirling around them. Ailell stared sullenly down upon Mac Datho. His proud brow creased, and he looked away. Mac Datho looked in that direction, too—where the early thunder continued to rumble as though the northern hills had caught the sound and turned it back. The hosteler sensed that not everyone had been distracted by the distant sound—someone was staring at him. He looked the Connacht party over and found Maeve through a space in her barrier. Her cold eyes picked his bones. He controlled the overwhelming urge to flee, and called out, "Whoever that is coming, you should all hurry into the hall. My laws will shield you there."

Ailell glowered at him suspiciously, but said, "Good counsel." He waved all of his people toward the hall. Servants led the chariots aside.

In the house, the people and their servants were placing the last of the foods on the long row of boards. At the far end others strapped a rectangular shield upside down beneath the hanging boar to catch drippings. Mac Datho got some of them to take places on the far side of the table. Ailell and most of his warriors watched from the doorway shadows as Clota walked past their chariots to greet the approaching ones, now resplendently displayed out beyond the low stone walls of Mac Datho's fields. The hosteler busied himself by straining wine into a horde of cups—a messy task that hid his trembling.

Clota met the chariots from Ulster far enough down the road not to be overheard from the hostel. The fractious warriors were already grumbling at the sight of the Connacht chariots. She singled out Conchovor from the transcendent number of bright colors woven into his cloak. He had a young face despite the premature gray in his light brown hair and parted beard. "We're very sorry," she told him, "but an untimely occurrence has brought the king and queen of Connacht here. They insisted

on being taken in. We had your feast laid out, but the laws of hospitality . . ."

"I understand," the king answered. "You've done what you must. It's on us to bend in this situation. Can we at least keep them to one side of the hall?"

"My husband tries that even now—but if you mean keep them away from your boar, I'm not sure we can succeed."

Conchovor stroked his beard and reflected on the problem she had inadvertently pointed up: Who was to be designated champion of the feast? On that subject he could not imagine any of Connacht agreeing with him. He considered his feast party. "It's a real pity," he told himself, "that Cú Chulainn and Conall aren't here or there'd be no question." Both of those warriors had been living at their homes, away from Emain Macha. If word of this event reached either of them, Conchovor doubted it would be in time. He sought his champion's face among his warriors. Laegaire Buadach might do, or Celtchar—about the others he could not say for certain. Then he spotted the cruel, mischievous face of Bricriu. Conchovor brightened. Maybe they could win the Champion's Portion after all. If the Bitter Tongue could lash out at the right enemies at the right moments . . .but who had Ailell brought with him?

The king entered the hall last, after his son Cuscraid, called The Stammerer. The warriors of Connacht stood in a row along the far side of the feast, fingering their weapons. Maeve was barely visible at the head of the row; her nine protectors circled her. Conchovor went around his people as Clota ushered them along their side of the feast, coming to his place across from Ailell. The two kings acknowledged one another stiffly. Between them, the boar of contention glistened.

Ailell said, "We've a precarious situation here. It's going to take strength on both sides to maintain order."

"And you doubt that someone younger than yourself, younger than most of his company, can do that," Conchovor answered sarcastically. "I'm sorry that I didn't bring Sencha along with me or our problems would be solved."

"You and I have an agreement—"

"Which I will hold to here in this hall, since hostility in a hostel carries its own punishment. The fates have brought us here for some reason, those three women who've goaded you and me before. But this time, I say we disregard the women." He turned to Maeve as he said it. Her eyes narrowed to slits and color flooded her cheeks. Assuaged, Conchovor addressed his warriors. "I want your weapons kept fully clothed during this meal. That means daggers are for eating, not for throwing. Provocation cannot belong to us." Ailell gave his people the same command,

though more plainly—he had no care here for the clever riddling that Ulstermen enjoyed.

At the end of the hall, gathered with their *tuath*, Mac Datho and Clota exchanged fearful glances. If these two monarchs began to converse civilly, they would inevitably get around to the subject of Ailbe and the hosteler's plot would be discovered, his life very likely forfeit.

One of his people said, "Look. Who's that that's stood up?"

The man had a spiteful demeanor. Mac Datho clutched at his tunic and offered a prayer to Brennos that this might save him.

His tunic a deep blue, Bricriu the Bitter Tongue walked along behind the row of seated Ulstermen, up to the raised platform that held the boar. Casually, he leaned against one of the uprights while he ran one finger slowly through the thick glaze that coated the animal. When he had a wad of glaze on his fingertip, he popped it into his mouth, then made a face of indescribable ecstasy. This mask disappeared beneath another, of furrowed agitation. As if to himself but loudly so as to be heard throughout the hall, Bricriu said, "This boar is simply dripping with sweet juices, and you couple that with its impressive size and, at the very least, you have to treble the honor of the first slice. Now, I must wonder, who among our lowly crowd can say they deserve such a Champion's Portion? I can't think of a soul."

From the ranks of Connachtmen, a woman's voice called out, "I've carried off enough fat *steers* from Ulster, so I guess one pig shouldn't be much of a burden." Other Connacht warriors laughed. Even dour Ailell smiled at the jest.

Bricriu, however, remained undaunted. "Maybe. But I've carried my share of *pigs* from Connacht. Why, just yesterday as fate would have it, I took one—I think it was your sister."

The laughter down one side of the board died as whoops and catcalls surged like a tide up the other. Conchovor caught the contagion enough to grin smugly at Maeve.

The offended warrior from Connacht started to get up but a huge fist closed on her arm and dragged her back down. The owner of that fist climbed up like an evil Fomor monster rising out of the sea. He wore a sleeveless tunic, revealing countless scars on his arms and shoulders. None marred his granite-jawed face. His glare hushed the Ulstermen as it swept along their ranks, settling finally on Bricriu. The huge warrior started down the hall toward the boar. Without looking away, he addressed the whole Ulster contingent.

"I've carried no steers from your province. I don't waste my time with trifling infringements. This party I sit with hasn't known me for very long, that's a fact. But many of *you* do." He drew up with the boar between him and Bricriu. "You, Black Tongue, may talk all day if you like, but

after I'm finished." He hefted his dagger. "The Champion's Portion belongs to me, and I defy anyone in your ranks to gainsay me."

Bricriu backed off the dais and scuttled in retreat along the feast. His head bobbed as he admitted to himself that he could not stand against this villain.

Clota asked her husband who the warrior was. "He's Ket mac Magach," came the answer. "He's a mercenary—his entire tribe rejected him as too unstable to have around when times were quiet. No one would foster him even."

"I wish I'd known that while he was outside. I'd have stuck a dagger through his heart before he got out of his cart."

"Clota!"

"I would! He's killed babies, children, as well as warriors. He's shameless, a monster." Then she said, "Look," and pointed to where an Ulster warrior had risen. He was fairly stout, but his face was sharp as an axe. His gray hair grew far back on his head, giving him the appearance of a Druid. He had curled his beard into two thick strands for this feast. "That's Laegaire Buadach of the Red Hand," Mac Datho told her. She wondered where he had learned the identities of these warriors.

"I'll deny you supremacy," said Laegaire. "I've slain hundreds to your one, just from the infamous cattle raid alone. Give me the first slice."

Ket mac Magach sneered. "Surely great Laegaire hasn't forgotten the time in Meath that he lost his chariot to me and I took his driver as well? Maybe you'd remember if you looked at your leg under that skirt and found the pink scar where my spear ran aground when I chased you home. Caught you 'Red-Handed,' have I, Laegaire?"

The Connachtmen jeered at him. Laegaire hid his face to hide his shame. He sat down, pulling his cloak up high on his shoulders. He looked like a turtle.

It was Maeve's turn to smile at Conchovor, and she acted with deprecating style. She did not find such verbal warfare as fulfilling as the real thing, but she drank any vengeance upon Ulster as if it were wine, or blood.

A tall man with curly russet hair stood next in Ulster's defense. He wore a gray doeskin patch over one eye.

"That's Oengus," Mac Datho told his wife. "He should defeat Ket."

"Laegaire's still your better," bellowed Oengus, "and so am I."

"Your partial blindness has made you partially stupid. See the whole picture, Oengus, before I take the second eye like I took the first." The Connachtmen roared at this. Red with shame, Oengus sat down. Another man was up in an instant.

"Give the choice portion to me, then. You've never wounded me in battle."

Ket replied, "That's true enough, Muinremor mac Gercin—oh, I know you, and for good reason. Your house suffered an immeasureable loss this past *se'nnight* of two good warriors and a son who was to wear the family torc. If you care to leave your sword here in the hall, I'll take you out to my chariot and show you their three heads hung from my wicker rails."

Muinremor collapsed as if speared. His body shook with grief. The Connachtmen did not jeer at him out of respect for his loss, but they hammered their dagger hilts against the boards in a martial tattoo.

At the far end of the row, a young woman took up Ulster's defense. She stumbled as she stood, and limped a few steps forward to be heard. "I'm Mend the Sword-Heel," she yelled in a hot voice, "and your cruelty exceeds any forgiveness."

"Yes, just as I cannot forgive churlish girls like you who limp forward without thanking me for bestowing them with their so appropriate surname."

The Connachtmen howled with glee. Mend tried to stand against it, but finally gave in and sank down as the man beside her stood. Before he could even speak, Ket waved the Connachtmen to silence and said derisively, "Celtchar mac Uthidir, I am amazed that you even dare stand. How long has it been since you made love with your wife, Celtchar? How long since you could pee without agony? Must we ask you to pull up your tunic and show us the great scar that divides your balls? Hey, Celtchar?"

This time Connacht threw food. Celtchar seemed not so much to sit as to shrink toward the floor amid the hail of leeks and parsnips.

Beside Conchovor, Cuscraid tried to get up. The king yanked him down by his hair.

"Let me gu-go," Cuscraid insisted.

"To do what? *I* already know how you came by your scarred throat and nickname. You stand and he'll call your broken diction smooth—rounded by his blade."

"But he muh-muh"—he pushed his fingers into his neck—"makes us all f-fools before him."

"Only we can do that to ourselves, and thanks to Bricriu we've had the opportunity."

Maeve called to him, "It's a royal pity that Cú Chulainn isn't here. I would have expected a group this large to bring at least *one* warrior along for protection. Or did he not come because he heard that I would be here? Is this the Hound's snub of me? Does he fear me still, Conchovor? If not, then where is he?" Her warriors' derision absorbed the name of Cú Chulainn.

"If he had come," Conchovor said softly to Cuscraid, "then Bricriu would be a hero for stirring this up. Each of us who stands only prolongs

the embarrassment. Ket's probably fought half the world." He looked over the rest of his party; no one else was getting up. Conchovor saw that this feast—and, somehow, the hound as well—was lost to him.

Ket waited until it was painfully obvious to all that no one else dared challenge him. A sneer bared his yellowed teeth. Contempt spilled from him down upon the Ulstermen like boiling water out of a cauldron. His people began to chant, "Ket, Ket, Ket," and hammered their daggers into the boards with such force that bowls overturned and the hard wood dented. Maeve gloated at her sworn enemy.

Turning his back upon Ulster, Ket made a great prolonged show of selecting the spot in which to insert his dagger, prodding the juicy carcass, grinning askance to his supporters. He chose the spot, twirled the dagger, raised it to cut. Above the uproar, a voice shouted out, "Stop!"

4. Heading Off Disaster

Ket whirled around, dagger poised, flashing for a kill. Every head swiveled, every eyelid stretched back. Ket turned feral, his sharp teeth like spear points. No one had the right to challenge him now.

At the far end of the feast, a tall man stood, silhouetted in the light from the doorway. He wore a reddish fur draped around him that hung to the straw at his feet. His face, pale and freckled, had sharp, prominent cheeks; even more prominent was his brow, that cast his eyes in deep shadow. His wavy red-blond hair hung to the gold torc at his throat. He strode silently, swiftly to stand behind Mend the Sword-Heel. Lights from the cooking fires now glittered off his deep, sea-blue eyes and revealed them to be crossed. The Connachtmen all touched their weapons, ready to slay him if he made any attempt upon Ket's life—or anyone's life for that matter. Any remotely justifiable reason to kill this fiery intruder would have served. This was Conall Cernach, the Cross-Eyed, the bitterest enemy they had alongside Cú Chulainn. They believed him capable of any atrocity.

One arm emerged from Conall's red fur cloak, the other still hidden. He pointed up at the boar. "Why," he asked his countrymen, "is that subhuman creature up there at the boar while you, his betters, squat down and ignore him?" Even as he asked this, he met each eye in the line, down to Mend, directly below him, and read the prevailing self-rebuke. "Our king eats a putrid pudding tonight despite all that's laid out for him," he murmured to Mend. Loudly, he bellowed, "Ket mac Magach! Rules governing hostels forbid cannibalism—so why are you preparing to cut into a pig?"

Bricriu spluttered in his wine. No one else moved or made a sound.

Ket replied icily, "The Champion's Portion is mine by virtue of the absence of unblemished warriors in Ulster. I'm the best man in the room."

"Possibly, for a moment or two that was the case. An accident—just as a herdsman is the best warrior when he wanders alone amongst his cattle. But now I would say that you are at best *second* best."

"Meaning that you've ascended?" Ket stood defiantly, his muscles bulging; but his voice betrayed resignation, and everyone in the room understood: he had nothing to claim against Conall.

Conall replied, "Not at all. I mean, you've *de*scended. Ask your company. When has a day passed since the great *táin* that I've spared a Connachtman his life. You can all count your losses—if by error I've left you any fingers to use. This hot-headed spear-wielder has nothing to compare to it. I've got years of slaughter on him. So I say, Ket climbs down."

Ket looked for guidance to the king and queen; they had only to say the word and he would leap upon Conall and hack him to pieces, the rules of hostels be damned. Maeve had already discounted him—she scanned the rest of the party for a face to defy Conall but without success. Ailell had already weighed these things. He gestured the warrior down from Mac Datho's pig. Ket slammed his dagger into its sheath. "You get this boar," he shouted insanely, "but if my brother, Anluan, came through that door right now, you'd have to crawl into a corner, and he'd still find you and squash you! Anluan's deeds shame the whole of Ulster. If he were here, this would be *his* pig, *his* feast. No one can restrict Anluan."

Down the line, desperate Connacht warriors began to pound and chant, "Anluan." Some said, "He's right!" and others, "If *he* were here, all right."

Conall answered above the din, "What are you all babbling about? Anluan *is* here."

This subdued the warriors. They looked around in dismay, seeking their brother in the shadows.

"No, you misunderstand," Conall told them, reeling in their attention, "Anluan's right here." He flung back his red fur and held out the severed head of Anluan. The milky eyes stared at the ceiling, the black tongue parted the lips. "He's mine, my trophy. However, since you've graciously given me this feast, I suppose I'll let him sit with you." With a snap, he flung the head the length of the boards. It bounced off a stunned Ket, spraying blood and gore down upon Ailell, and plopped into Maeve's lap.

She shoved the head off her legs and backed away in revulsion. Ulster hooted at her and resurrected the name she had won in her cattle raid: "Queen of Foulness!" they cried, pointing sadistically at the red smear between her thighs.

Conall raced along the boards between adversaries. He leapt over the food and landed beside the boar, immediately shoved Ket out of the way,

turned and, with a quick stroke, cut a huge slice of dripping pork. He jumped down in front of Ailell, dropped to one knee. "Here is my cut—that I've wished to share with you both for so very long." He bit into the pork, grinning like the fiendish fate, the Morrigan.

With exaggerated calmness, Ailell wiped the streaks of blood from his face. He got to his feet and ordered his party out of the hostel. Then he helped Maeve up. She had lost most of her color and could not look away from the head that lay on its side, seeming to stare at her. Ailell pushed her ahead of him.

The Ulstermen jeered and hurled food at the departing guests. When-

the last of Connacht had left, they ran to Conall and embraced him. Conchovor shouted his name like a battle cry and it resounded up the walls, escaped through the smoke hole in the roof, filling the clear sky with that name.

Mac Datho and his wife hurried out after the departing Connacht force, pretending abject apology, hiding their delight. The king said nothing. Surrounded by her wall of chariots, Maeve was busy stripping off her blood-drenched clothing only to discover that Anluan's head had stained her belly and thighs. Frantically, she wiped at it, but the blood smeared. Her driver rolled off with her naked against the rails.

All the chariots rolled off and in celebration Mac Datho released Ailbe. He held out his arms to the immense beast, but Ailbe ran past him in pursuit of Connacht. Mac Datho yelled and dashed after the dog. He could not stop the hound. Ailbe caught up with Ailell's chariot, barking and charging around it, shoulders as high as its wheel. The king of Connacht saw that here lay the source of his humiliation. His sword swept up, flashed once across the sky, and the great, prancing *mastew* crashed down without its head. Ailell dangled it by one ear. He called back, "The Ulstermen may have your pig, Mac Datho. I shall keep the dog." He shook the massive head wildly until his chariot rolled out of sight.

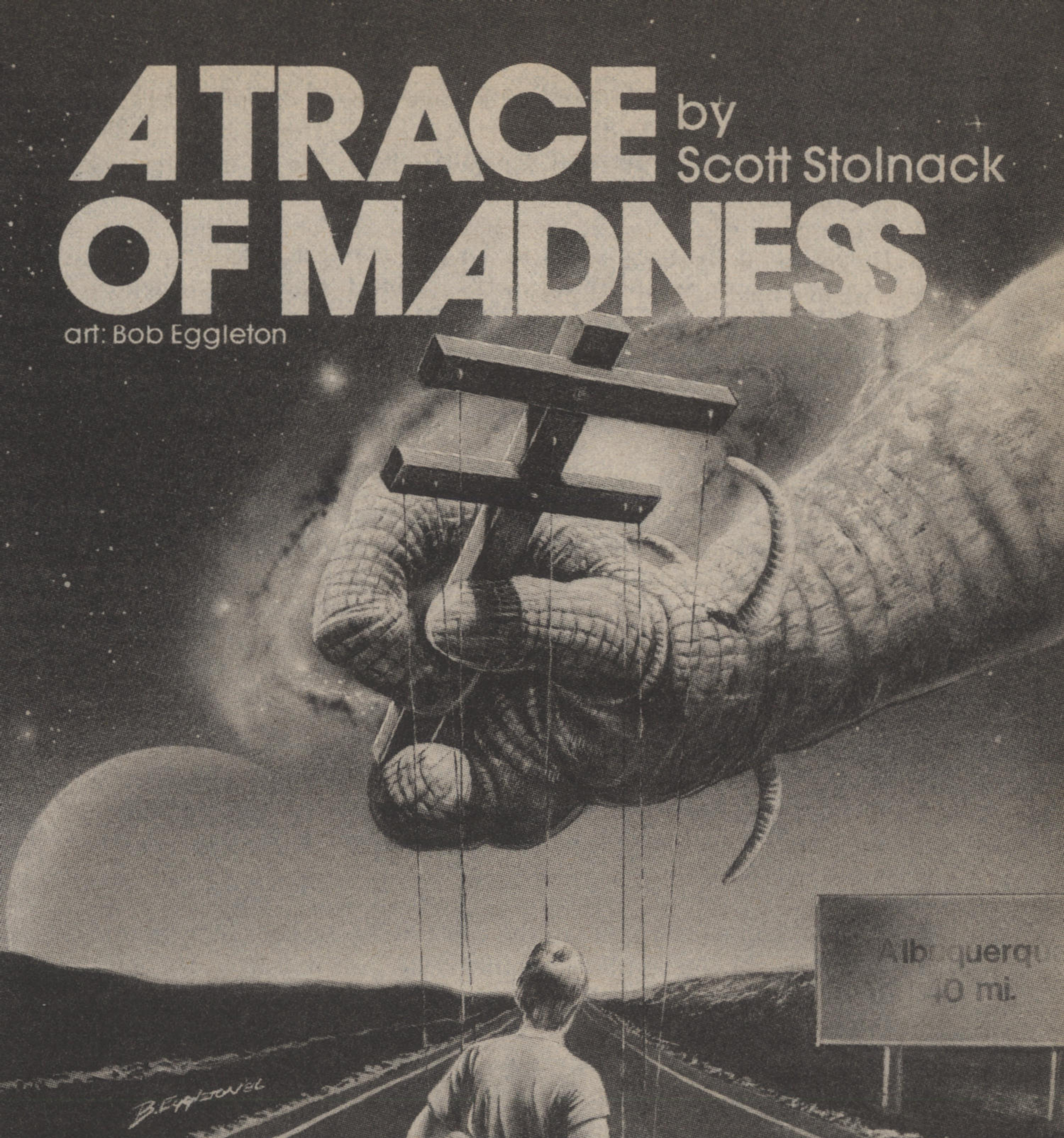
Conchovor, in the doorway, saw all of this and figured out how he had been deceived. The rest of his party still shouted and laughed within. He shook his head at Mac Datho. "A dangerous gambit you've played here, and maybe an offense to us, but I won't ask for an accounting. I think you've lost enough." He went back inside.

Mac Datho left his wife's side and trudged down the road toward the body of his hound. He was still standing beside it, lost for what to do, when the lone chariot appeared and came to a stop nearby. The passenger jumped down and walked up to him. "You Mac Datho the hosteler?" Mac Datho nodded. The man smiled. "Good. I've been sent by the king of Leinster. He's interested in purchasing your hound." ●

A TRACE OF MADNESS

by Scott Stolnack

art: Bob Eggleton



The author, a graduate of the 1985 Clarion West, lives in Seattle. "A Trace of Madness" is his first professional fiction sale.

"Where you headed?" Red poured me another cup of coffee, my sixth since midnight.

"Peoria," I said. Peoria was as good as anyplace else.

"Yeah, I remember where Peoria used to be."

"Where's it at now?"

Red looked up at the greasy ceiling for a moment and scratched his head. "Somewhere in South America, last I heard. Had a guy come in about a month ago . . ." He shrugged. "Could be anyplace by now."

Red walked away to wait on a couple who had just come in, and I went back to my bacon and eggs. I swore under my breath. Damn reality was getting harder and harder to count on. World was changing every day, it seemed.

My skull buzzed. "Toads comin', Boss," said the voice in my brain.

"Go away," I said out loud, meaning the Toads, and the voice, and the growing headache that felt like a fissure cracking open my forehead.

"Sorry, Boss," said the voice. "You said—"

"I didn't say anything."

"You said to warn you if any Toads came within—"

"How about some more coffee, Red?" I shouted to drown out the voice. Red didn't turn around, but kept talking to the couple.

"Boss . . ." The fissure in my forehead deepened. "You okay, Boss?" Out of the crack in my skull came a man who looked like me. I felt myself fading away, becoming a ghost as this other me who wasn't me sat where I sat and picked up a slice of bacon with his/my fingers.

"Location?" I subvocalized.

"Just walked in," said the voice in my brain. "Two of them."

"Right." Red had seated them in the booth near the door. A man and a woman. If I tried to leave that way, they'd sniff me in a second.

"Sorry—you call for more coffee?" Red stood over me with a fresh pot in his hand.

"Oh. Yeah, I did. Thanks." I drained my cup and set it down. "Good stuff," I said, smiling up at him. He poured me a refill.

"Hey listen, Red—" I beckoned him closer. "There a back door to this place?"

"Sure. Out past the john." He lowered his voice. "It's those kids, ain't it." My fingers tightened around the coffee cup. "They were asking about you."

Damn! If the Toads knew me by sight there was no use trying to slip out the back.

Red walked to the counter and came back with a rag. "I'll just get this cleaned up in no time," he said loudly, wiping an imaginary spill from my table. In a softer voice, he said: "Sorry for being nosy, but you in trouble?"

I looked at him. He was a big man, with a face that seemed honest—solid, like a boxer's, with steady blue eyes that looked *into* you instead of at you. There was something about him that made you trust him without a moment's hesitation. I decided to lie to him.

"Those kids over there aren't human," I said. "They're the crazy aliens who are moving all our cities around."

He stopped wiping and looked toward the Toads. I could see the veins at his temples throb. *"Bastards—"*

"Hold on, Red." I grabbed his arm as he started toward them. Poor guy. When you're touchy about something, you'll believe anything. And who wasn't touchy these days, with the world falling apart?

"Haven't you seen the news reports?" I asked him. "They're both totally crazy. You want to end up in Albuquerque? Or on the moon?" One was as bad as the other. Nobody had seen Albuquerque in three months.

"What do you want me to do?"

"Help me get outside so I can contact the rest of my team."

"I'll be back." Red moved away to wait on two truckers who had just walked in. He said something to them I couldn't hear, and they answered him in broken English and fragments of Italian.

"Another pair of Toads, Boss."

Christ! "The truckers?"

"Affirmative."

"How many outside?"

"One in an old Volvo thirty feet south-southeast of the rear entrance. No others within range." My headache blossomed into low-level agony.

"Flux status?" I asked.

"Transition in thirty seconds."

I pushed back my plate. "Let's kick some ass, then." I was changing again. I could feel it, but as usual I could do nothing about it. All I could do was hang on and pray for survival.

"They've got guns, Boss—"

But are they as crazy as I am? The headache intensified, and I felt myself getting angry. I was murderous. I was crazy. They'd have to kill me to stop me. I stood up and walked toward the front door.

"Flux?" I subvocalized.

"Terminated."

"Termination point?"

"About sixty miles west of the Black Sea. How's your Rumanian, Boss?"

I signaled Red and he met me at the cash register with the check. The truckers were sitting at the counter, pretending to look at menus. The other two Toads slid out of the booth to intercept me.

The woman stood on my left. The man put his hand on my shoulder. "Excuse me, but—"

I pinned his hand to my shoulder with my left, stepped back, and broke his elbow with my right forearm. Pushing him into the woman, I lunged for the doorknob.

Something hot slammed into my right shoulder and spun me into the door. I turned and saw one of the truckers aiming a pistol at my chest. Red was fighting with the woman for another pistol. Everyone in the diner but me, Red, and the Toads, was on the floor. I fell through the doorway and landed face-down on the gravel walk.

I rolled onto my left side, pushed to my feet and ran to the car. No one had come out after me yet. There were gunshots inside the diner.

"They got Red, Boss."

I fumbled for my keys and jammed them into the ignition. The car fishtailed out of the parking lot as I fought to control it with my good left hand, grateful for power steering.

"How's the body holding up?" I felt almost no pain in my shoulder, but the headache was throbbing like timed explosions inside my skull.

"Blood sugar level a little low. I've found a chronic prostate infection, and that right knee's still not completely—"

"Very funny, Edgar. I'm bleeding to death all over this wonderful upholstery and you're cracking jokes about my prostate."

"Give me forty-eight hours, I'll have everything good as new."

"Wonderful. Got anything for a headache?"

Edgar was silent. I saw headlights reflected in my rear-view mirror. I tried not to think about the poor dumb son of a bitch in the diner who had saved my life. There had been a lot of poor dumb sons of bitches in the last six months. I tried not to think about any of them.

"Transition in three minutes."

"What?" Another one so soon?

"Flux border coming close. We can leave the Toads in another phase if you get there in time."

"Lead the way," I said.

Picture a giant checkerboard set up in the middle of a game. Then picture a giant pair of hands shifting all the checkers around onto different squares. That's something like what happened to the face of the earth during a phase transition. And we were about to leave the Toads on another checker.

"Turn right."

I slowed and peered into the darkness for an intersection. "Where?"

"Into the field."

We turned off the road and drove into the field.

"Bear left."

I did as instructed, still driving one-handed, dodging whatever ruts and boulders I could see and bouncing over the ones I couldn't.

My head hit the roof as the front end of the car dropped five feet. The steering wheel came up and hit me in the chest. We pitched forward into a creek and the car stalled with half its hood underwater.

"Flux border forty feet north. Transition in one minute."

I flung open the car door and waded through the creek. The icy water came to my thighs. As I scrambled up the opposite bank, I saw the Volvo bouncing across the field behind me, its headlights slashing crazily into the night.

I was up the bank and running over level ground as the Toads skidded to a stop behind my crippled car. Edgar was working overtime making endorphins, or I would have passed out from the pain.

A spotlight swept toward me on my left.

"Bear to the left. Transition in five seconds."

I ran into the light. I heard gunshots behind me. I kept running and

ran into daylight. Before me was a stretch of empty highway flanked on either side by scrub desert.

"Termination point?"

"I can't place us, Boss. I don't think we're on Earth."

I turned, and saw the green and white highway sign: Albuquerque, forty miles. Great. Albuquerque wasn't on Earth anymore.

Forty miles is a long way to walk. Especially in the desert, with no water, with a bullet in your shoulder. I fought down a surge of pain and nausea.

"How are we doing?"

"Give me a chance, Boss. These prostate infections are tough to get rid of."

"You're a laugh a minute, Edgar." It must be pretty bad if he wouldn't tell me the truth. I was dizzy and sick to my stomach, but at least the headache was gone. For now. I started walking toward Albuquerque.

The headache started again. A blast of pain hit me behind my eyeballs so hard I staggered.

"Bad news, Boss. Toads closing in from the West, North, and South."

My legs buckled. I sat down hard by the edge of the highway. I closed my eyes.

"Transition in thirty seconds."

My skull was ripped in half and smashed together again. I screamed. The fire began in my eyes and burned through every part of my body, through the dirt beneath me, through the air around me.

A distant part of my consciousness registered the drone of an approaching helicopter.

Then my eyes opened as if by someone else's will. Directly above me I saw the Toads' ship, looking just like Edgar had told me it would. I

tried to find signs of the damage that had forced them into our solar system, but—

Silence.

I woke to more silence, an unknown time later. Pain was mercifully absent. The air tasted metallic and smelled faintly of ozone. I opened my eyes and found myself on the floor of a doorless, windowless room, ten feet wide, ten feet high. There was no furniture. The ceiling glowed pale pink.

"Termination point?" I subvocalized.

There was no answer.

I spoke out loud: "Come on, Edgar."

My voice was absorbed by the four smooth walls.

Pain blossomed in my forehead, then subsided. I tried to sit, but the action shot fire through my right shoulder. I explored with my left hand and found the gunshot wound neatly bandaged.

Then the Toads had caught me. Now what? The exorcism would begin soon. There was nothing I could do. I was tired. So I went to sleep.

The next time I woke, my surroundings hadn't changed. I felt a little stronger. The headache was back, a dull red throb at the base of my skull, creeping slowly toward my eyes.

"Edgar?"

Still no answer. Either he was working full-time on keeping me alive, or he was gone for the first time in six months.

I tried to remember what it had been like before Edgar. Quieter, probably. Less painful, definitely. There had been no headaches before him. There had been no Toads, either. Or cities moving around every few days. Or more "me's" than the simple jerk who was grabbed to play Charlie McCarthy to a sick runaway alien's Edgar Bergen.

Leaning against the wall for support, I got slowly to my feet. The walls were seamless. I had two immediate problems: my bladder was full, and my stomach was empty.

"Hey!" My voice sank without echo into the walls. The headache reached my forehead and intensified. A metal wedge was being driven between my eyes. I felt a tremor through the soles of my feet.

"Location!"

No answer. I ground my teeth and whimpered.

"Flux status!"

No answer. Something was wrong. I was changing again, another me was coming out. One that had never come out before.

I slid down the wall and hugged my knees to my chest. I tried to fight

it. It was part me, but it was part something else. Edgar was using it to kill us all.

Pain clawed my skull apart. I willed my heart to stop. The ship heaved and threw me against the ceiling.

"Nooooooooo—"

Something dark climbed from m forehead. It turned and wrapped shadowy hands around my throat. I looked into its face and saw my face grinning the room trembled I laughed spit fire burned my own flesh the room the Toads the walls cracked open like a giant egg screaming wind metal ship Toads vacuum silence gone all goneallgoneallgone*all gone*—

I coughed, opened my eyes, spat blood. It was night, and it was raining. I was slouched against the flat front tire of a gutted milk truck, a cold wet rusty fender beneath one hand, muddy earth beneath the other. Around me squatted the shadows of other scrapped cars and trucks.

"Termination point?" My throat felt raw. A freight train passed nearby, the steady *click-clack, click-clack* of the boxcars strangely reassuring in the darkness.

"Midwestern North America, Great Lakes region. Welcome to Peoría."

"Where the hell have *you* been?" My right shoulder was stiff, but as I moved it I knew it was almost healed.

"Had a prostate job that just wouldn't wait, Boss."

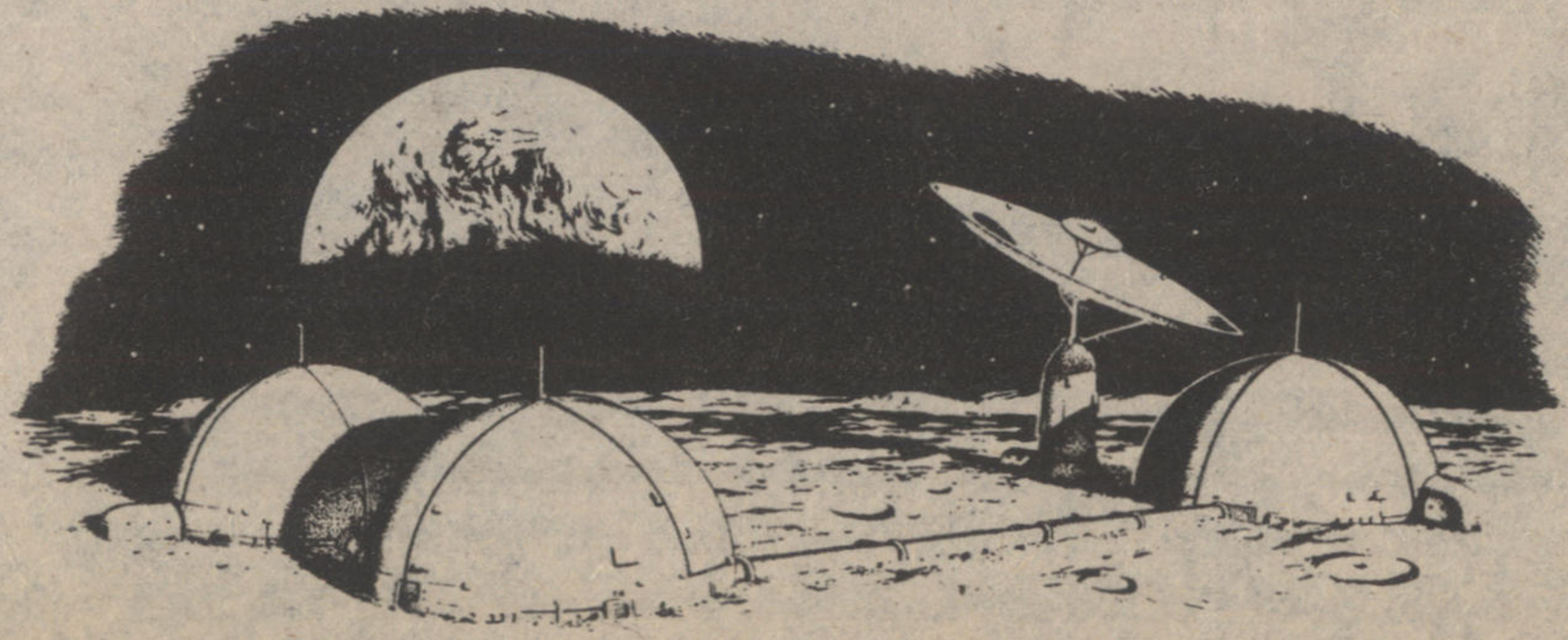
I stood up and took a deep breath. The rain on my face was cool. "Toads?"

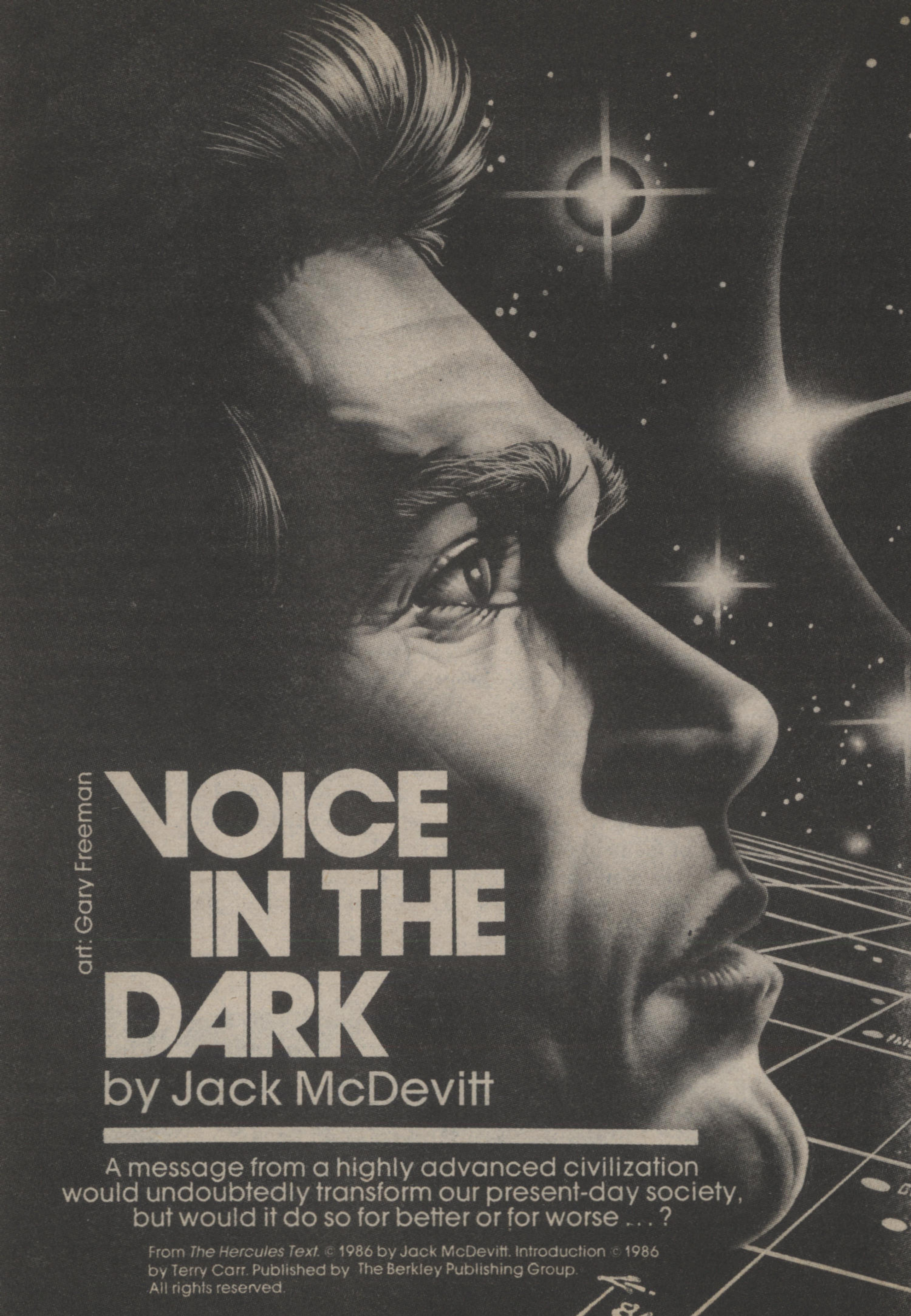
"All gone. Ship exploded, everyone aboard was lost."

All gone. The same power he used to move cities around he had used to tear the ship apart. They'd send another ship, of course. They would feel responsible. He was too crazy to let run around loose on a helpless planet. Part of me held onto that one small hope.

I felt the seeds of a headache sprouting behind my eyes. "Flux status?"

"Transition in eleven minutes." There was a trace of madness in the voice inside my brain. ●



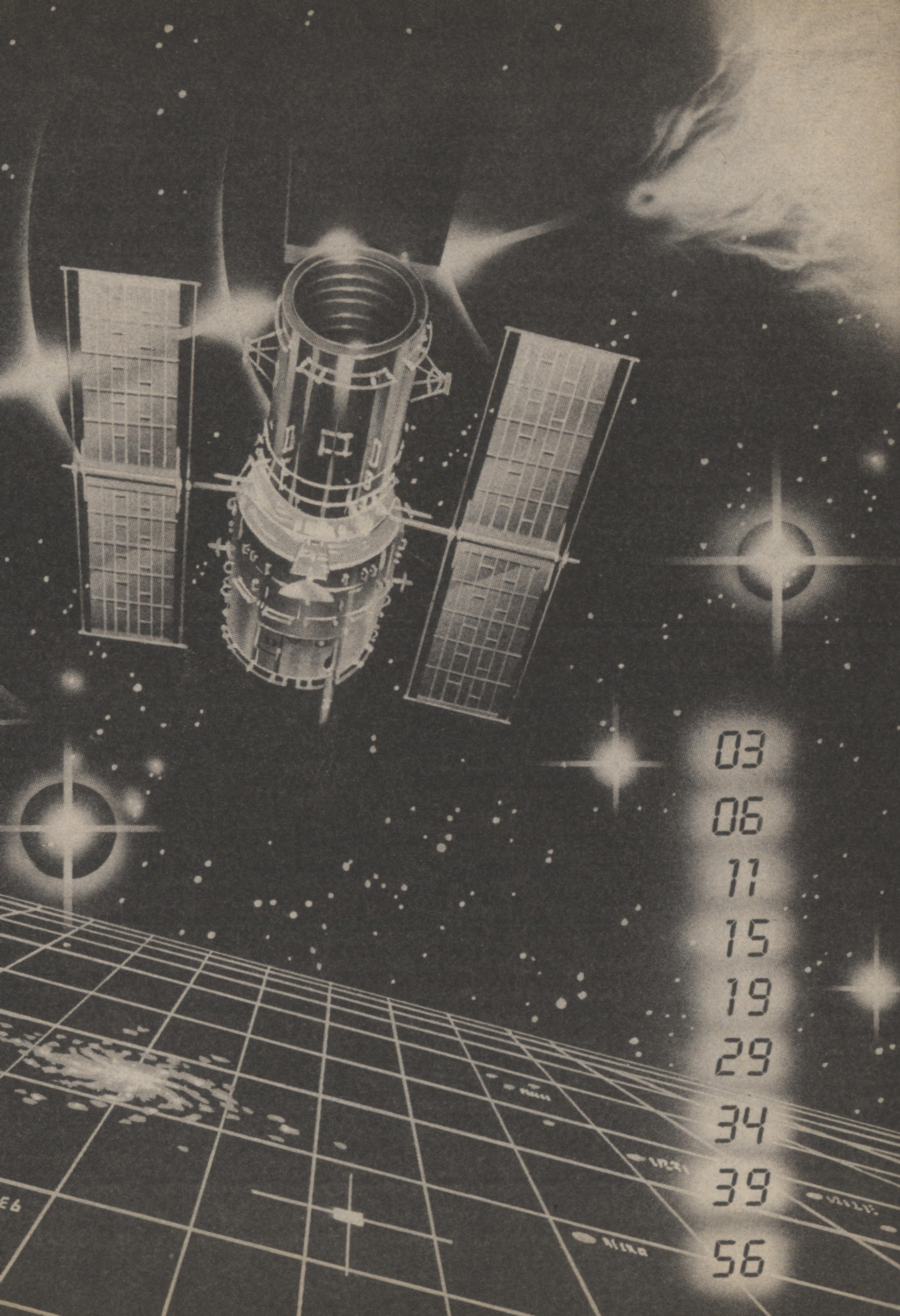


art: Gary Freeman

VOICE IN THE DARK

by Jack McDevitt

A message from a highly advanced civilization would undoubtedly transform our present-day society, but would it do so for better or for worse . . . ?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I.

Harry Carmichael sneezed. His eyes were red, his nose was running, and his head ached. It was mid-September, and the air was full of pollen from ragweed, goosefoot, and thistle. He'd already taken his medication for the day, which seemed to accomplish little other than to make him drowsy.

Through the beveled stained-glass windows of the William Tell, he watched the Daiomoto Comet. It was now little more than a bright smudge, wedged in the bare hard branches of a cluster of elms lining the parking lot. Its cool unfocused light was not unlike that reflected in Julie's green eyes, which seemed preoccupied, on that night, with the long, graceful stem of a wineglass. She'd abandoned all attempts to keep the conversation going, and now sat frozen in a desperate solicitude. She felt sorry for Harry. Years from now, Harry understood, he would look back on this evening, remember this moment, recall the eyes and the comet and the packed shelves of old textbooks that, in the gloomily illuminated interior, were intended to create atmosphere. He would recall his anger and the terrible sense of impending loss and the numbing knowledge of helplessness. But most of all, it would be her sympathy that would sear his soul.

Comets and bad luck: it was an appropriate sky. Daiomoto would be back in twenty-two hundred years, but it was coming apart. The analysts were predicting that, on its next visit, or the one after that, it would be only a shower of rock and ice. Like Harry.

"I'm sorry," she said, shrugging her shoulders. "It's not anything you've done, Harry."

Of course not. What accusation could she bring against faithful old Harry, who'd taken his vows seriously, who could always be counted on to do the decent thing, and who'd been a reliable provider? Other than perhaps that he'd loved her too deeply.

He'd known it was coming. The change in her attitude toward him had been gradual but constant. The things they'd once laughed over became minor irritants, and the irritants scraped at their lives until she came to resent even his presence.

And so it had come to this: two strangers carefully keeping a small round table between them while she inserted shining utensils like surgeon's tools into beef that was a little too raw and assured him it wasn't his fault.

"I just need some time to myself, Harry. To think things over a bit. I'm tired doing the same things, in the same way, every day." I'm tired of *you*, she was saying, finally, with the oblique words, and the compassion that peeled away his protective anger like a thin slice of meat. She

put the glass down and looked at him, for the first time, it might have been, during the entire evening. And she smiled: it was the puckish good-natured grin that she traditionally used when she'd run the car into a ditch or bounced a few checks. My God, he wondered, how could he ever manage without her?

"The play wasn't so good either, was it?" he asked drily.

"No," she said unsteadily, "I didn't really care much for it."

"Maybe we've seen too many shows by local playwrights." They'd spent the evening watching a dreary mystery-comedy performed by a repertory company in an old church in Bellwether, although Harry could hardly be accused of having made an effort to follow the proceedings. Fearful of what was coming later, he'd spent the time rehearsing his own lines, trying to foresee and prepare for all eventualities. He'd have done better to watch the show.

The final irony was that there were season tickets in his pocket.

She surprised him by reaching across the table to take his hand.

His passion for her was unique in his life, unlike in kind to any other addiction he had known before or, he suspected, would know again. The passing years had not dimmed it; had, in fact, seeded it with the shared experiences of almost a decade, had so entwined their lives that, Harry believed, no emotional separation was possible.

He took off his glasses, folded them deliberately, and pushed them down into their case. His vision was poor without them. It was an act she could not misinterpret.

Bits and pieces of talk drifted from the next table: two people slightly drunk, their voices rising, quarreled over money and relatives. A handsome young waiter, a college kid probably, hovered in the background, his red sash insolently snug round a trim waist. His name was Frank: odd that Harry should remember that, as though the detail were important. He hurried forward every few minutes, refilling their coffee cups. Near the end, he inquired whether the meal had been satisfactory.

It was hard now to remember when things had been different, before the laughter had ended and the silent invitations, which once had passed so easily between them, stopped. "I just don't think we're a good match anymore. We always seem to be angry with each other. We don't talk. . . ." She looked squarely at him. Harry was staring past her shoulder into the dark upper tier of the room, with an expression that he hoped suggested his sense of dignified outrage. "Did you know Tommy wrote an essay about you and that goddamn comet last week? No?

"Harry," she continued, "I don't exactly know how to say this. But do you think, do you really believe, that if anything happened to Tommy, or to me, that you'd miss us? Or that you'd even know we were gone?"

Her voice caught, and she pushed the plate away and stared down into her lap. "Please pay the bill and let's get out of here."

"It isn't true," he said, looking for Frank the waiter, who was gone. He fumbled for a fifty, dropped it on the table and stood up. Julie slowly pulled her sweater around her shoulders and, Harry trailing, walked between the tables and out the door.

Tommy's comet hung over the parking lot, splotchy in the September sky, its long tail splayed across a dozen constellations. Last time through, it might have been seen by Socrates. The data banks at Goddard were loaded with the details of its composition, the ratios of methane to cyanogen and mass to velocity, of orbital inclination and eccentricity. Nothing exciting that he had been able to see, but Harry was only a layman, not easily aroused by frozen gas. Donner and the others, however, had greeted the incoming telemetry with near-ecstasy.

There was a premature chill in the air, not immediately evident perhaps because no wind blew. She stood on the gravel, waiting for him to unlock her door. "Julie," he said, "ten years is a long time to just throw away."

"I know," she said.

Harry took the Farragut Road home. Usually, he would have used Route 214, and they'd have stopped at Muncie's for a drink, or possibly even gone over to the Red Limit in Greenbelt. But not tonight. Painfully, groping for words that would not come, he guided the Chrysler down the two lane blacktop, through forests of elm and little leaf linden. The road curved and dipped past shadowy barns and ancient farmhouses. It was the kind of highway Harry liked. Julie preferred expressways, and maybe therein lay the difference between them.

A tractor-trailer moved up behind, watched its chance, and hammered by in a spasm of dust and leaves. When it had gone, its red lights faded to dim stars blinking between distant trees, Harry hunched forward, almost resting his chin on the steering wheel. Moon and comet rode high over the trees to his left. They would set at about the same time. (Last night, at Goddard, the Daiomoto team had celebrated, Donner buying, but Harry, his thoughts locked on Julie, had gone home early.)

"What did Tommy say about the comet?" he asked.

"That you'd sent a rocket out there, and were bringing a piece of it back. And he promised to take the piece in to show everybody." She smiled. He guessed that it took an effort.

"It wasn't our responsibility," he said. "Houston ran the rendezvous program."

He felt the sudden stillness, and sneezed into it. "Do you think," she asked, "he cares about the administrative details?"

The old Kindlebride farm lay cold and abandoned in the moonlight. Three or four pickups and a battered Ford were scattered across its overgrown front yard. "So where do we go from here?"

There was a long silence that neither of them knew quite how to handle. "Probably," she said, "it would be a good idea if I went to live with Ellen for a while."

"What about Tommy?"

She was looking in her bag for something, a Kleenex. She snapped the bag shut, and dabbed at her eyes. "Do you think you could find time for him, Harry?"

The highway went into a long S-curve, bounced across two sets of railroad tracks, and dipped into a tangled forest. "What's that supposed to mean?" he asked.

She started to speak, but her voice betrayed her, and she only shook her head, and stared stonily through the windshield.

They passed through Hopkinsville, barely more than a few houses and a hardware store. "Is there somebody else? Someone I don't know about?"

Her eyelids squeezed shut. "No, it's nothing like that. I just don't want to be married any more." Her purse slid off her lap onto the floor, and when she retrieved it, Harry saw that her knuckles were white.

Bolingbrook Road was thick with leaves. He rolled over them with a vague sense of satisfaction. McGorman's garage, third in from the corner, was brightly lit, and the loud rasp of his power saw split the night air. It was a ritual for McGorman, the Saturday night woodworking. And for Harry it was an energetic island of familiarity in a world grown slippery.

He pulled into his driveway. Julie opened her door, climbed easily out, but hesitated. She was tall, a six-footer, maybe two inches more in heels. They made a hell of a couple, people had said: a mating of giants. But Harry was painfully aware of the contrast between his wife's well-oiled coordination and his own general clumsiness. "Harry," she said, with a hint of steel in her voice, "I've never cheated on you."

"Good." He walked by her and rammed his key into the lock. "Glad to hear it."

The baby-sitter was Julie's cousin, Ellen Crossway. She was propped comfortably in front of a flickering TV, a novel open on her lap, a cup of coffee near her right hand. "How was the show?" she asked, with the same smile Julie had shown him at the William Tell.

"A disaster," said Harry. He did not trust his voice to say more.

Julie hung her cardigan in the closet. "They did all the obvious gags. And the mystery wasn't exactly a puzzle."

Harry liked Ellen. She might have been a second attempt to create a Julie: not quite so tall, not quite so lovely, not nearly so intense. The

result was by no means unsatisfactory. Harry occasionally wondered how things might have gone had he met Ellen first; but he had no doubt that he would, in time, have betrayed her for her spectacular cousin.

"Well," she said, "it was a shaky night on the tube, too." She laid aside the novel. Then the pained silence settled in on her. She looked from one to the other, and sighed. "Gotta go, guys. Tommy's fine. We spent most of the evening with Sherlock Holmes." That was a reference to a role-playing game that Harry had discovered the previous summer. His son played it constantly, prowling with Watson through the tobacco shops and taverns of 1895 London.

Harry could see that Ellen knew about their problem. It figured that Julie would have confided in her. Or maybe their situation was more apparent than he thought. Who else knew?

Ellen kissed him and held him a degree tighter than usual. Then she was out the door, talking on the walkway with Julie. Harry shut off the television, went upstairs, and looked into his son's room.

Tommy was asleep, one arm thrown over the side of the bed, the other lost beneath a swirl of pillows. As usual, he'd kicked off the spread, which Harry adjusted. A collection of hardbound *Peanuts* comic strips lay on the floor. And his basketball uniform hung proudly on the back of the closet door.

He looked like a normal kid. But the upper right hand drawer of the bureau contained a syringe and a vial of insulin. Tommy was a diabetic.

The wind had picked up somewhat: it whispered through the trees and the curtains. Light notched by a Venetian blind fell across the photo of the Arecibo dish his son had bought a few weeks before on a visit to Goddard. Harry stood a long time without moving.

He'd read extensively over the last year about juvenile-onset diabetes, which is the most virulent form of the disease. Tommy faced a high probability of blindness, an array of other debilities, and a drastically shortened life expectancy. No one knew how it had happened: there was no sign of the disease in either of their families. But there it was. Sometimes, the doctors had said, it just happens.

Son of a bitch.

He would *not* give up the child.

But before he got to his bedroom, he knew he would have no choice.

It began to rain about 2:00 A.M. Lightning quivered in the windows, and the wind beat against the side of the house. Harry lay on his back staring straight up, listening to the rhythmic breathing of his wife. After a while, when he could stand it no more, he pulled on a robe and went downstairs and out onto the porch. Water rattled out of a partially blocked drainpipe. It had a frivolous quality, counterpointing the deep-throated

storm. He sat down on one of the rockers and watched the big drops splash into the street. A brace had fallen off, or blown off, the corner streetlight. Now the lamp danced fitfully in gusts of wind and water.

Headlights turned off Maple. He recognized Hal Esterhazy's Plymouth. It bounced into the driveway across the street, paused while the garage door rolled open, and vanished inside. Lights blinked on in Hal's house.

Sue Esterhazy was Hal's third wife. There were two more wandering around out there somewhere, and five or six kids. Hal had explained to Harry that he remained on good terms with his former wives, and visited when he could, though he admitted it wasn't very often. He paid alimony to both. Despite all that, he seemed perfectly content with life. And he owned a new van and a vacation home in Vermont.

Harry wondered how he did it.

Inside, the telephone was ringing.

Julie had picked it up on the extension before he got to it. He climbed the stairs and found her waiting at the bedroom door. "It's Goddard," she said.

Harry nodded and took the phone. "Carmichael."

"Harry, this is Charlie Hoffer. The Hercules signal changed tonight. I just got off the line with Gambini. He's pretty excited."

"So are you," said Harry.

"I thought you'd want to know," he said.

Hoffer was the duty officer at the Special Projects Lab. "Why?" asked Harry. "What's going on?"

"Have you been following the Hercules operation?"

"A little." That was an exaggeration. Harry was assistant director for administration, a personnel specialist in a world of theoretical physicists, astronomers, and mathematicians. He tried hard to stay on top of Goddard's various initiatives in an effort to retain some credibility, but the effort was pointless. Cosmologists tended to sneer at particle physicists, and both groups found it hard to take astronomers, perceived as restricted to confirming the notions of the theorists, seriously. Harry's M.B.A. was, at best, an embarrassment.

His job was to ensure that NASA hired the right people, or contracted out to the right people, to see that everyone got paid, and to keep track of vacation time and insurance programs. He negotiated with unions, tried to prevent NASA's technically oriented managers from alienating too many subordinates, and handled public relations. He'd stayed close to Donner and the comet, but had paid little attention to any of Goddard's other activities over the past few weeks. "What sort of change?"

At the other end, Hoffer was speaking to someone in the background. Then he got back on the line. "Harry, it stopped."

Julie watched him curiously.

Harry's physics wasn't very good. Gambini and his people had been observing an X-ray pulsar in Hercules, a binary system composed of a red giant and a suspected neutron star. The last few months had been a difficult period for them, because most of Goddard's facilities had been directed toward the comet. "Charlie, that's not all that unusual, is it? I mean, the goddam thing rotates behind the other star every few days, right? Is that what happened?"

"It's not due to eclipse again until Tuesday, Harry. And even when it does, we don't really lose the signal. There's an envelope of some sort out there that reflects it, so the pulse just gets weaker. This is a complete shutdown. Gambini insists something must be wrong with the equipment."

"I assume you can't find a problem?"

"The Net's fine. NASCOM has run every check it can think of. Harry, Gambini's in New York and won't get back for a few hours. He doesn't want to fly into National. We thought it might be simplest if we just sent the chopper."

"Do it. Who's in the operations center?"

"Majeski."

Harry squeezed the phone. "I'm on my way, Charlie," he said.

"What is it?" asked Julie. Usually, she was impatient with late calls from Goddard; but tonight her voice was subdued.

Harry explained about Hercules while he dressed. "It's an X-ray pulsar," he said. "Ed Gambini's group has been listening to it on and off for the last eight months or so." He grinned at his own joke. "Charlie says they aren't picking it up any more."

"Why is that important?"

"Because there's no easy explanation for it." He strolled into his bedroom and grabbed an armful of clothes.

"Maybe it's just some dust between the source and the Net." She shrugged the nightshirt off and slipped into bed in a single fluid gesture.

"SKYNET isn't affected by dust. At least not the X-ray telescopes. No: whatever it is, it's enough to bring Gambini back from New York in the middle of the night."

She watched him dress. "You know," she said, striving for a casual tone, but unable to keep the emotion entirely out of her voice, "this is what we've been talking about all evening. The Hercules Project is Gambini's responsibility. Why do *you* have to go running down there? I bet he doesn't head for your shop when some labor relations crisis breaks out."

Harry sighed. He hadn't got where he was by staying home in bed when major events were happening. It was true he didn't have direct responsibility for Hercules, but one never knew where these things might

lead, and a rising bureaucrat needed nothing so much as visibility. He resisted the impulse to suggest that she was no longer entitled to an opinion anyway, and asked instead that she lock the door after him.

The X-ray pulsar in Hercules is unique: it's a free-floater, the only known stellar configuration not attached to a major system of some sort. More than a million and a half light years from Goddard, it is adrift in the immense void between the galaxies.

It is also unusual in that neither of the components is a blue giant. Alpha Altheis, the visible star, is brick red, considerably cooler than Sol, but approximately eighty times larger. If it were placed at the center of our solar system, it would engulf Mercury.

Altheis is well along in its helium-burning cycle. Left to itself, it would continue to expand for another ten million years or so before erupting into a supernova.

But the star will not survive that long. The other component in the system is a dead sun, a thing more massive than its huge companion, yet so crushed by its own weight that its diameter probably measures less than thirty kilometers: the distance between the Holland Tunnel and Long Island Sound. Two minutes by jet, maybe a day on foot. But the object is a malignancy in a tight orbit, barely fifteen million miles from the giant's edge, so close that it literally rolls through its companion's upper atmosphere, spinning violently, dragging an enormous wave of superheated gas, dragging perhaps the giant's vitals. It is called Beta Altheis, a peculiarly mundane name, Harry thought, for so exotic a body.

It is the engine that drives the pulsar. There is a constant flow of supercharged particles from the normal star to the companion, hurtling downward at relativistic velocities.

But the collision points are not distributed randomly across Beta: rather, they are concentrated at the magnetic poles, which are quite small, a kilometer or so in diameter and, like Earth's, not aligned with the axis. Consequently, they also are spinning, at approximately thirty times per second. Incoming high-energy particles striking this impossibly dense and slippery surface tend to carom off as X-rays. The result is a lighthouse whose beams sweep the nearby cosmos.

Harry wondered, as his Chrysler plowed through a sudden burst of rain, what kind of power would be needed to shut down such an engine.

The gate guards waved him through. He made an immediate left, and headed for Building 2, the Research Projects Laboratory. Eight or nine cars were parked under the security lights, unusual for this time of night. Harry pulled in alongside Cord Majeski's sleek gray Honda (the Chrysler looked boxlike and dull in contrast with the turbocharged two-seater)

and hurried under dripping trees into the rear entrance of the long, utilitarian structure.

The Hercules Project had originally been assigned a communication center with an adjoining ADP area. But Gambini was politically astute, and his responsibilities, and staff, tended to grow. He'd acquired two workrooms, additional computer space, and three or four offices. The Project itself had begun as a general purpose investigation of several dozen pulsars. But it had quickly focused on the anomaly in the group, which was located five degrees northeast of the globular cluster NGC6341.

Harry strolled into the operations center. Several technicians sat in the green glow of monitors; two or three, headphones pushed off their ears, drank Cokes and whispered over newspapers. Cord Majeski leaned frowning against a worktable, scribbling on a clipboard. He was more linebacker than mathematician, all sinew and shoulder, with piercing blue eyes and a dark beard intended to add maturity to his distressingly boyish features. He was a grim and taciturn young man who nevertheless, to Harry's bewilderment, seemed inordinately successful with women. "Hello, Harry," he said. "What brings you in at this hour?"

"I hear the pulsar's doing strange things. What's going on?"

"Damned if I know."

"Maybe," said Harry, "it ran out of gas. That happens, doesn't it?"

"Sometimes. But not like this. If the pulsar were losing its power source, we'd have detected a gradual decline. This thing just stopped. I don't know what to think. Maybe Alpha went nova." Majeski, who seldom showed emotion, flipped the clipboard across the table. "Harry," he said, "we need access to Optical. Can't you pry Donner loose for a few hours? He's been looking at that goddam comet for three months."

"Submit the paper, Cord," said Harry.

Majeski tugged at his beard, and favored Harry with an expression that suggested his patience was in short supply. "We're supposed to be able to observe a target of opportunity."

"Observe it tomorrow night," said Harry. "It won't be going anyplace." He turned on his heel and walked off.

Harry had no serious interest in pulsars. In fact, on this night, nothing short of a black hole bearing down on Maryland could have roused him. But he had no inclination to go home.

The rain had slackened to a cold drizzle. He drove north on Road 3 and eased into the parking lot outside Building 18, the Business Operations Section. His office was on the second floor. It was a relatively Spartan place, with battered chairs and bilious green walls and government wall hangings, mostly cheap art deco that GSA had picked up at a cut-rate price from one of its bargain basement suppliers. Photos of

Julie and Tommy stood atop his desk, between a Cardex and a small framed reproduction of a lobby card from *The Maltese Falcon*. Tommy was in a Little League uniform; Julie stood in profile, thoughtful against a gray New England sky.

He lit the desk lamp, turned off the overhead lights, and fell heavily into a plastic sofa that was a little too short for him. Maybe it was time to quit. Find a deserted lighthouse somewhere along the coast of Maine (he'd seen one advertised in Providence once for a buck, but you had to move it), maybe get a job in the local general store, change his name, and drop out of sight altogether.

His years with Julie were over. And in the terrible unfairness of things, he knew he'd lose not only his wife but Tommy as well. And a sizable portion of his income. He felt a sudden twinge of sympathy for Alpha, burdened with the neutron star it couldn't get rid of. He was forty-seven, his marriage was a wreck, and, he suddenly realized, he hated his job. People who didn't know what it was like envied him: he was, after all, part of the Great Adventure, directing the assault on the planets, working closely with all those big shot physicists and astronomers. But the investigators, though few were as blunt, or as young, as Majeski, did not recognize him as one of them.

He was a compiler of schedules, the guy who answered questions about hospitalization and retirement benefits and other subjects so unutterably boring that Gambini and his associates could barely bring themselves to discuss them. He was, in the official terminology, a layman. Worse, he was a layman with a substantial amount of control over operational procedures at Goddard.

He slept fitfully. The wind died, and the rain stopped. The only sound in the building was the occasional hum of the blowers in the basement.

There was sunlight in the windows when the phone rang. "Harry." It was Hoffer's voice again. "The pulsar's kicked back in."

"Okay," said Harry, trying to focus on his watch. It was almost eight. "Sounds like equipment. Make sure you haven't overlooked anything, okay? I'll get Maintenance to run some checks later. Gambini get here yet?"

"We expect him any time."

"Tell him where I am," said Harry. He hung up, convinced that the night's events would, indeed, eventually be traced to a defective circuit board.

The Center was peaceful on Sunday mornings; and the truth was that, although he tried not to examine his motives too closely, he was always happy for sufficient reason to sleep in his office. Odd: despite his passion for Julie, there was something in the surrounding hills, in the mists that rose with the sun, in the solitude of this place and its direct connection,

perhaps, with the night sky, that drew him. Even now. Maybe especially now.

II.

If Edward Gambini had been awake all night, it didn't show. He scurried around the operations center, driven by restless energy, a thin birdlike man with a sparrow's quick eyes. He possessed a kind of avian dignity, a strong sense of his position in life, and the quality that politicians call charisma, and actors, presence. It was this characteristic, combined with a superb sense of timing in political matters, that had resulted in his appointment the previous summer, over more seasoned candidates, to manage the pulsar project. Although Harry was considerably the taller of the two men, persons familiar with both might not have been aware of it.

Unlike most of his colleagues, who reluctantly recognized the advantage of befriending administrators, Gambini genuinely enjoyed Harry Carmichael. When Carmichael occasionally lamented his lack of formal training (he'd begun life as a physics major at Ohio State), Gambini assured him that he was better off. Although of course he never explained why, Harry understood his meaning: only a mind of the first water (like Gambini's own) could survive extensive work in the disciplines without losing its intellectual edge. Harry's dry sense of humor and occasional outrageous perspectives would never have emerged intact from detailed study of the Schmidt-Hilbert Method or the Bernoulli Theorem.

Gambini cheerfully conceded that persons in Harry's line of work had a valid place in the world. And, God knew, rational administrators were hard enough to come by.

It was about nine when Harry arrived, carrying with him a cinnamon roll for Gambini who, he knew, would not have eaten.

Cord Majeski sat in front of a monitor, his jaw pushed into one palm, while characters moved down the screen. His eyes did not move with them. The others, computer operators, systems analysts, and communications experts, were alert to a degree that Harry had seldom seen on a Sunday morning. Gambini picked out a spot well away from everybody and took a substantial bite out of the cinnamon roll. "Harry, can you get full optical for us tonight?"

Harry nodded. "I've already made arrangements. All I need is a written request from you or Majeski."

"Good." Gambini rubbed his hands. "You'll want to be here."

"Why?"

"Harry, that is a *very* strange object out there. In fact, I'm not sure it

should exist at all." He leaned against a worktable piled high with printouts. Behind him, centered on a wall covered with photos of satellites, shuttles, and star clusters, was an Amtrak calendar depicting a switcher in a crowded freight-yard. "In any case, it certainly shouldn't be where it is: way the hell out in the middle of nowhere. Harry, stars don't form between the galaxies. And they also don't wander out there. At least we've never seen one before."

"Why not?" asked Harry. "I mean, why do they remain in galaxies?"

"Because the escape velocities are too large."

"How about an explosion? Maybe it was blown free."

"That's a possibility. But that sort of catastrophe would also have scattered the system. This thing's a binary." His voice took on a conspiratorial tone. "There's something else you should know."

Harry waited, but Gambini slid off the table. "My office," he said.

It was paneled in red cedar, decorated with awards the physicist had received over the years: the 1989 Nobel for his work in high energy plasmas; the Man of the Year in 1991 from Georgetown; Beloit College's appreciation of his contributions to the development of the Faint Object Spectrograph; and so on. Before transferring to NASA from his former position with the Treasury Department, Harry had indulged in the bureaucratic tradition of hanging plaques and certificates of recognition on his walls, but his stuff had looked pathetic by contrast: the Treasury Department's Exceptional Achievement Award, a diploma from a three-day executive development program, that sort of thing. So Harry's eyewash now rested in a box in his garage.

The office was located behind a broad glass panel that overlooked the forward compartment of the L-shaped operating spaces. The floor was covered with a thick woven carpet. His desk was awash in paper and books, and several yards of printout had been draped over a chair-back. Gambini snapped on a Panasonic stereo set in a bookcase; the room filled immediately with Bach.

He waved Harry to a seat, but seemed unable to settle into one himself. "Beta," he said, crossing the room to close the door, "has been transmitting bursts of X-rays in an exceedingly regular pattern during the two years we've been observing it. The details don't matter, but the intervals between peaks have been remarkably constant. At least that was the situation until this morning. I understand Hoffer informed you that the signal stopped altogether last night."

"Yes. That's why I came in."

"It was down precisely four hours, seventeen minutes, forty-three seconds."

"Is that significant?"

Gambini smiled. "Multiply it by sixteen, and you get Beta's orbital

period." He watched Harry expectantly, and was clearly disappointed at his lack of response. "Harry," he said, "that's no coincidence. The shutdown was designed to attract attention. *Designed*, Harry. And the duration of the shutdown was intended to demonstrate *intelligent* control." Gambini's eyes glittered. His lips rolled back to reveal sharp white teeth. "Harry," he said, "it's the *LGM* signal! It's happened!"

Harry shifted his weight uncomfortably. LGM meant little green man: it was shorthand for the long-sought communication from another world. And it was a subject on which Ed Gambini had long since lost all objectivity. The negative results of the first SKYNET survey of extrasolar planetary atmospheres two years before had broken the physicist. And Harry suspected he had never entirely recovered. "Ed," he said carefully, "I don't think we should jump to conclusions."

"Goddammit, Harry, I'm not jumping to conclusions!" He started to say something else, caught himself, and sat down.

"*That's* the evidence?" asked Harry. "That's all there is?"

"It's all we'll ever need." Gambini smiled tolerantly. "But yes, there's more." His jaws worked, and an expression that was a mixture of smugness and anger worked its way into his features. "Nobody's going to pack me off to a shrink *this* time."

"What else is there?"

"The consistency of the pattern is on the record. With minor variations, in intensity and pulse width and so on, the basic sequence of events never changed during the time we've been observing Beta. There were almost always fifty-six pulses in a series, and the series repeats every three and a half seconds. Slightly less, actually." He folded his arms and made no effort to hide an expression of pure triumph. "Son of a bitch, Harry, I still can't believe it. Anyhow, after we recovered the signal this morning, we could still recognize the pattern. But there was an odd difference. Some of the pulses were missing, but only from alternate series. And always the same pulses. It was as if you took, say, the Third Concerto and played it straight through, and then played it again, with some notes removed, but substituting rests rather than shortening the composition. And you continued to do this, complete, and truncated, with the truncated version always the same." He took a notepad out of the top drawer, and wrote "56" at the top. "The number of pulses in the normal series," he said. "But in the abbreviated series, there are only forty-eight."

Harry shook his head. "I'm sorry, Ed. I'm lost."

"All right, forget all that. It's only a method for creating a recurring pattern. Now, what is particularly interesting is the arrangement of the missing pulses." He printed the series: "3, 6, 11, 15, 19, 29, 34, 56." His gray eyes rose to meet Harry's. "When it's finished, we get fifty-six pulses without the deletions, and then the series runs again."

Harry stared back. "Say it in English, Ed."

Gambini looked like a man who'd won a lottery. "It's a code," he said.

Two years before, when SKYNET had gone operational, Gambini had expected to solve the basic riddles of the universe. Life in other places, the creation, the ultimate fate of the galaxies. But it hadn't happened that way, of course. Those questions remained open. Ed had been particularly interested, for philosophical reasons, in the role of life in the cosmos. And SKYNET had revealed, for the first time, terrestrial worlds circling distant stars. Gambini and Majeski, Wheeler at Princeton, Rimford at Cal Tech, and a thousand others had looked at the photos and congratulated one another. Planets floated everywhere! Few stars seemed so poor, so sterile, as to be destitute of orbiting bodies. Even multiple star systems had somehow produced, and held on to, clusters of worlds. Often they fluttered in eccentric orbits, but they were there. And Gambini had offered Harry his opinion one Sunday afternoon in late April that he no longer had any doubts: the universe was rich with life.

That optimism had all changed in the long shadow thrown by the Faint Object Spectrograph. Light analysis showed that planets of terrestrial mass located within the biozone of a star (at a distance from their primary that would allow liquid water to exist) tended to be like Venus rather than Earth. The data had, in fact, revealed the nearby universe as an unremittingly hostile place, and the Saganesque vision of a Milky Way populated with hundreds of thousands of life-bearing planets gave way to the dark suspicion that humans were, after all, alone. Gambini's dream dissipated, and, ironically, it was his own work with the Faint Object Spectrograph that had led to the discovery.

It was a grim time, traumatic for the Agency and for its investigators. If, after all, there was nothing out there but rock and gas, why were the taxpayers pumping money into long-range projects? Harry had no inclination to go through it again. "I think we need better evidence," he said, as gently as he could.

"Do you?" Gambini's tongue flicked across his lips. "Harry, I don't think you've looked closely at the transmissions." He pushed the pad on which he'd scrawled the numbers closer to Harry, picked up the phone, and punched in a number. "We'd better tell Quint," he said.

"What about the series?" asked Harry. "And by the way, I wouldn't be in a hurry to get the Director out here." Quinton Rosenbloom was NASA's operations chief, now also wearing the hat of director at Goddard. An automobile accident a few weeks before had left the position suddenly empty. The change in leadership at this time was unfortunate: the old director had known Gambini well and would have been tolerant of this

latest aberration. But Rosenbloom was an old-line conservative, utterly dedicated to rock-bound good sense.

Harry examined the numbers, but saw nothing out of the ordinary.

Rosenbloom was not available. Gambini tactlessly directed the person at the other end to have Rosenbloom call "when he gets in."

"I assume there's some sort of sequence," Harry said.

The physicist nodded. "Of the most basic sort. At the start of the series, there are two pulses, set off by the pulse that does not appear. Then two more, and then four. An exponential group. Followed by the three that appears between sites eleven and fifteen, another three between fifteen and nineteen, and a nine between nineteen and twenty-nine. Two, two, four. Three, three, nine. Four, four, sixteen. Could anything be clearer?"

Quint Rosenbloom was overweight, rumpled, and ugly. He needed his glasses adjusted and could have used a competent tailor. Nevertheless, he was an administrator of considerable ability. He'd been trained as a systems analyst, but the application of bureaucratic pressure appealed to his mathematical instincts: he enjoyed wielding power.

And he did not like Gambini.

If Rosenbloom doubted his conclusions that Sunday morning, it was not because he felt that such a thing wasn't possible, but rather that it simply did not happen in well-run government agencies. He also sensed that, if events were permitted to take their course, he would shortly face one of those fortunately rare situations in which there would be considerable career risk, with little corresponding opportunity for advantage.

His irritation was obvious from the moment he arrived at the operations center. "He doesn't like being called out on a Sunday," Gambini remarked, while both men watched him stride stiffly through the whitewashed door. But Harry suspected it went deeper than that. Rosenbloom had a long memory and no inclination to go another round with Gambini's demons.

It was warm: he had a worn blazer slung over his shoulder, and his knit shirt was stuffed into his pants in a manner that suggested he'd come directly from the golf course. He passed through operations like a shabbily dressed missile and exploded quietly in Gambini's office. "I don't have a better explanation for your dots and dashes, Ed. But I'm sure someone else will. What's Majeski's opinion?"

"He can't offer any alternative."

"How about you, Harry?"

"It's not his field," observed Gambini, nettled.

"I asked Harry."

"I have no idea," said Harry, his own irritation rising.

Rosenbloom extracted a cigar from an inside pocket of his coat. He

inserted it unlit into his mouth. "The Agency," he said reasonably, "has a few problems just now. The rest of the moon operation's going to hell. The Administration is unhappy with our foot-dragging over the military's pet projects. The Bible-thumpers are still suspicious of us, and I don't need to remind you that there's a presidential election next year."

That had been another embarrassment for the Agency. The year before, NASA investigators, using SKYNET, had got on the track of a quasar they'd suspected of being the Big Bang, and had begun issuing periodic reports that the press promptly labeled Creation bulletins. The Agency's position had become untenable when Baines Rimford, at Cal Tech, had said he no longer believed a Big Bang had occurred. "The Administration's in trouble with the taxpayers, the Congress, and most of the fringe groups in the country," Rosenbloom went on. "I suspect the only solid support the White House has left comes from the NRA. Now, it strikes me, gentlemen, that the President would just love to have a cord wherewith to strangle this organization. To take us by our collective throats and hang us out to dry. If we start talking about little green men, and we're wrong, we're going to be handing him the rope." He was sitting on a reversed wooden chair, which he tilted forward. "Maybe," he added, "even if we're right."

"We don't have to make any statement at all," objected Gambini. "Just release the transmissions. They'll speak for themselves."

"They sure as hell will." Rosenbloom was the only person in the organization who would have taken that tone to Gambini. There was much about the Director's methods for handling subordinates that reminded Harry of a tractor-trailer with a loose housing. "Ed, people are already jittery. There's a lot of war talk again, the economy's a mess, and we've recently had a nuclear demonstration by the IRA. The President is not going to want to hear about Martians."

Harry's eyes were beginning to water. Pollen was getting down into his throat, and he sneezed. He felt slightly feverish, and began to wish he could get home to bed. It was, after all, a Sunday.

"Quinton." Gambini twisted the name slightly, drawing out the second consonant, but he kept a straight face. "Whoever is on the other end of that transmission is far away. *Far* away. There were cavemen here when that signal left Altheis."

"It is my earnest desire," Rosenbloom continued, as if no one else had spoken, "that this entire issue should just go away."

"That's not going to happen," said Gambini.

"No, I don't suppose so." Rosenbloom's chair creaked. "Harry, you didn't answer my question. Would *you* be willing to stand up there and tell two hundred million Americans that you've been talking to Martians?"

Harry drew a deep breath. He didn't like to be perceived as opposing

Gambini on his own grounds. Still, it was hard to believe the entire thing wouldn't turn out to be a loose flywheel somewhere. "It's like UFO's," he said, trying to be diplomatically noncommittal, but realizing too late to stop that he was saying the wrong thing. "You can't really take them seriously until somebody parks one in your backyard."

Rosenbloom closed his eyes and allowed a picture of contentment to settle across his features. "Carmichael," he said reasonably, "has been here longer than any of us. He has an instinct for survival that I admire, and he has the best interests of the Agency at heart. Ed, I suggest you listen to him."

Gambini, stationed behind his polished desk, ignored Harry. "What Admin thinks is irrelevant. The fact is that nothing in nature creates exponential sequences."

Rosenbloom chewed the unlit cigar, removed it, turned it between his thumb and forefinger, and flipped it into a wastebasket. (Gambini's disapproval of smoking was public knowledge, and Harry could not miss the implied derision in the Director's actions.) "You're wrong, Ed," he said. "You spend too much time in observatories. But Harry understands the realities here. How badly do you want to see SKYNET finished? How important are the Mare Ingenii telescopes?"

Gambini's cheeks were reddening, and a nerve quivered in his throat. He said nothing.

"Okay," continued Rosenbloom, "you push this business with the pulsar, create another stir, and I guarantee you it'll be the end. All you've got is a goddam series of beeps."

"No, Quint. What we have is hard evidence of intelligent control of a pulsar."

"All right, I'll buy that. You've got *evidence*." He rose ponderously and pushed the chair away with his foot. "And that's it. Evidence is a long way from proof. Harry's right: if you're going to talk about little green men, you better be prepared to march them into a press conference. This stuff is *your* specialty, not mine. But I looked up pulsars before I came down here this morning. If I understand my sources, they're what's left after a supernova blows a star apart. Isn't that correct?"

Gambini nodded. "More or less."

"Just so you can reassure me," he continued, "what's your answer going to be when someone asks how an alien world would have survived the explosion?"

"There's no way we could know that," objected Gambini.

"Well, you'll want to have a plausible story ready for Cass Woodbury. She's a cobra, Ed. She'll probably also want to know how anyone could control the kind of energy that a pulsar puts out." He drew a piece of paper from his pocket, unfolded it with deliberate ease, and adjusted his

glasses. "It says here that the power of your basic X-ray pulsar could generate about ten thousand times the luminosity of the sun. Could that be right? How could anyone control that? *How*, Ed? How could it be possible?"

Gambini rolled his eyes toward the ceiling. "We may be talking about a technology a million years beyond ours," he said. "Who knows what they might be capable of?"

"Yeah, I've heard all that before. And you'll bear with me if I suggest to you that that's a hell of a poor answer. We'd better be ready with something a little more convincing."

Harry sneezed his way into the conversation. "Look," he said, wiping his nose, "I probably shouldn't be in this at all. But I can tell you how I'd try to use the pulsar if I wanted to signal with it."

Rosenbloom rubbed his flat nose with fat short fingers. "How?" he asked.

"I wouldn't try to do *anything* with the pulsar itself." Harry got up, crossed the room and looked down, not at the Director, but at Gambini. "I'd set up a blinker. Just put something in front of it."

A beatific smile brightened Rosenbloom's languid features. "Good, Harry," he said, his manner heavy with mockery. "It must come as something of a surprise to your associate to discover that there's some imagination outside the operations group.

"Okay, Ed, I'm willing to concede the possibility. It might be artificial, or it might be something else entirely. I suggest we keep our minds open. And our mouths shut. At least until we know what we're dealing with. In the meantime, no public statements. If the signal changes again, you notify *me* first. Clear?"

Gambini nodded.

Rosenbloom looked at his watch. "It's, what, about ten and a half hours now since it started. I take it you're assuming this is an acquisition signal of some sort."

"Yes," said Gambini. "They'd want to attract our attention first. Somewhere down the line, when they think we've had enough time, they'll substitute a textual transmission."

"You may have a long wait." The Director's eyes fell on Harry. "Carmichael, you get in touch with everybody who was in here last night. Tell them not a word of this to anybody. Any of this gets out, I'll have someone's head. Ed, if there's anybody special you want to bring in, clear it with my office."

Gambini frowned. "Quint, aren't we losing sight of our charter here a little? Goddard isn't a defense installation."

"It also isn't an installation that's going to have people laughing at it for the next twenty years because you can't wait a few days—"

"I have no problem with keeping it out of the newspapers," Gambini said, his temper rising visibly. "But a lot of people have worked on different aspects of this problem for a long time. They deserve to know what happened last night."

"Not yet." Rosenbloom appeared maddeningly unconcerned. "I'll tell you when."

The Director's aura hung oppressively in the office.

"Last night, Harry," Gambini said quietly, "you and I lived through the most significant moment in the history of the species. I suggest you record everything you can remember. You'll be able to write a book on the subject soon, and people will read it a thousand years from now. Let's go outside."

Reluctantly, because the pollen would be worse, Harry went along. "When things begin to happen, we're going to need Rimford. And I'd like to have Leslie Davies on hand. Eventually, if we do make contact, we should also get Cyrus Hakluyt. If you could get the paperwork started, I'd appreciate it."

Baines Rimford was probably the world's best known cosmologist. He'd become a public figure in recent years, appearing on television specials and writing books on the architecture of the universe that were invariably described as "lucid accounts for the general reader," but which Harry could never understand. In the latter years of the twentieth century, Gambini maintained, Rimford's only peer was Stephen Hawking. His name was attached to assorted topological theorems, temporal deviations, and cosmological models.

Wheeler was also a cosmologist, a Norbertine priest who shared Gambini's intense interest in the possibilities for extraterrestrial life. He'd written extensively on the subject, and had predicted long before SKYNET that living worlds would be exceedingly rare.

But who were Davies and Hakluyt?

They came out through the front doors into a bright sunlit afternoon, cool with the smell of mid-September. Gambini's enthusiasm was returning. "Cyrus is a microbiologist from Johns Hopkins. He's a Renaissance man, of sorts, whose specialties include evolutionary mechanics, genetics, several branches of morphology, and assorted other subdisciplines. He also writes essays."

"What sort of essays?" asked Harry, assuming that Gambini meant technical papers.

"They're more or less philosophical commentaries on natural history. He's been published by both the *Atlantic* and *Harper's;* and a volume of his work came out just last year. I think it was called *The Place Without*

Roads. There's a copy of it down in my office somewhere. He got a favorable review in the *Times*."

"And Davies?"

"A theoretical psychologist. Maybe she can do something for Rosenbloom." It was going to be a lovely day. And Harry, noting the solid reality of a passing pickup, of the homely Personnel offices across Road 3, of lumber and sheeting stacked against one wall of the building from which they'd just come (the residue of a remodeling project that had been abandoned), wondered whether the Director wasn't right about Gambini.

"I understand why you want Wheeler," he said. "And Rimford. But why these other people?"

"Just between us, Harry, we already have all the astronomers we need. Wheeler's in because he's an old friend and deserves to be here. Rimford has been part of every major discovery in his field for thirty years, so we couldn't slight him. Besides, he's the best mathematician on the planet. If contact occurs, Harry, if it actually happens, the astronomers are going to be close to useless. We'll need the mathematicians to read the transmission. And we'll need Hakluyt and Davies to understand it."

Two twenty-four meter telescopes overlook the west wall of the Champollion Crater at thirty-seven degrees north latitude, on the far side of the moon; two more are under construction near the Mare Ingenii in the southern hemisphere. The Champollion reflectors are the heart of SKYNET. Functioning in tandem with an Earth-orbiting array of eight 2.4 meter Space Telescopes, they are fully capable of reaching to the edge of the observable universe.

The system, which was barely two years old, had been completed only after a long struggle over financing. There'd been internal bickering, delays, cost overruns, and, in the end, political problems. The flap over the creation event had heavily damaged efforts to fund the second pair of telescopes; the discovery that planetary systems out to more than a hundred light-years were as desolate and devoid of life as the moons of Jupiter had guaranteed that the imagination of the taxpayer, and consequently the interest of the politician, would not be engaged.

SKYNET also included a system of radio and X-ray telescopes and, for enhancement, a bank of computers whose capabilities were believed to be second only to those of the National Security Agency. When operating as a fully coordinated optical unit (in other words, when all ten reflectors were locked onto the same target) the system could magnify remote objects more than four hundred thousand times. During SKYNET's early months of operation, Harry had stood under the monitors with Gambini and Majeski and Wheeler, silently absorbing the blue-white curve of majestic Rigel, the vast trailing filaments of the Whirlpool Galaxy, and

the fog-shrouded surface of the terrestrial world Alpha Eridani. They'd been rousing days, filled with promise and excitement. The investigators, the news media, and the general public had all got caught up in a near frenzy of expectation. Harry had been forced to put on four extra people in the public relations office to answer telephones and quash rumors. But he, like everyone else, had been carried along by the rising tide.

But the big news never came: the long bleak winter was filled with the increasingly familiar patterns of carbon dioxide spectrograms. And in April, with the coming of spring, Ed Gambini had broken down.

Linda Barrister, who manned the comm link, was talking softly to NASCOM when Harry followed Gambini into the operations center. She smiled prettily, spoke again into the phone, and looked up at the project manager. "They're still a few minutes from calibration, Doctor."

Gambini nodded and took a position near the communications monitor, where he quickly tired of waiting and began to wander through the spaces, holding brief whispered conversations with the technicians.

Harry saw Pete Wheeler stretched out comfortably in a chair not quite big enough for his long frame, lazily watching the preparations. "You don't expect much out of this, do you, Pete?" he asked.

Wheeler was slow to react, as though his thoughts were elsewhere. "No," he said. "Not really. But who knows? Listen: last year I'd have denied the possibility of a free-floating binary. There are a few questions to be answered here."

Two technical assistants, both bearded, fortyish, and overweight, pulled their earphones down on their necks and bent forward over their consoles.

Cord Majeski was visible back in ADP, moving easily among the consoles, his face a mask against the tension.

Somewhere, probably in one of the workrooms, a radio was playing Glenn Miller. Harry leaned against a supply cabinet. Directly overhead, an auxiliary monitor was flashing sequences of numbers more quickly than the eye could follow. "It's the satillite," Barrister explained. "TDRSS." That would be the Tracking and Data Relay Satellite System. "It's the X-ray signal from Hercules."

She touched a slim finger to her right earphone. "Champollion's locked in," she said.

Gambini, who was trying to retain his customary dignity, trembled. Despite the air conditioning, damp crescents stained his shirt. He moved closer to Linda's monitor.

"We're getting a signal," she said.

The lights dimmed.

Majeski came into the room.

Wheeler pulled off his plaid sweater and tossed it into the supply cabinet.

"Recording," said one of the bearded technicians.

The monitor darkened, and a red point of light appeared at its center, framed in a starfield. Someone exhaled, and there was a general rustling throughout the several rooms of the operations center.

"They're foreground stars, most of them," Pete whispered. "Probably a couple of galaxies in there too."

"Mag is two point oh," said Barrister. That was a magnification of two hundred thousand.

"Take it in," said Gambini.

The peripheral objects rotated forward off the screen; the red star, Alpha Altheis, brightened.

"It wouldn't be a good place to live," said Wheeler.

Harry did not take his eyes from the monitor. "Why not?"

"If there *were* a world, there'd be no stars in its sky. The moon would be red; the sun's being eaten."

"Three-oh," said Barrister.

"A culture that developed under those conditions—"

"—Would," observed Majeski, "sure as hell be God-fearing."

Harry couldn't see Wheeler's reaction, but there was no softness in Majeski's voice.

Alpha Altheis had become a brilliant scarlet diamond. Someone across the room grunted. "What the hell's that?" Gambini, trying to get closer, stumbled over something in the dark, but popped back up without missing a beat.

A yellow pinprick had appeared west of the giant star.

"Spectrograph," snapped Gambini.

Barrister checked her instruments. "Three-six," she said.

Wheeler was out of his chair. He laid a hand on Harry's shoulder. "There's a third star in the system."

"Class G," said the analyst. "No readings yet on mass. Absolute magnitude six-point-three."

"Not very bright," said Gambini. "No wonder we missed it."

Harry grinned at Wheeler. "There goes the supernova problem," he said. "Now we know where the planets are."

"No, I don't think so. If that class G is part of the system—which, out there, it damned well would have to be—the explosion would have taken out *its* worlds too. Still—" Wheeler looked perplexed. He turned, looking for Gambini. "Ed—?"

"I see it, Pete," said the project manager. "It doesn't make much sense, does it?"

Harry could make out nothing but the two stars. "What is it?" he asked. "What's wrong?"

"There should be a shell of gas around the system," said Wheeler. "Some remnant of the supernova. Ed, I don't understand this at all."

Gambini was shaking his head. "There's been no supernova here."

Wheeler's voice was barely audible. "That's not possible, Ed."

"I know," Gambini said.

III.

Baines Rimford stood on a wooded hill out near the rim of the Milky Way, looking toward galactic center. He could sense the majestic rotation of the great wheel and the balance of gravity and angular momentum that held it together. Relatively few stars were visible over the lights of Pasadena, hurtling down their lonely courses.

The sun completes an orbit every 225 million years. During this latest swing around the galaxy, pterodactyls had flown and vanished; the ice had advanced and retreated, and near the end of the long circuit, men had appeared. Against that sort of measure, what is a man's life? It had occurred to Rimford, at about the time he approached fifty, that the chief drawback in contemplating the enormous gulfs of time and space that constitute the bricks and mortar of the cosmologist is that one acquires a dismaying perception of the handful of years allotted a human being.

To what microscopic extent had the sun depleted its store of hydrogen since he'd sat reading about Achilles and Prometheus on the front porch of his grandfather's row home in South Philadelphia? How much deeper was the Grand Canyon?

He was suddenly aware of his heartbeat: tiny engine of mortality whispering in his chest. It was one with the spinning galaxies and the quantum dance, as he was one with anything that had ever raised its eyes to the stars.

It was in good condition, his heart, as much as could be expected for a mechanism designed to self-destruct after a few dozen winters.

Somewhere below, lost in the lights of Lake Avenue, a dog barked. It was a cool evening: the air conditioners were off, and people had their windows open. He could hear fragments of the Dodgers game. Pasadena was, if more prosaic, at least more sensible than the universe. One knew why traffic lights worked, and where it had all come from. And, taken from the perspective of Altadena and Lake, the Big Bang seemed rather unlikely.

Curious: in the days when he had been constructing the cosmic model that bore his name, many of his creative insights had come while he

stood atop a hill like this one on the edge of Phoenix. But what he remembered most clearly from those solitary excursions was not the concepts, but the dogs. While he juggled matter and hyperbolic space, the night had seemed full of barking dogs.

It was getting late. The comet and the moon were both low in the west. Rimford wasn't much interested in comets, and he couldn't understand people who were. There was, he felt, little to be learned from such an object, other than the trivia of its composition.

He started slowly down the hill, enjoying the cool night air and the solitude. Near a cluster of palms, about a hundred yards from the top, there was a spot from which he could see his house. Like a child, he always stopped to savor its warm light and familiar lines. All in all, he had little of which to complain. If life was desperately short, it had been nevertheless good.

There was a story in Herodotus of a Greek philosopher who'd visited an Asian kingdom, where the ruler inquired of him who was happiest among men? The philosopher understood that the king himself wished to be thought of as occupying that enviable position. But the visitor had other ideas: "Perhaps," he replied, "It might be a farmer of my acquaintance, who lived near Athens. He had fine children, a wife who loved him, and he died on the field of battle defending his country." Rimford didn't expect to see any armed combat, but he had nevertheless waged the good fight, not for a particular flag, but for humanity.

In the dark, his lips curved into a smile. He was feeling satisfied with himself. The probability was that the Rimford universe would one day join Euclidean geometry and Newtonian physics as a system with much to recommend it, but in the end inadequate. It didn't matter: when the great strides of the twentieth century were being made, they would know that Rimford had been there. And if he and Hawking and Penrose had got some of it wrong, or even most of it wrong, they'd made the effort.

He was content.

His colleagues expected him to retire shortly. And possibly he would. He had sensed the decline of his conceptual abilities recently: equations that had once been visions were reduced to mathematics. His creative work was over, and it was time to step aside.

Agnes was on the phone when he walked in. "He's here now," she said into the instrument. She held it out to him with a smile. "Ed Gambini," she said. "I think he needs help."

It was a little after nine-thirty when Harry arrived in the Hercules conference room and met Leslie Davies. She was slender and efficient in a gray business suit, with a classically chiseled jaw, and brooding,

distant eyes. She did not, Harry quickly concluded, look friendly enough to be a psychologist.

"Why," asked Wheeler, picking up the threads of the conversation, "did they bother? The Altheans are a million years dead. They couldn't hope to see any result from their project."

"Aren't we assuming the existence of organic life forms?" asked Majeski. "We could be listening to a computer of some sort. Something for which the passage of long gaps of time means nothing."

"It's a possibility," said Gambini. "But it seems to me there should still be a motive."

"They're throwing a bottle into the ocean," said Harry. "The same way we did with the plaques we put on the early Pioneers and Voyagers."

"I agree," said Leslie. "In fact, unless we're dealing with something that is, in some way, not really subject to time—a computer, a race of immortals, whatever—I can imagine no other motive. They wanted us to know they were there. They would have been a species isolated beyond our imagination, with no hope of intercourse of any kind outside their own world. So they assembled a vast engineering project. And sent us a letter. What activity could be more uniquely human?"

In the long silence that followed, Pete Wheeler got the coffee pot and refilled the cups. "We don't have the letter yet," he said. "Cord, you dated the class G. What sort of result did you get?"

"I don't know," said Majeski. There was a strange expression on his face.

"You don't know? Was the lithium exhausted?"

"No, that wasn't the problem."

"I think I can explain," said Gambini. He opened a Manila envelope that lay on the table in front of him. "A class G star," he said to Harry and Leslie, "uses up its supply of lithium as it gets older. So we can get a fairly decent idea of its age by looking at how much lithium remains." He extracted from the envelope several pages of trace paper with color bars and passed them around to Wheeler. "This is Gamma's spectrogram. We've run it several times, and it keeps coming up the same way."

Wheeler must have been surprised by what he saw: he leaned forward, straightened a crease in the sheets, and then spoke in subdued tones. "How long have you known about this?"

"We got the readouts the first night. Saturday. Sunday morning. Whatever. Then we checked the equipment and ran it again. We've relayed the test data to Kitt Peak." He raised his eyes significantly. "They came up with the same result."

"What is it?" asked Leslie.

"One of the problems we've had all along," said Gambini, "is to find a source for this system. The thing had to coalesce before being expelled

from its parent galaxy; Altheis could not have formed by itself, in the void. And here we were, looking at three stars, which appear to have been out there for a longer time than the stars have been burning. So it was very difficult to account for their presence at all."

"And now," said Leslie, "you feel you have a solution?"

Wheeler was still staring at the spectrogram.

Gambini nodded. "We have an intriguing possibility."

Harry cleared his throat. "Could somebody explain to the rest of us what we're talking about?"

"This is an extremely atypical spectrogram for a class G," said Wheeler. "There are no metallic lines, not even H and K lines. No calcium, no iron, no titanium. No metals of any kind. Gamma appears to be pure helium and hydrogen. Which is why you couldn't date it, Cord. No lithium."

Majeski inclined his head, but said nothing.

Harry listened to the silence. "I still don't think I know what it means," he said.

Gambini tapped a pen restlessly on the tabletop. "Class G's are Population I stars. They're metal-rich. Even Population II stars, which are not, have some metals boiling in the pot somewhere. But this one"—he held up a second set of spectrograms—"has none."

Harry noticed that all the color had gone out of Wheeler's face. "What's the point?" he asked.

The priest turned puzzled eyes toward him. "There's no such thing as a metal-free star," he said. "Ed, what about Alpha?"

"Same thing. Somehow, the original spectrogram was made and filed, and apparently no one ever looked at it. We got it out after *this* turned up. Neither one of those stars seems to have any metal at all."

IV.

The flight was almost an hour late. Normally, the delay would have angered Ed Gambini; but on that morning, no mundane frustration could reach him. He was meeting a giant, and because of the nature of the discovery at Goddard, Gambini realized that he, too, was on the threshold of joining the immortals. It was an exhilarating feeling.

Harry sensed all this. And he recognized the importance of the meeting with Rimford. The California cosmologist might well see other possibilities, suggest alternative explanations. If, however, he could not, Gambini's hand, and probably his confidence, would be greatly strengthened.

They waited at the cocktail lounge in the main terminal. Gambini sat nervously toying with a drink, totally absorbed in his thoughts. Harry

recalled the obsession of a year and a half earlier. He wondered whether Gambini might be another Percival Lowell, seeing canals that were visible to no one else.

They met Rimford, finally, in the security area. He was a man of ordinary appearance: his hair was whiter than it appeared on TV, and he dressed like a mildly successful midwestern businessman. Harry almost expected him to produce a card. But, like Leslie, he had eyes of compelling quality. They were subdued during those early moments of that first meeting; but Harry would later see them come to life. At such times, there was no confusing Baines Rimford with a hardware salesman. When Gambini solemnly introduced him, Harry caught the amused flicker of a smile in the eyes. Rimford's handshake was warm. "Nice of you to invite me, Ed," he said. "If you've really got something, I wouldn't want to miss it."

They walked down to the baggage pickup, while Gambini outlined the evidence to date.

"Marvelous," said Rimford when he'd finished, and, turning to Harry, he remarked that it was a wonderful time to be alive. "If you're right about this, Ed," he said, "nothing is ever again going to be the same." Despite the words, however, he looked perplexed.

"What's wrong?" asked Gambini, whose nerves were close to the surface.

"I was just thinking how unfortunate it is: they're so very far away. I think we all assumed that, when it came, *if* it came, there'd be at least some possibility for a two-way conversation." He threw his bags into the trunk, and climbed into the front seat beside Gambini. Harry rode in back.

The visitor asked a lot of questions. He asked about the various orbital periods of the Althean system's components, the characteristics of the pulsar, and the quality and nature of the incoming signal. Harry could not follow much of it, but his interest soared when they settled on the physical peculiarities of Alpha and Gamma.

Rimford blinked at the spectrogram, "The star has no metal?"

Gambini shook his head. No.

A smile broke across the cosmologist's features. "Maybe," he said, "it is a construct."

By the time they reached Kenilworth Avenue, everyone had lasped into silence.

Linda Barrister usually whiled away midnight shifts in the operations center with crossword puzzles. She was good at them, and they helped keep her reasonably alert when her body ached for sleep. She was trying to recall the name of a Russian river with seven letters when she became

suddenly aware that something had changed. She checked her watch. It was precisely 4:30 A.M.

The auxiliary overhead monitor carrying the TDRSS relay from Hercules X-3 was silent. The signal had stopped.

V.

Harry had never known a colder October in Washington. The sky turned white, and drizzly knife-edged winds sliced through the bone. Temperatures dropped below freezing on the first of the month, and stayed there.

Hercules X-3 remained silent, and hope that the transmission would be followed swiftly by a second signal faded. Toward the end of the month, Wheeler's suspicion that the aliens might, indeed, have nothing more to say became common currency. But silence, Gambini argued, is not the natural state of a pulsar.

So they continued to listen.

The second Thursday of November was a bleak, wintry day that clawed the last of the leaves out of the elms behind the Business Operations Section. Leslie Davies came in from Philadelphia that afternoon. She seemed more intrigued by events than some of the investigators, and admitted to Harry that she took every excuse she could find to visit the Project. "Things are going to happen here, Harry," she told him expectantly. "Ed's right: if something weren't on its way, the pulsar would be back to normal."

She invited him to dinner, and Harry gratefully accepted. The only other staff members who regularly ate alone were Wheeler and Gambini. But the priest was back at Princeton, and Gambini showed little inclination for company.

At Harry's suggestion, they skipped the Red Limit and drove instead to the Coachman in College Park, which offered a more exotic atmosphere. "Leslie," he said, after they were settled at a table, "I don't really understand why you're so interested in all this. I wouldn't think a psychologist would care much one way or the other."

"Why not?" she asked, eyebrows rising.

"It's not your field."

She smiled: it was a deep water response, reserved, noncommittal, amused. "Whose field is it?" When Harry didn't answer, she continued: "I'm not sure that any of these people have the potential for profit I do. For Ed and Pete Wheeler and the rest, the whole project is only of philosophical interest. I shouldn't have said 'only,' I suppose, because I'm as involved philosophically as anyone.

"But I may be the only person here with a professional stake. Listen, if there *are* Altheans, they can be of only academic concern to an astronomer or a mathematician. Their specialties have no direct connection to the issue of thinking beings. That's *my* province, Harry. If there *is* a second transmission, if we get anything at all that we can read, I'll get the first glimpse into a nonhuman psyche. Do you have any idea what that means?"

"I hadn't thought of it in quite that way," said Harry.

"Maybe more important than learning about Altheans: we might get a handle on qualities that are characteristic of intelligent beings, as opposed to those that are culturally induced. For example, will the Altheans turn out to be a hunting species? Will they have a code of ethics? Will they organize themselves into large political groups?" She tilted her head slightly. "Well, I guess we've already answered that one. Without political organization, you wouldn't get large scale engineering projects. In the end, we may not learn a lot about the Altheans," she said. "But we stand to learn a lot about ourselves."

President John W. Hurley strode smiling through the curtains and took his place behind the lectern that bore his seal. A flip chart was set to his immediate right. He was of less than average height, the shortest President in modern memory, and consequently a running target for "short" jokes. Cartoonists loved to portray him talking things over with Washington, Lincoln, or Wilson. But he responded in good humor, laughed at the jokes himself, and even told a few. His lack of stature, usually a fatal handicap to serious political ambitions, became a symbol of the man in the street. Hurley was the President everyone identified with.

Approximately two hundred people were packed into the small auditorium. Television dollies rolled up and down the central aisle as the President graciously acknowledged the applause, looked squarely down at Harry in the front row, and smiled. "Ladies and gentlemen, I have an announcement of importance." He looked directly into the cameras. "On Sunday morning, September seventeenth, shortly before dawn, the United States intercepted a signal of extraterrestrial origin." Harry, who knew what was coming, of course, was struck by the sudden absolute stillness in the crowded room. "The transmission originated from a small group of stars outside our own galaxy. They are located in the constellation Hercules and are, I am told, extremely far from Earth, far too distant to permit any possibility of a two-way conversation. NASA estimates that the signals started on their way toward us a million and a half years ago."

Chairs scraped, but still, except for some startled exclamations, the press corps held its collective breath.

"There was no message: the transmission was simply a mathematical progression that apparently leaves itself open to no other interpretation.

"We are continuing to monitor the star group, but it has been silent now for several weeks, and we don't expect to hear any more." He paused; when he spoke again, his voice was laden with emotion. "We know nothing, really, about those who have announced their presence to us. We cannot hope ever to talk with them. I have been given to understand that their star group is receding from us at a rate of approximately eighty miles per second.

"It's unfortunate that these . . . beings . . . did not see fit to tell us something about themselves. But they have told us something about the universe in which we live. We now know we are not alone."

Ed Gambini checked in at the Hyattsville Ramada under an assumed name. He hated motels because they never gave you enough pillows, and the maids always looked so distraught when you asked for more. So he lay in bed propped up on two, with the top one folded over, watching the specials on the news conference. All the major networks had run them, and he'd switched back and forth. On the whole, the coverage was intelligent. They'd stressed the proper facts, and asked the right questions. And they'd seen through the Administration's effort to pretend that the incident was over.

Later he watched an argument (he hesitated to call it a debate) between "Backwoods" Bobby Freeman, television preacher and founder of the American Christian Coalition, and Senator Dorothy Pemmer (D-Pa), on the Coalition's efforts to require a statement of religious belief from all candidates for federal office.

The phone rang, and Gambini turned down the sound.

It was Majeski. "Ed," he said, "Mel's on the line. Is it okay to give him your number?"

It was the call that Gambini feared. "Yes," he said without hesitation, and hung up.

Mel Brockton was an astronomer from UNH. More than that, he was a lifelong friend. Gambini had met him at the University of California, when they were both undergraduates. They'd come a long way since then, but they'd kept in touch. And last year, when Gambini had suffered his breakdown, it had been Mel who'd come forward, held off the wolves who wanted his job, and who'd offered time and money. "Ed?" The familiar voice sounded tired, and far away.

"How are you, Mel?"

"Not bad. You're a hard man to get through to."

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"I suppose. It's been a difficult day."

"Yes," Brockton said. "I would think so."

Gambini dug, looking for something to say.

"Did you really," asked Brockton, "hear that signal six weeks ago?"

"Yes."

"Ed," he said, sadly, "you are a son of a bitch."

Later, he wandered down to the bar. It was filled to capacity, and it was loud. He took a manhattan out onto one of several adjoining terraces.

The evening was warm, the first decent weather Washington had had in a month. A clear sky curved over the nation's capital. Hercules was on the horizon east of Vega, his warclub held aloft in a threatening gesture.

The home of life.

In the west, he could see summer lightning.

A middle-aged couple had followed him out. Silhouetted against the lights of the capital, they were discussing in ponderous detail a recalcitrant teenage son.

Gambini wondered whether there would be a second signal. It was a doubt that he had been careful not to express to anyone. But even if there were no further communication, the essential question was answered: we were not alone! Now we knew it had happened elsewhere. And the details of that other event, and those other beings, their history, their technology, their experience of the universe, were of enormous interest. But for all that, they were only details and secondary to the central fact of their existence.

Gambini raised his glass in the general direction of the constellation.

The incoming shift was expected to be no less than fifteen minutes early. Linda Barrister, working the midnight, was usually reliable, but she'd had a big night with an old flame in town, had gone to dinner and a movie, and the time had got away from her. The other member of her shift, Eliot Camberson, was at his station when she arrived, bleary-eyed and apologetic, more than an hour late.

Camberson was the youngest of the communications specialists. He wasn't much more than a kid, really, tall, freckled, exceedingly serious about his job, inclined to excesses of enthusiasm. On this night, he surprised her.

"Linda," he said, with an amused casualness she found hard to credit later, "it's back."

"What is?" she asked, misled by his tone.

"The signal."

She looked at him, then glanced at the overhead monitor. Camberson

flipped a switch, and they got sound: a staccato buzzing like an angry bee. "Jesus," she said. "You're right. How long ago?"

"While you were taking off your coat." He looked down at his console. "But it's not the pulsar."

VI.

Harry arrived late at his office next morning, to find a message waiting from Ed Gambini. "Please call," it said. "Something's happened."

He didn't bother with the phone.

The operations center was bedlam. Extra technicians and investigators were gathered around monitors, laughing and pushing one another. Majeski waved a scroll of printout paper in his direction and shouted something Harry couldn't hear over the noise. In Harry's memory, it was the only time that Gambini's assistant had actually looked pleased to see him.

Leslie was in ADP, bent over a computer. When she straightened, he caught an expression on her face of pure uninhibited joy.

"What's going on?" he asked a technician. She pointed at the TDRSS monitor. Assorted keyboard characters were flashing across the screen in rapid succession. "About one this morning," she said, her voice pitched high with excitement. "It's been coming in ever since."

"One-oh-nine, to be exact." Gambini pounded Harry on the shoulder. "The little bastards came through, Harry!" His face glowed with pleasure. "We lost the acquisition signal on September 20 at four-thirty A.M. We get the second signal on November 11, at one-oh-nine A.M. Figure in the change to standard time, and they're still operating on multiples of Gamma's orbital period. Eighteen and an eighth this time."

"The pulsar's back?"

"No, not the pulsar. Something else: we're getting a radio wave. It's spread pretty much across the lower bands, but it seems to be centered at sixteen hundred sixty-two megahertz. The first hydroxyl line. Harry, it's an ideal frequency for long-range communications. But their transmitter—my God, our most conservative estimate is that they're putting out a one-and-a-half-million megawatt signal. It's hard to conceive of a controlled radio pulse with that kind of power."

"Why would they abandon the pulsar?"

"For better definition. They've got our attention, so they've switched to a more sophisticated system."

Their eyes locked. "Son of a bitch!" said Harry. "It's really happening!"

"Yes," said Gambini. "It really is."

"Ed, can we read any of it?"

"It's too soon. But they know what we need to begin translating."

"They're using a binary system," a technician said.

"There're a couple of mathematicians we need to bring in, and it probably wouldn't hurt to get Hakluyt down here as well."

"We'd better notify Rosenbloom."

"It's already done." Gambini smirked. "I'll be interested in hearing what he has to say now."

"Not one word." Rosenbloom glowered at his desktop. "Not one goddamn word until I tell you!"

"We can't hide this," said Gambini, his voice trembling. "There are too many people who deserve to know."

Harry nodded. "It makes me uncomfortable, too," he said. "And the government is going to look like hell to the rest of the world."

"No!" Rosenbloom overflowed the chair behind his oak desk. He grunted softly and pushed himself out of it. He wasn't much taller standing than he was sitting. "It probably won't take long, but until we get clearance, I don't want any of this to get out. Do you understand?"

"Quint." Gambini stifled his rage as best he could. "If we do this, if we hold this back, my career, Wheeler's career, the careers of all our people will be finished. Listen: we aren't employees of the government; we're here on contract. But if we participate in this, we can expect to become persona non grata. Everywhere."

"Careers? You're talking to me about careers? There are bigger stakes here than where you'll be working ten years from now. Look, Ed, how can we announce the second transmission unless we're prepared to release the transmission itself? And we can't do that."

"Why not?" demanded Gambini.

"Because the White House says we can't. Hell, Ed, we don't know what might be in there. Maybe the makings for some home brew plague, or weather control, or God knows what."

"That's ridiculous."

"Is it? When we know that, you can release the goddamn thing. But not till then."

"How about," suggested Harry coldly, "if we just shut SKYNET down? Stop listening? Wouldn't that simplify things?"

The presidential press conference had started a war in which Harry was manning a front line. Public response to the long delay between reception and announcement was decidedly unfriendly. And while most of it was directed at the White House, a reasonable spillover landed at Goddard's administrative offices. Harry had to bring in three temporaries to mail out form letters, and install additional telephone lines. He could

live with that. But occasionally, old friends surfaced among the outraged callers. Hausner Diehl of Yale had been among them.

"A lot of people here," Diehl had said in a strained tone that Harry barely recognized, "are not convinced that the truth is out yet. Was anything withheld from the conference?"

"No," Harry had replied. "There was nothing else."

Diehl had persisted. There was a rumor about a second signal. Was there any truth to it?

Harry's job did not normally require him to lie; it was not a tactic he was good at, and he was moderately surprised to get away with his reply. But he felt the weight of the deception nonetheless.

He returned no more calls.

They started reading the transmission in a 256K desktop Apple computer. That part of it turned out to be easy: the signal had contained sufficient clues to adapt the unit, and a self-initiating program which they activated with a simple search routine.

The result, displayed simultaneously on two dozen monitors, was a cube.

Late Monday afternoon, Gambini retired to his quarters in the VIP section in the northwestern corner of the Goddard facility. He wasn't sure he'd be able to sleep, but the computers were doing the work now, and he wanted to be reasonably alert later.

He fell into bed with considerable satisfaction and sank toward oblivion with the happy thought that he had achieved his life's ambition. To how many men was that inestimable blessing given?

When the phone rang four hours later, he was slow to orient himself. He burrowed deeper into the pillows, listened to the insistent jangling, reached for the instrument, and knocked it over.

The voice on the other end belonged to Charlie Hoffer. "It's finished," he said.

"The signal?"

"Yes. The pulsar's back."

Gambini looked at his watch. "Nine fifty-three."

"One full orbit," said Hoffer.

"They're consistent. What's the length?"

"We haven't done the calculation."

The transmission had been a relatively slow one: 41,279 baud. "Okay," Gambini said. "Thanks. Let me know if anything changes, Charlie."

He punched the numbers into a calculator. It came out to approximately 23.3 million characters.

* * *

VII.

"Somebody's got to talk to the President." Gambini stirred his coffee, and stared stonily across the cafeteria. "He's only getting one side, the military consideration. He's up there listening to the Joint Chiefs, and all they can see are the dangers. They're so goddamn shortsighted. Harry, I do not want to become part of a military exercise. I've waited all my life for this, and the sons of bitches are ruining it. Listen, Hurley has a chance to do some real good here. We won't get world peace out of this, but he has an opportunity to knock down some walls.

"Maybe we need a good gambler to change the flow. Anyway, we've got a mystery, and we'll do a lot better using the planet's resources than us trying to solve it without telling anybody what's going on." He looked carefully at Harry. "I think we need to do an end run.

"They're having the annual National Science Foundation banquet over there Thursday. The President will be passing out awards to some high school kids. It's a big media event, and it would be a good chance to get close to him. But I have to get in first. NASA would have access to some tickets, if we asked." Gambini leaned forward. "From there it would be easy. How about it, Harry?"

"You don't really care if they put me out in the mountains, do you?" Harry braced his elbows on the tabletop, knitted his fingers together, and rested his chin on them. His marriage was gone, and he'd never liked his job at Goddard that much. Actually, his early days with Treasury, when he was surrounded by others much like himself, had not been bad. But he'd been exposed to a lot at Goddard, where men looked into deep space while he arranged their group insurance. Maybe he'd begun to imbibe their contempt for his profession.

Dostoevski, Tolstoi, Dickens, and Melville lined the walls of the sitting room. The books were leather-bound, and one, *Anna Karenina*, lay open on a coffee table.

"These are worn," said Harry, inspecting several of the volumes. "You don't suppose Hurley, of all people, reads Russian novels?"

"If he does, I think he's smart to keep it quiet." Gambini was sitting with his eyes closed, hands pushed into his pockets.

Sunlight streamed into the room. The NSF group was visible through arched windows, spread out across the White House lawn, officials, parents, teachers, and kids, taking pictures, comparing awards, and generally having a good time.

They heard voices in the corridor outside; then the door opened and Hurley entered. "Hello, Ed," he said, extending his hand. "Good to see you." He turned to Harry. "I wanted to thank you for suggesting Rimford.

He was magnificent out there today." The President took a chair opposite Gambini. "I'm glad you came by, I've been meaning to call you. Ed, Hercules has interesting possibilities. I'm intrigued by what you and your people are doing over there. But you know how I get my information? You talk to Rosenbloom, Rosenbloom talks to a couple of other people until it gets to the top of NASA, and then it comes over here to Schneider." That was Fred Schneider, Hurley's meek, eager-to-please science adviser. "By the time it gets to me, I don't know how many distortions it's picked up, what's being shaded, or what's been left out altogether." He pulled a memo pad across the coffee table, wrote a number on it, tore it off, and gave it to Gambini. "That's where you can reach me whenever you need to. If I'm not immediately available, I'll get right back to you. In any case, call every morning at, ah, eight-fifteen. I want to be kept informed about what's going on out there. I especially want to know about any breakthroughs in reading the stuff. I want to know what kind of material we're getting. And I'll be interested in hearing your views on the implications of what we learn."

Somehow Harry wound up with the phone number.

It was a bit warm in the room. "You *are* still making progress?" he continued. "Good. In that case, why don't you tell me why you were so eager to attend the NSF function today."

"Mr. President," Gambini began hesitantly, "we're not being as efficient as we might be."

"Oh? And why not?"

"For one thing, our staff is too limited. We haven't been able to get the people we need."

"Security problems?" asked Hurley. "I'll look into it and try to speed things along a bit. Meantime, Ed, you have to realize the sensitivity of this operation. As a matter of fact, I signed an order this morning assigning code word classification to the Hercules text. You'll be getting some assistance with your security measures this afternoon."

Gambini looked pained. "That's just what I'm complaining about. We can't get things done when we can't communicate with the experts in these various disciplines. Security clearances take time, and we don't always know ahead of time who we're going to need. If we have to wait six months to get someone in here, we might as well not bother."

"I'll see what I can do. Is that all?"

"Mr. President," said Harry, "there's strong feeling among the investigators, and in the scientific and academic communities, that we have no right to keep a discovery of this magnitude to ourselves."

"And how do *you* feel, Harry?"

Harry looked into the President's piercing gray eyes. "I think they're

right," he said. "I know there are risks involved here, but somewhere we're going to have to take a chance. Maybe this is the time."

"The academic and scientific communities," Hurley said with studied annoyance, "don't have to deal with the Kremlin. Or the Arabs. Or a hundred and forty tin-pot countries that would like nothing better than to develop a cheap new superweapon to lob over the back fence at someone they don't like. Or the loonies who've taken over that nuclear power plant in New Jersey. Who knows what might be on those discs?"

"I think," said Gambini, putting everything he had into one roll, "we're being a little paranoid."

"Do you really? That's an easy conclusion for you to draw, Ed. If you're wrong—" he shrugged "—what the hell!" He closed the blinds and shut the sunlight out of the room. "Do you have any idea what it's like to sit on a nuclear stockpile? Tell me, Gambini, have you ever held a loaded gun on anybody? I'm holding a gun on every human being on the planet. No: every human being who will ever walk this world is in my sights right now. You have any idea what that feels like?

"Don't you think I know how this makes us look? The press thinks I'm a fascist, and the American Philosophical Society wrings its hands in anguish. But where the hell will the American Philosophical Society be if we set in motion a chain of events that leads to a catastrophe?" He sneered. It was an expression unlike any he would have allowed himself to use in public. "You can't have the extra people until we're sure we can trust them. If that means an extra few days, or an extra few years, that's how we'll do it. We keep the transmissions to ourselves. I'll give you this much: you can announce that there's been a new signal, and you can release the pictures, the triangles and whatnot. But the other stuff, what we haven't been able to read yet, until we can tell what it is, it stays under wraps."

An hour later, Majeski greeted them with the latest news. "We've found the Pythagorean Theorem."

Harry and Pete Wheeler were having dinner a few evenings later at Rimford's residence in the VIP section behind the Geochemistry Lab. While they grilled steaks and baked potatoes, they drank cold beer and waited for the newscasts.

"Actually, we're not doing badly," said Rimford, when Harry asked about progress with the translation. "We can read the numbers now, and we've assigned working symbols to a lot of the bytes that seem to occur in patterns.

"Some of the symbols are directive in nature—that is, they perform the functions that correlatives or conjunctions would in a grammatical

system. Others have a substantive reference, and we're beginning to get some of those. For example, we've isolated terms meaning magnetism, system, gravity, termination, and a few more. Other terms *should* translate, because they're embedded in familiar mathematical equations or formulas, but they don't."

"Concepts," offered Harry, "for which we have no equivalent?"

Wheeler grinned. "Maybe." They were sitting in the kitchen. The world outside was dark already, only a bare glow in the west marking the passing of the sun. "How much in advance of us would they have to be," he wondered, "to be able to do the things we know they can do? Are we likely to have anything at all in common?"

"We already know," said Harry, "that we have a common base in math and geometry."

"Of course," snapped Wheeler impatiently. "How could there be any other condition? No, I'm thinking about their philosophy, their ethical standards. I was interested in your account of Hurley's fears regarding the contents of the transmission. He has a valid point." He refilled his mug and drank with a purpose. "But he's worried for the wrong reason. I'm not nearly so afraid of the technical knowledge we may find as I am of the possibilities for poison of other kinds."

"You know," said Rimford, "before the Hercules signal, I'd concluded that we were alone. The argument that a living galaxy would have filled the skies with transmissions seemed very compelling to me. If there were other civilizations, surely there would have been evidence of their existence."

Wheeler started turning the meat.

"And it occurred to me, one night while I was driving through Roanoke, why there might be no evidence." Rimford got up to see if the potatoes were done. "Is there a correlation between intelligence and compassion?"

"Yes," said Harry.

"No," said Wheeler. "Or, if there is, it's a negative one."

"Well," said Rimford, opening his arms to the skies, "that throws out my point."

"Which is what?"

"Any society smart enough to survive its early technological period might discover that even the *knowledge* of its existence could have deleterious effects on an emerging society. Who's to say what such knowledge might do, for example, to the religious foundations of a society?"

"That's an old idea," said Wheeler. "But you're suggesting we might be listening to the only culture that survived its atomic age without acquiring common sense."

"Or compassion," said Harry. "Baines, you don't really believe that."

He shrugged. "Right now, I'm open to the evidence. But there *is* some-

thing else. We know that the Hercules transmitter is a product of extreme sophistication. What happens if we get a million years' worth of technology overnight?" Rimford saw that Harry had finished his beer, opened two cans, and gave him one. "Toward the end of the nineteenth century," he continued, "some physicists announced that nothing remained to be learned in their discipline. It's an interesting notion. What would happen to us, to all of us, if that indeed were the case? What, then, would be the point of our existence?"

Rimford studied the digital clock atop the refrigerator. It was 6:13. "We may be about to discover the true nature of time. Except that *we* won't discover it. The *Altheans* will tell us. I have to admit that I'm not as ecstatic about the Hercules texts as I used to be."

Soviet Foreign Minister Alexander Taimanov noted that he was alone with the President, nodded with satisfaction, but remained standing. He was a harsh, uncompromising man in public, an inveterate foe of the western world. He came of peasant stock, had risen to power during the Khrushchev regime, and had survived. Despite his unrelenting hostility, Taimanov was nevertheless viewed by U.S. diplomats as predictable, and a force for stability in the Soviet Union. "Taimanov understands the missiles," they said, echoing a remark the Foreign Minister had made about Hurley. He could be counted on to resist the encroachments of the younger commissars (who, unlike him, did not recall the horrors of the Great Patriotic War), and of the Army.

Hurley, himself an ardent nationalist, had found it possible to deal with Taimanov, and he even developed, reluctantly, an affection for the man whom the press had dubbed The Little Bear. He and the Foreign Minister had cooperated on at least two occasions to defuse potentially explosive situations. Hurley, summing him up for a political reporter, had observed that, as long as Taimonov remained in a position of power, relations with the U.S.S.R. would always be tense, but that there would be no resort to war.

That statement had been made for Soviet consumption, rather than because the President really believed it.

"Mr. President," he said, after several minutes of diplomatic small talk, "We have a problem."

Hurley had left only one comfortable chair in the room, a wingback placed near the window, to the left of the desk. When Taimanov settled into it, the President offered his favorite brand of scotch, and then seated himself casually on the desktop, looking down on the Foreign Minister.

"Your action in withholding the Hercules transmissions from the general public is quite correct."

"Thank you, Alex," Hurley said. "The editorial writers at *Tass* don't seem to agree."

"Ah, yes." He shrugged. "They will be spoken to. Sometimes, Mr. President, they tend to act reflexively. And not always responsibly. It is the price we pay for their autonomy under the present leadership. In any case, I'm sure you've already recognized that the current state of affairs creates severe difficulties for both of us."

"How so?"

"You are placing Chairman Roskosky in an untenable position. His situation is already precarious. Neither the military nor the Party is enthusiastic about his efforts to establish better relations with the West. Many perceive him as being too willing to accept American guarantees. In all honesty, I must inform you that I concur with that perception." His appearance took on a note of resignation, which said to Hurley, in effect: you and I recognize his naïveté; you have the advantage of us on this one. "His position is not improved by continuing economic difficulties."

"Your economic problems," observed Hurley, "are part and parcel of any Marxist system."

"That is of no moment just now, Mr. President. What you have to keep in mind is the sensitivity of his situation, and the potential for mischief in this business of the radio signals." Uncomfortable in the chair, Taimanov looked around for an escape, but found nothing. "I do not personally believe you will find anything worth concealing—that is, anything of military value. I think we will learn that other intelligent species will be quite like ourselves. They will give away nothing of use."

"What is your concern?" asked Hurley.

Taimanov's head wobbled up and down. "Do you play chess, Mr. President?"

"Moderately."

"That fact does not appear in your campaign biography."

"It would not have won any votes."

"I will never understand the United States," Taimanov said. "A land that extols mediocrity and produces engineers of exceptional quality."

"Your concern?" asked the President.

"Ah, yes: the point. The point, Mr. President, as any good chess player, or statesman, knows, is that the threat is of considerably more use than the execution. It does not matter whether, eventually, you find something of military or diplomatic value in the Hercules text; it matters only that we fear you might. And the question for you to ponder, sir, is whether that fear is sufficiently deep to provoke actions that neither of us wishes to see." He tilted his glass of scotch, examined it in the light, and finished it with evident satisfaction. The President would have refilled his glass,

but Taimanov demurred. "It is all they allow me," he said. "John"—the formality dropped from his tone, and Hurley glimpsed real concern in his eyes—"I urge you to dispel the fears of my government."

"And how can I do that?"

"Provide us with a transcript. We could arrange a suitable forum, perhaps at the Soviet Academy—and let us work together on this project. There would be political advantage for all; and you yourself could negate much of the criticism to which you've been subject. Or, if you prefer, give us the transcript secretly, and we will be discreet."

"You want me to give you material that we've withheld from the American scientific community? Alex, you can't believe I would gain anything by doing that.

"I wish I could say I'll consider it, Alex," Hurley said. "Unfortunately, I can see no way to comply with your request. To be honest with you, I'm sorry we ever received the goddam transmission. And if I had it to do over, I'd dismantle SKYNET, and we could go back to arguing over subs and warheads.

"I *would* be willing, however, to make a gesture for the Chairman. We might, say, pull some missiles out of Western Europe."

"That could do no harm, Mr. President. But I think we have got far beyond that now."

"Yes. Yes, I'm sure we have."

Taimanov nodded slowly, got up, and pulled on his coat. "I will not be returning to Moscow until Wednesday. . . . Should you wish to speak further."

When he was gone, Hurley hurried to his next appointment, which was a photo session with some union people. His guests found him distracted. His usual ability to push problems aside to concentrate on the matter at hand had deserted him.

VIII.

There was a growing sense of exhilaration about it all. Harry enjoyed his access to the topmost levels of government, where he was now known by his first name. It was a heady experience for a minor federal employee. If things went well, if he could avoid blunders, if Gambini's team could find the type of information that could be of immediate practical value, he could probably reap an agency directorship. Consequently, he invested a disproportionate amount of his time in the Hercules Project. To his credit, Gambini never grew impatient with his questions. (Although Harry realized that the idealist in Gambini would never have looked for

an ulterior motive.) And Harry found himself swept up in the excitement of the hunt for the elusive nature of the Altheans.

The work of establishing the "language" of the transmissions was proceeding slowly, and with moderate success. That it was proceeding at all, Rimford told Harry, considering the enormous complexity of the problems involved, was a tribute to Cord Majeski and his mathematicians.

Harry brought his son out to Goddard on his visiting day. There'd been a delay at home because the boy's insulin supply had run low, and Harry had to take him to the People's drug store. That was always a depressing experience, rendered even more so by Tommy's good-natured resignation to his disease.

The boy loved to ride around at the Space Center, looking at dish antennas and communications equipment and satellite models. But in the end, he'd been most interested in the duck pond. (There were still seven or eight mallards floating around on the cold water. Harry wondered when they would leave.)

Tommy was tall for his age, with his mother's elegant features, and Harry's oversized feet. ("That'll change as he gets older," Julie had reassured him.) The ducks knew about kids, and they crowded around him before he had a chance to get his popcorn open. They were quite tame, of course, and, when the boy proved a little too slow, they tried to snatch the food from his hand. Tommy giggled and retreated.

Harry, watching from a distance, recalled all the evenings he'd worked late, the weekends given to one project or another. The government had recognized his efforts with scrolls and cash bonuses, and last year he'd been inducted into the Senior Executive Service. Not bad, on the whole. But a tally of some sort was mounting, with his scrolls and bonuses on one side. And on the other?

Tommy among the ducks.

And Julie.

Later, they had dinner and went to a movie. It was a bland science fiction film with a group of astronaut-archeologists trapped in an ancient ruin on another world by a killer alien. The effects were good, but the dialogue was wooden, and the characters unbelievable. And anyhow, Harry was near the end of his tolerance with aliens.

Julie had moved into a condo in Silver Spring. When Harry returned Tommy Sunday evening, she took a few minutes to show him through the unit. It looked expensive, with hardwood appointments and central vacuuming and a scattering of antiques.

But she seemed disspirited, and his tour was, at best, a mechanical display of rooms and knick-knacks.

"What's wrong?" he asked, when they stood finally alone on her patio, looking north on Georgia Avenue from the fourth floor. It was cold.

"They've increased Tommy's dosage," she said. "His circulation hasn't been so good. That's why he needed more this morning."

"He didn't say anything to me," said Harry.

"He doesn't like to talk about it. It scares him."

"I'm sorry."

"Oh, Harry, we're *all* sorry." She closed her eyes, but tears ran down her cheeks. "He's taking *two* shots now." She'd thrown a white woolen sweater over her shoulders. Below, a police car approached Spring Street, its siren loud and insistent. They watched it angle through a jammed intersection, and pick up speed again until it turned into Buckley. They could hear it a long time after that.

Leslie nibbled thoughtfully at a tuna sandwich. She didn't see him until he slid into a seat beside her. "Harry," she said. "How are you doing?"

"Good," he said. "How are the translations coming?"

"They're coming," she said. "Harry, we really need to be able to send this stuff out. I know all sorts of people who should be getting a look at it. There are too many areas where we just don't have the expertise. Sitting here bottled up with it—it's frustrating."

"I know," said Harry. "Maybe things'll change now. Some clearances have come through, and we can start bringing in more people."

"Harry," she said, "it's getting worse."

She meant the new security restrictions. The Hercules Text was contained on one hundred seventy-eight laser discs. The originals were at the lab, and a backup set in the library. That was it. None could be removed from the operating areas, and none could be duplicated without going through a cumbersome routine. "Anyhow," she continued, "we're beginning to get some sense of the structure of the language. It's highly mathematical, a code almost. But what fascinates me is that if you translate it into English, freely substituting general terms, you get some very striking poetry. Except that it isn't poetry, I don't think, but I don't know what else to call it." She discovered her sandwich, almost untouched, and took a bite. "I think Hurley's going to be disappointed."

"Why?"

"The bulk of the material we've been able to break into so far reads like philosophy. Although we can't be sure of that because we don't understand most of the terms, and maybe we never will. I'm not even sure we aren't being subjected to some sort of interstellar Gospel.

Images drifted through his mind of the President reacting to that. "It's the best thing that could happen to us," he said.

"Harry," she replied, "I'm glad you think it's funny, because there's an awful lot of it."

"Is there any history? Do they tell us anything about themselves?"

"Not that we've been able to find. We're getting commentaries, but they're abstract, and we can't really make out what they relate to. There are long mathematical sections as well. We think we found a description of their solar system. If we're reading it correctly, they have six planets, and the home world has rings. They *are* circling the yellow sun, by the way.

"But this other stuff. They paint with broad strokes, Harry. From what I've seen, they're not much interested in the sorts of things you build weapons from. You know what I really think the transmission is? Basically?"

Harry had no idea.

"A series of expanded essays on the good, the true, and the beautiful."

"You're kidding."

"We know they're interested in cosmology. They have enough knowledge of physics to baffle Gambini. They've supplied mathematical descriptions for all sorts of processes, including a lot of stuff we haven't begun to identify. We're probably going to learn what really holds atoms together, and why water freezes at thirty-two degrees, and how galaxies form. But there's a sense in the Text that all that is—" she searched for a word, "—incidental. Trivial. The way they establish their credentials, perhaps. What they really seem interested in, where it seems to me their energy is, is in their speculative sections."

"It figures," said Harry. "What else would we expect from an advanced race?"

"They may have given us their entire store of knowledge. Everything they consider significant."

Harry was realizing that he enjoyed spending time with her. Her laughter cheered him and, when he needed to talk, she listened. Furthermore, she embodied a fierce independence that implied she was on her own.

They walked together toward the Lab, Harry carefully keeping a proper distance, but warmly aware (perhaps for the first time) of her physical presence. She needed almost two strides to each of his. But she stayed with him, apparently lost in thought, although, if he'd been watching carefully, he might have noted that her eyes strayed occasionally in his direction, and then looked too quickly away.

They strolled across a bleak landscape, under a gray-white December sky, threatening snow. When they arrived, she hurried back into the rear office which she'd taken over, and Harry wandered over to talk to Pete Wheeler.

The priest was seated at a computer, painstakingly punching in numbers from a set of notes. He looked relieved to have a chance to get away from it.

"I hear," he said, "Baines is beginning to get some pressure. The Academy wants him to refuse to cooperate further with the Project. And to take a public stand."

"How the hell can *anyone* pressure Baines?"

"Directly, they can't. But you know how he is. He hates to have anyone think ill of him. Especially all those people he's worked with for a lifetime. To make matters worse, of course, he thinks they're right."

"How about you?"

"I guess some people have complained to the Abbot. He says that the Vatican isn't worried, but that there's been some discontent from the American Church. But I don't think there'll be anything overt. They're extremely sensitive right now about being seen as a roadblock to progress."

"The Galileo Syndrome," said Harry.

"Sure."

"You look worried."

"I keep thinking how all this must look to Hurley. He's in a no-win situation, and he'll be damned no matter which way things go. You really want my opinion, Harry?" He rubbed the back of his neck. "Historically, governments are not good at keeping secrets. Especially about technology. The only one I can even think of that retained control of an advanced weapon for a long time was Constantinople."

"Greek fire," said Harry.

"Greek fire. And that's probably it for the whole course of human history. Whatever we learn here, Harry, whatever's in the text, will soon be common property." His dark eyes were troubled. "If Hurley's right and we discover the makings of a new bomb or a new bug, it'll be only a matter of time before the Russians have it, or the IRA, or the other assorted loonies of the planet." He looked disheartened. "I don't even think that's the real danger, though God knows it's serious enough. But at least it's a danger everyone recognizes. Harry, we're about to be inundated by an alien culture. This time we are the South Sea islanders." He shut off his monitor. "Do you remember a couple of years ago when Gambini and Rimford and Breakers used to get into those long arguments about the number of advanced civilizations in the Milky Way? And Breakers always said that if there were others, we'd be able to hear some of them. They'd be transmitting to us." Wheeler extracted the disc he'd been working with, and returned it to the master file. "I've got to get out of here for a while," he said. "Want to come along?"

"I just came in," said Harry. But he followed the priest outside, thinking

about Breakers. He'd been a cynical old son of a bitch from Harvard who hadn't lived quite long enough to hear the great question answered.

"Baines published an article recently," continued Wheeler, "titled 'The Captain Cook Syndrome,' in which he says a wise culture might recognize that contact with a more primitive society, however well intentioned, could do nothing but create problems for the weaker group. Maybe, he said, they're silent out of compassion.

"But our aliens chatter. They tell us *everything*. Why would they be different? Could they possibly be incompetent?"

"That's hard to buy," said Harry. "After they manipulated that pulsar. No, I can't believe they're dullards. Maybe their solitude has something to do with it."

"Maybe. But that doesn't help us. Harry, we are about to be invaded as surely as if the little critters arrived in saucers and began rumbling around the terrain in tripods. The transmission, which we are now beginning to be able to read, is going to change us beyond recognition. Not just what we know, but how we think. And undoubtedly it'll affect our values. It's a prospect I can't say I relish."

"Pete, if you feel that way, why are you helping?"

"For the same reason everybody else is: I want to find out what they are. What they've got to say. And maybe what the implications are for us. It's all I care about any more, Harry. And it's the same with everyone. Everything else in my life right now seems trivial."

There were a few flakes in a stiff cold wind coming out of the northwest. Just beyond the perimeter fence, three men crouched on the roof of a two-story frame, repairing shingles. In the adjoining backyard, two teenagers were unloading firewood from a pickup. Wheeler wore an ugly oversized green cap. "It belonged to a student I had a few years ago at Princeton in a cosmology class. I admired it pretty openly, I guess, and at the end of the semester he gave it to me." It jutted far out over his eyes.

"It looks like something you took from a mugger," Harry said.

They stopped at an intersection, and waited for a mail truck to pass. "I've got something to tell you," said the priest.

Harry waited.

"I found some equations in the Text that describe planetary magnetic fields: why they develop, how they work. Some of it we know already, some of it we don't. They go into a lot of detail, and it isn't really my specialty. But I think I can see a way to tap them for energy. Lots of energy."

"Can we *get* at magnetic fields to use them?" asked Harry.

"Yes," replied Wheeler. "Easily. All that's necessary is to put a few satellites up, convert the energy to, say, a laser, and beam it to a series

of receivers on the ground. It'd probably solve our energy needs for the indefinite future."

"How certain are you?"

"Reasonably. I'm going to tell Gambini about it this afternoon."

"You sound hesitant."

"I am, Harry. And I don't really know why. Solving the power problem, and getting away from fossil fuels sounds like a pretty good idea. But I wish I had a better notion how something like this, sprung all at once, might shake things up. Maybe we need an economist out here too."

"You worry too much," said Harry. "This is the kind of useful information we want. The good, the true, and the beautiful may make for interesting talk at lunch, but taxpayers would be more interested in doing something about their electric bills."

Harry called his White House number. "Please tell him we might have something," he said.

The voice on the other end belonged to a young woman. "Come in this evening. Seven o'clock."

IX.

"How about some *good* news?" Hakluyt removed his glasses and placed them on Gambini's desk. The lenses were thick, mounted in steel frames. Hakluyt was physically so slight that he seemed somehow less substantial without the spectacles. "I've worn them all my life," he said. "I'm nearsighted, and I had an astigmatism. My family has a long line of eye problems. They're all myopic." He smiled delicately, picked up a *Webster's*, and held it over the glasses. "I got my first bifocals when I was eight." He let the book drop. It smashed the spectacles flat.

Gambini watched, mystified. "Cy," he said, "what the hell are you doing?"

Hakluyt swept the pieces casually into a wastebasket. "I don't need them anymore." He looked triumphantly at Gambini. "You know why we had all those vision problems?"

"Genetic," said Gambini.

"Of course," snapped Hakluyt. "But why? The repair mechanisms aren't properly directed, that's why. The equipment to put my eyes in decent order was always there. But the coding was incorrect. Ed, rewrite the coding and you wind up with twenty-twenty."

"Son of a bitch," said Gambini, beginning to glow. "You've been able to do that?"

"Yes! I can do some of it. I can do it for *you*, Ed, if you want. I can

make your eyes twenty-one years old." He took a deep breath. "I never knew what it was to see well. Even the glasses didn't help much, really. I always felt as if I were looking at the world through smeared windows.

"This morning, from my car, I watched a cardinal sitting on a branch out near the main gate. A week ago, I'd have had trouble seeing the tree."

"And you can do the same for anyone?"

"Yes," he said. "For you. For anybody. All it takes is a little chemistry. And I'd need a blood sample."

Gambini sat down. "Are you sure?"

"Of course not. I don't know enough yet. But, Ed, I think this is only the beginning. You know how I did it? I sent bogus instructions to several billion cells. The sort of instructions my DNA should put out if it really cared about my welfare. I've still got a lot to learn, but I don't think there's anything we won't be able to do—stop cancer, strengthen the heart, you name it."

"You mean, stop deterioration generally?"

"Yes!" Hakluyt's voice literally rang. "Ed, I'm not sure yet where all this will lead. But listen: we're going to come away with the means to cure epilepsy, Hodgkin's, cataracts, you name it. It's all there."

Gambini removed his own glasses. He only used them for reading. He needed new ones, had for years, but he suspected that stronger lenses would weaken his eyes further, and consequently he refused to return to an optometrist. It *would* be good to be rid of them. To be rid of the back that ached on damp mornings and the loose flesh around his waist and under his jaw. To be rid of the dark fear that came occasionally in the night when he woke suddenly aware of the beating of his heart.

My God, what would such a thing not be worth? To be young again—"Does anyone else know?"

"Not yet."

"Cy, it strikes me we would have a very hard time if people stopped dying."

"I know," said Hakluyt. "We'd need some controls. Probably, we should suggest the White House turn it over to the National Council for the Advancement of Science."

"Or the Boy Scouts of America." Gambini laughed. "They'd turn it over to nobody. It's too dangerous. If people find out that something like this is around, God knows what would happen. I'll tell you this much: if we give this to Hurley, we'll wind up with a bunch of immortal politicians, and nobody'll ever hear of the technique again." He looked very tired. "I'm sorry, Cy. But there's only one way we can deal with this." He took a ledger out of his desk and consulted it. "You've been working with DS one-oh-one."

"Yes."

"Bring it here. Along with your notes and any other records you have on this."

Hakluyt's eyes went very wide, and the blood drained from his face. He looked near tears. "You can't do this," he said.

"I'm not doing anything right now except ensuring that nothing happens until I want it to."

Waves of pain and rage rolled through Hakluyt's eyes. "You're a madman," he said. "You know, all I have to do is tell Rosenbloom or Carmichael what you're doing, and you'll find yourself in jail somewhere."

"I'm sure you're right," said Gambini. "But I wish you'd stop a moment to consider the consequences. In any case, if I have to, I'll destroy DS one-oh-one." He held out his hand. "I'll also need your library ID."

Hakluyt produced the plastic card, dropped it on the desk, and started for the door. "If anything happens to those discs," he said, "I'll kill you."

Gambini waited a few minutes, then went out to Hakluyt's station, retrieved the laserdisc, gathered the microbiologist's papers, and locked them in his filing cabinet.

An hour later, he retrieved the duplicate disc from the library, and put it too in the cabinet. Then he resisted the temptation to erase both and be done with it.

After Carmichael had gone, John Hurley stood a long time near the curtains, watching the traffic on Executive Avenue. He'd come to the White House three years before, convinced that accommodation with the Russians was possible, that in the end common sense could prevail. That happy notion had become the undisclosed cornerstone of his Presidency. And the measure of his failure.

He suspected that other men, on other nights, had stood brooding beside these windows: other men in the shadow of the nuclear hammer, Kennedy and Nixon and Reagan and Meyer. They too would have yearned for the easier times of a Cleveland or a Coolidge.They too must have wished desperately for a world free of nuclear weapons, and in the end they must have grown to hate their antagonists in Moscow.

The frightened, angry men of the Kremlin had never responded to reason. During his own administration, he'd watched his chances and, when the moment seemed right, had made his offers. The Russians had reacted by increasing pressure in Central America and the Philippines. Reagan had been right, of course: the Soviet rulers were bastards, but it was no longer politic to point that out in public. Certainly if there were a way of dealing with them, he had not yet found it. And the Hurley strategy became one with the American position since 1945: wait for the leavening effect of time to soften the Soviet posture. And so the waves

of weapons mounted, year after dreary year, generation after generation, until hardly anyone now lived who could remember when it was not so. And, perhaps most disquieting of all, the walk along the precipice had come to seem like the natural order of things.

The terrible truth was that a tiger was loose in the world. And the real danger from the tiger, perhaps, was not that it might, in some irrational spasm, launch an attack: rather, its disruptive policies encouraged nations to play one superpower against the other. With the result that the planet bled constantly.

Harry Carmichael's news might have changed all that.

At a stroke, particle beam weapons would become feasible. The technology was there, had been there, for a decade. But the enormous power needed to operate the projectors had never been available. Hurley had in his hands the key to realizing Reagan's dream of a planetary shield against nuclear war. Possibly, the United States would be able to guarantee everyone, even the goddamn silly Russians, a safer existence.

It occurred to the President that Carmichael had brought him immortality.

"Baines told me yesterday that he's beginning to think that whatever the discs contain, we'd be better off if they were destroyed."

Leslie nodded. She obviously had also heard the talk, which was becoming more common now. "Let me show you something," she said. She retreated to the bedroom, and returned with a stuffed black binder which she laid before Harry.

It was a hefty collection of extraterrestrial verse and philosophy: early translations from the Hercules Text in printout form with extensive notes scrawled across the pages in Leslie's neat hand.

He leafed through. The material had a lyrical quality, but it was hard to know whether that was the Altheans or the translator. Some terms were not yet solved; syntactical relationships were not always clear; and Harry sensed that even a perfect translation in simple English would have been a baffling document. It reminded him of a cross between Plato and haiku; but there was no escaping the overall sense of gloomy intelligence, nor, paradoxically, the suggestion of a wry wit, just beyond his grasp.

The Altheans were concerned with many of the problems that obsessed human beings, but with subtle differences: for example, a discussion of morality explicated in considerable detail the responsibilities that an intelligent being has toward other life forms, and even to inanimate objects; but obligations to others of its own species were ignored. A philosophical treatise on the nature of evil examined only the catastrophes

caused by natural forces, overlooking those that result from human (or inhuman) malice.

Gamma must have been a world of oceans: again and again there appeared the metaphor of the seas, of the wandering ship, of the questing mariner. But the waters are calm: nowhere do squalls rise; nor does one feel the surge of heavy tides. There are neither rocks nor shoals, and the coasts glide peacefully by.

The stars are silent.

Voyager among dark harbors, I listen, but the midnight wind carries only the sound of trees and water lapping against the gunwale and the solitary cry of the nightswallow.

There is no dawn. No searing sun rises in east or west. The rocks over Calumel do not silver, and the great round world slides through the void.

"Worth saving?" she asked.

"Yes," he said, suddenly aware of her presence on the sofa beside him.

Shadows moved across her jaw and throat. "I'm beginning to feel that I know the Altheans pretty well. And what I get is a terrible sense of solitude. We've assumed that the communication is from one species to another. But I get the distinct impression that there's only one of them, sitting in a tower somewhere, utterly alone." There was something in her eyes that Harry had never seen before. "You know what it makes me think of? An isolated God, lost and drifting in the gulfs."

Harry put his hand over both of hers. She was lovely in the half-light.

"The data sets," she continued, "are full of vitality, compassion, a sense of wonder. There's something almost childlike about them. And it's hard to believe the senders are a million years dead." She wiped at her eyes. "And I'm not sure any more what I'm trying to say."

He watched her breast rise and fall. She turned her face toward his. Harry absorbed the warm geometry of softly curving lip and high cheekbone.

"I'm never going to be the same, Harry. You know what? I think it was a mistake to bring the translations back here and read them alone at night."

"You're not supposed to do that." Harry smiled. "Does anybody around here obey the regulations?"

"In this case, at least, I should have. I'm beginning to see things in the night, and hear voices in the dark." Her head fell back, and a sound like laughter rose in her throat. He caught her eyes, and became aware of his own heartbeat.

His arm circled her shoulder, and he drew her forward. Their eyes joined, and she folded herself against him. It had been a long time since an honest female passion had been directed, without reservation, at him. He savored it, holding her, tracing the line of her jaw and throat with

his fingertips. Her cheek was warm against his. After a time she whispered his name and turned herself, turned him, so that she could reach his mouth.

Beneath the filmy material of her blouse, her nipples were erect.

X.

"I think I've got another bomb," said the priest. "We're finding detailed, and exceedingly fundamental, descriptions of electromagnetic radiation, harmonics, particle theory, you name it. At the moment, I have answers to all kinds of classic questions. For example, I think I know why the velocity of light is set where it is. And how a photon is constructed, although that's the wrong verb. And I have a few insights to offer into the nature of time." But Wheeler's comments, which should have elicited a celebratory mood, were delivered in a somber voice.

"You're not going to tell us," Leslie asked, "that we can build a time machine, I hope?"

"No. Fortunately, time machines are probably prohibited. The nature of the universe won't permit their construction. But I wonder whether you'd care to settle for an exceedingly efficient death ray? We're going to have a whole new technology for creating articulated light—concentrated radiation that could be used for a variety of constructive purposes, but which will also have one hell of a military application as a long range weapon. It would possess significant advantages over bombs, by the way. For one thing, it'd kill people without blowing holes in the real estate, thereby making war profitable again. And the beams travel at light speed, so there'd be no chance of defense or retaliation. It's ideal; the military would love it."

"I think," Hakluyt said derisively, "that we have another data set to hide in Gambini's file cabinet."

Only Gambini seemed to notice the remark.

"There's more," continued Wheeler. "Unfortunately, a good deal more. Harmonic manipulation, for example."

"What can you do with harmonics?" asked Harry.

"At a guess, we could probably disrupt climate, induce earthquakes, bring down skyscrapers. Who knows? I don't think I want to find out. Harry, what's so funny?"

"Nothing, really, I guess. But it occurred to me that Hurley is trying to make the world safe from a weapons system that has just become obsolete."

It was an uncomfortable moment.

"I don't suppose," said Wheeler, "there's any way that a detailed de-

scription of physical reality—an advanced description—could help having this sort of effect. I'm putting it all into a report, which you'll have before you go home this evening. I think we've reached a Rubicon, and we're going to have to decide what we want to do."

"How many data sets are involved?" asked Hakluyt.

"Almost every one I've looked at. About a dozen, so far."

Gambini slumped back in his chair. "There's something else you might as well know," the project manager said. "Cy, tell them about the DNA."

Hakluyt smiled wickedly. He looked different without his glasses. But it was more than that. He appeared healthier somehow. Harry had trouble, at first, understanding why his impression of the man had changed. "I've discovered," he began, "some techniques for restoring the repair functions of the body. We should be able to rewire DNA so as to do away with most genetic disorders, and those normally associated with ageing."

"Wait a minute," said Leslie. "What precisely do you have, Cy?"

"At the moment, not very much. Dr. Gambini found it necessary to lock up the data set from which I was working."

Gambini colored slightly, but said nothing.

"What were you working *on?*" pursued Leslie.

"A way to stop cancer. To prevent physical deterioration. To ensure there are no more crib deaths, and to clear out the hospitals! We can eliminate birth defects, mental retardation." He looked pointedly at Harry. "Cure diabetes," he said, emphasizing both words. "We can change the entire flow of human existence.

"You people talk about weapons and war. Maybe, if we showed a little courage, we could remove some of the causes of war! Give everyone a decent life! With the things we're learning here, we can create prosperity around the globe. There'd be no point any more in maintaining standing armies."

"You really believe that?" asked Wheeler.

"I think we need to *try*. But we have to get the information out. Make it available."

"What you are going to make available," said Gambini wearily, "is more misery. When there are too many people, you get famine."

"God knows," said Wheeler, "the Church has been saddled with that reality for a long time now, and they don't want to look at it either. But I'm not so sure we'd be correct in withholding something like this."

Good for you, Pete, thought Harry, who, for the first time since the terrible days following the diagnosis of his son's illness, felt the beginning of hope.

"It's obvious," Leslie said, "that we need to make a very basic decision. We've talked about withholding things from the White House, but until now we haven't had to do it. But we have to think about that, and we

have to think about what's going to happen down the road. What are we going to *do* with the material we *can't* release? To anyone?"

"If we start doing that," said Harry, "holding stuff back, and we get caught at it, everything will unravel. The project will be taken away from us and given to people the President can trust."

"No." Gambini's index finger was pressed against his lips. "They'd have done that already if they could. Their problem is that there's no one they *can* trust who'd be any real help to them. They've got code-breakers and engineers, but for this stuff they need physicists. That's why they've been so patient with us."

"Cy," asked Wheeler, "I take it you'd vote to turn everything over to NCAS?"

"Yes. It's not a move I'm comfortable with, but it's the best of bad alternatives."

"What move *would* you be comfortable with?" asked Leslie.

Hakluyt fiddled with the top button of his shirt. "None," he said. "Maybe there is no reasonable way."

"How about you, Harry?" asked Gambini. "What would *you* recommend?"

It was a bad moment, and Harry hadn't yet sorted everything out. He couldn't get Tommy out of his mind. If they withheld information and got caught at it (and you could not really rely on these people for discretion), his job would go, his pension, everything he'd worked for over a lifetime. Worse, it might even open them up to charges of treason.

But what alternative was there? If they released this stuff to the White House, advanced weapons and DNA reprogramming and whatever the hell else was in there, what would the world be like in five years?

"I don't know," he said. "I really don't know. I guess we have to sit on some of this stuff. Even Cy's material. I keep thinking what happens if people stop dying."

Gambini's eyebrows rose in surprise; and Harry thought he detected, after that, a new respect in the project manager's bearing toward him.

"Pete?"

"The DNA material should be released. We have no right to withhold it. As for the rest of it, we really have no choice but to keep it to ourselves. *I* certainly won't be party to turning it over to the government. *Any* government."

"Okay," said Gambini. "I'm inclined to agree—"

"I haven't finished yet," said Wheeler. "There's no way we can retain control over this information indefinitely. Leslie's right when she says we need to think about the long term. Eventually, if we continue to collect it, it'll get out. We have in this building the knowledge that would provide almost anyone with the means to obliterate an enemy so quickly

and decisively that retaliation need not be taken into account. *That,* so that we are all clear, is what we are talking about. And when the disaster comes, it is *we* who will be responsible. The Text . . . is a Pandora's box. Right now, it's contained. Some of it's out, but most of it is unknown, even to us. I suggest we shut the lid. Forever."

"No!" Leslie was on her feet. "Pete, we can't just destroy the discs! Do that and we lose everything. I know there's a terrible risk here, but the potential for gain is enormous. Hercules may eventually prove to be our salvation. God knows we're not making it on our own.

"Pete, you're a dealer in ultimate causes and final purposes. What practical reason have we for existence other than to learn things? To *know* what lies beyond our senses? If we destroy the Hercules recordings, it seems to me we do a terrible disservice not only to ourselves, but to the people who conquered a pulsar to let us know they were there."

"We know they're there," said Wheeler, his voice sharp and resonant. "It is *enough!*"

"It is *not* enough," said Leslie. "It is never enough."

"Listen to the lady," said Hakluyt. "She makes sense. If you destroy the Text, the act will be irrevocable. There will be no going back, and I can assure you it is an act you will regret all your lives. And all thinking persons with you.

"In any case, whatever we do here, the things that are in those recordings will come anyhow, and at the rate science is moving today they will be upon us very soon. So I submit to you that technical knowledge is *not* what we stand to lose. What we will lose is our contact with another species. Destroy those discs, and we will never know any more than we know right now. And it is more than possible that, during the life of our species, we will never meet another. And you would throw that away because we lack the courage to do what needs to be done?"

Harry's voice, when he spoke, was barely a whisper. "How about a holding action? We could hide the Text somewhere. For a few years. Maybe indefinitely. Until the world is a little more ready for it."

"And where would you hide it?" asked Hakluyt. "Whom do you think you could trust with it? Not me, certainly. Nor Ed. Nor, I think, anyone in this room. We've dedicated our lives to finding out how the world works. You'd be asking the mice to hide the cheese."

A bubble universe drifting over a cosmic stream: Rimford's features widened into a broad grin. He pushed the mound of paper off the coffee table onto the floor and, in a surge of pleasure, lobbed a pen the length of the room and into the kitchen.

He went out to the refrigerator, came back with a beer under one arm,

and dialed Gambini's office. While he waited for the physicist to answer, he pulled the tab and took a long swallow.

"Special Projects," said a female voice.

"Dr. Gambini, please. This is Rimford."

"He's tied up at the moment, Doctor," she said. "Can I have him call you?"

"How about Pete Wheeler? Is he there?"

"He went out a few minutes ago with Mr. Carmichael. I don't know when he'll be back. Dr. Majeski's here."

"Okay," said Rimford, disappointed. "Thanks. I'll try again later." He hung up, finished the beer, walked around the pile of paper on the floor, and sat down again.

One of the great moments of the twentieth century and there was no one with whom to share it.

A quantum universe. Starobinskii and the others might have been right all along.

He didn't understand all the mathematics of it yet, but he would; he was well on the way. Within a few months he would have the mechanism of creation.

Much of it was clear already. The universe was a quantum event, a pinprick of space-time. It had been called into being in the same way that apparently causeless events continue to occur in the subatomic world. But it had been a bubble, not a bang! And once in existence, the bubble had expanded with exponential force. There'd been no light barrier during those early nanoseconds, because the governing principles had not yet formed. Consequently, its dimensions had, within fractions of an instant, exceeded those of the solar system, and indeed those of the Milky Way. There had been no matter at first, but only the slippery fabric of existence itself erupting in a cosmic explosion. Somehow an iron stability had taken hold, expansion dropped below light-speed, and substantial portions of the enormous energy of the first moments were converted into hydrogen and helium.

Not for the first time in his life, Rimford wondered about the "cause" of causeless effects. Perhaps he would find also the secret of the unaccountable: the De Sitter superspace from which the universal bubble had formed. Perhaps, somewhere in the transmission, the Altheans would address that question. But he understood that, no matter how advanced a civilization might be, it was necessarily tied to *this* universe. There was no way to look past its boundaries or beyond its earliest moments. One could only speculate, regardless of the size of the telescope or the capability of the intellect. But the implications were clear.

He paced the small living room, far too excited to sit still. There were any number of people with whom he would have liked to talk, men and

women who had dedicated their lives to this or that aspect of the puzzles to which he now held partial solutions, but security regulations stood in the way. Parker, for example, at Wisconsin, had invested twenty years trying to explain why the velocity of universal expansion and the gravity needed to reverse the outward flight of the galaxies were very nearly identical. *So* balanced, in fact, that even after the computations that included nonluminous matter in the equation, the question of an open or closed universe remained unanswered. Why should that be? Rimford's lips pulled back from his teeth. They had long suspected that the perfect symmetry of the two was somehow dictated by natural law. Yet that was an unacceptable condition, because absolute cosmic equilibrium would have precluded the formation of the galaxies.

But now he had the math, and he saw how symmetry between expansion and contraction was generated, how it was in fact two sides of a coin, how it could have been no other way. Yet, fortunately for the human race, the tendency toward equilibrium was offset by an unexpected factor: gravity was not a constant. The variable was slight, but it existed, and it induced the required lag. (That would also explain, he was sure, recently found disparities between deep space observations and relativity theory.)

What would Parker not give for five minutes tonight with Rimford!

Unable to sit still, Baines left the cottage, drove out to Greenbelt Road and turned east under slate skies.

He'd been on the highway about half an hour when rain began to fall, fat icy drops that splashed like wet clay against the windshield. Most of the traffic disappeared into a gray haze, and headlights came on. But the rain stopped quickly, the sky cleared, and Rimford sailed happily down country roads until he came to a likely looking inn on Good Luck Road. He stopped, went in, collected a scotch, and ordered a prime steak.

His old notion of the initial microseconds of the expansion, which had included the simultaneous creation of matter with space-time, brought about by the innate instability of the void, seemed to be wrong on all counts. He wondered whether some of his other ideas were also headed for extinction. In the mirror across the room, he looked oddly pleased. The scotch was smooth, accenting his mood. Assuring himself that no one was watching, he raised a toast, downed the rest of the drink, and asked for another.

He was surprised at his own reaction. His life work had blown up. Yet he felt no regrets. It would have been good to be right. But now he *knew*!

He had never enjoyed a better steak. Midway through the meal, he scribbled an equation on a cloth napkin, and propped it up where he could see it. It was a description of the properties and structure of space.

If any single mathematical formula could be said to constitute the secret of the universe, that was it!

Good God, now that he had it in his hands, it all seemed so logical. How could they not have known?

The Altheans did indeed manipulate stars, in Gambini's phrase, but in the wider meaning of the term. In fact, they manipulated space in the sense that that they could alter its degree of curvature. Or they could flatten it altogether!

And so could *he*!

My God! His hands trembled as, for the first time, he considered the practical applications.

A shadow passed across the room. It was only the waitress, with the coffee. She was an attractive young lady, bright and smiling, as waitresses in country inns invariably are. But Rimford did not smile back, and she must have wondered about the plain little man in the corner who'd looked so frightened at her approach.

Later, when he'd gone, she picked up the napkin with the string of numbers written on it. By six o'clock, she had tossed it into the laundry.

XI.

Baines Rimford did not drive back to his quarters after leaving the inn on Good Luck Road. Instead, he wandered for hours along bleak highways, between walls of dark forest. The rain that had cleared off in midafternoon had started again. It was beginning to freeze on his windshield.

God help him, he did not know what to do.

He soared over the crest of a hill, descended too swiftly down its far side, and entered a long curve that took him across a bridge. He could not see whether there was water below, or railroad tracks, or only a gully; but it was, in a sense, a bridge across time: Oppenheimer waited on the other side. And Fermi and Bohr . . . And the others who had unleashed the cosmic fire.

There must have come a moment, he thought, at Los Alamos, or Oak Ridge, or the University of Chicago, during which they grasped, really understood, the consequences of their work. Had they ever met and talked it over? Had there been a conscious decision, after it became clear during the winter of 1943–44 that the Nazis were *not* close to building a bomb, to go ahead anyway? Or had they simply been caught up in momentum? In the exhilaration of penetrating the secret of the sun?

Rimford had spoken once with Eric Christopher, the only one of the Manhattan Project physicists he'd ever met. Christopher was an old man

at the time of the meeting, and Rimford had mercilessly put the question to him. It was the only occasion he could recall on which he had been deliberately cruel. And Christopher had said, yes, it's easy enough for you, fifty years later, to know what we should have done. But there were Nazis in our world. And a brutal Pacific war and projections of a million American dead if we could not make the bomb work.

But there must have been an hour, an instant, when they doubted themselves, when they could have acted for the future, when history might have been turned into a different channel. The choice had existed, for however short a time: they could have refused.

The Manhattan Option.

Rimford hurried through the night, pursued over the dark country roads by something he could not name. And he wondered fiercely whether the world would not be safer if he died out here tonight.

Goddard's library was located in a specially constructed facility just west of Building 5, the Experimental Engineering and Fabrication Shop. Rimford had stopped home first to get his green ID badge. Now, the badge dangling from a chain around his neck, he mounted the library steps and entered the building.

He descended to the lower level and identified himself to a guard. Had the guard concentrated less on the photo on the plastic card and looked more closely at the subject's eyes, he might have hesitated. As it was, he only entered a routine query into the computer, which came back negative. Rimford signed in on the log and proceeded into the secure area. Halfway down a polished hall, still within sight of the guard, he stopped before an unmarked door and inserted his ID.

The total Hercules transmission consisted of approximately 23.3 million characters divided into 108 data sets, recorded on 178 laserdiscs. Only two complete sets existed: one in the operations center in the Laboratory Building, and the other here.

The discs themselves occupied a small corner of the middle shelf at the back wall. They were stored in individual plastic sleeves, labeled, and maintained in slots in a cabinet designed originally for the library's word processing records. Briefly, the text had also been stored in Goddard's central computer system, but Schenken had raised security considerations and it had been erased.

Two computer stations had been placed along the south wall of the storage room. The only other pieces of furniture were a couple of chairs, an old conference table, and, at the far end, a battered credenza. Rimford was so preoccupied with his own thoughts that he was at first unaware that he was not alone.

"Can't decide which one you want, Dr. Rimford?"

Gordie Hopkins, one of the technicians, was seated before a console.

"Hello, Gordie," Rimford said, selecting the two discs that constituted DS 41, the cosmology section. He took his place beside Hopkins without turning the other computer on. Instead, he thumbed through his notebook, pausing occasionally to give the impression he was actually contemplating its contents. But his attention was riveted on Hopkins.

Rimford had heard that some of Gambini's people had got into the habit of working in the library, where it was quieter. But it was unfortunate running into someone just now. He glanced at his watch: almost ten. The library would close at midnight, and he estimated he'd need at least an hour.

It was almost eleven when Hopkins finally shut down his console and turned to Rimford, remarking offhandedly that it was an exciting time.

"Yes," replied Baines.

"Dr. Rimford," he said, suddenly, "I should tell you that I'm proud to be working with someone like you."

"Thank you. Soon I suspect that the personalities of all of us will be submerged by the event. But thank you all the same."

Hopkins stared at him with an expression that suggested solicitude. "Doctor, you don't look so good. Are you okay?"

"Yes," he said, more irritably than he would have wished. "Just a little tired, I guess."

Hopkins nodded, but showed no inclination to take the hint. He talked at some length about his own project, a statistical analysis of alphanumeric characters in the first six data sets. And he solicited Rimford's opinion on the reason for the isolation of the Althean system, which the older man refused to give. His behavior was stupid and Rimford knew it, but he was barely able to resist ordering the technician out.

Eventually, Hopkins announced that he had a few things to attend to at the Lab, and that his shift would be over at midnight.

Uncertainly, Rimford watched him leave. When the door closed with the loud final snap of the electronic lock, he turned on the computer, and instructed it to unlock the files. An amber lamp glowed and went out. Rimford removed DS 41A from its plastic jacket, and inserted it into the port. Then he called up the operating menu. It was cold in the little room: there was only one heat duct and it was inadequate. Nevertheless, he felt perspiration sliding down his arms, and a large drop formed on the tip of his nose.

The computer memory, of course, was empty. I am doing the right thing, he told himself. No other course is open. And he loaded the empty memory onto the disc as a file replacement. In that instant, the data contained on DS 41A vanished. He repeated the procedure for DS 41B.

That was the data set he knew to be deadly. But he dared not stop there. And one by one, he removed each disc from its transparent plastic jacket, and wiped it clean. He grew numb during the process, and tears welled into his eyes.

At a few minutes after midnight he emerged from the storage room and checked out with the guard, who had waited patiently. It was hard to believe that the man could be unaware that some terrible thing had happened in the security area. Rimford had no doubt that his face had lost its color and that the conflicting emotions which tore at him were fully displayed across his broad features. But the guard barely looked up.

Now the lab had the only copy of the text. He left the library and walked, not wishing to drive on this night, toward it. And if his conscience had begun to weigh on him, he cheered himself by contemplating Oppenheimer, who had done nothing.

But he was glad there was no moon.

Hopkins had been reluctant to leave the old man alone. Rimford's eyes had been dilated, perspiration running down his neck, and his face drawn. Heart attack country. But he'd obviously wanted Hopkins to leave. The technician had thought about saying something to the guard, but what the hell good would that do? He stopped on the parking lot, looking over at Rimford's black Ford, and wondered whether he should go back.

He even took a few reluctant steps in that direction. But he drove to the lab instead, hoping to find Gambini. There he learned that the project manager had gone home early. Majeski was in charge, and he was not a man to go to with a problem. If Gordie turned out to be wrong, he would pay a price.

Hopkins finished his own work, and hurried out of the building when his relief showed up early. The black Ford was still in the parking lot. He had worked past midnight in there on a few occasions, and the guard had always waited patiently until he came out. If Rimford had collapsed, and lay needing help, how long might it be before anyone checked on him?

On the other hand, he had no interest in confronting that irascible temper again.

There was a light on in Harry Carmichael's office in the Business Operations Building. He drove slowly past, continued on to the front gate, stopped, and went into the security office to use the phone.

Tommy.

Harry was inclined to discount Hopkins' fears. Baines possessed the vitality of a Viking, and anyhow the staff meeting that afternoon had

laid out so wide a range of disaster scenarios that the suspected illness of an old man seemed trivial.

But Tommy: that was another matter. Harry's thoughts were full of his son's diabetes, of the syringes and the grim-lipped doctors and the guilty suspicion that somehow Harry himself was responsible. The tantalizing suggestion by Cy Hakluyt that a cure might be possible had brought it all to the surface again.

Written on a disc locked in Ed Gambini's filing cabinet.

If that was so, why the hell was he sitting in his office? Its walls had shielded him for years from the dreary administrative routines of his job. It was his retreat: the inner sanctum of defense against the lassitude of his days and the sense of personal failure ignited by the dazzling successes of those with whom he routinely associated—Gambini, Rimford, Leslie Davies, and even Cord Majeski.

He wondered whether he had not, during recent months, used this office as a shelter from Julie.

And tonight. What was he hiding from tonight?

His responsibility to Tommy?

He stalked the place that evening, wandering among the tired government furniture and the souvenirs of his own better times.

What would be the price of helping his son?

He folded the budget projections which had lain most of the evening on his desk, clipped them together, and dropped them into the out box. Then he brought up the inventories on his computer, found Ed Gambini's filing cabinet, and noted the serial number. He pulled on his gray cardigan, walked out to the storage locker in his secretary's office, extracted the appropriate master key, and dropped it into his pocket.

He would see about Baines. And then he would take care of his son.

The night air smelled faintly of ozone. Lightning flickered in the west, but the sky was clear. Rimford's car was still parked in the lot outside the library. Harry pulled in beside it just as Baines emerged from the building.

The cosmologist shut the door behind him, hesitated, turned his back on his car, and walked stiffly out across the asphalt toward Road 4. Though it would not be correct to say that he was moving uncertainly, the characteristic energy with which he customarily did things was missing. Harry watched him a few moments, then got out of the Chrysler and called his name.

"Harry," replied Rimford, stopping to peer in his direction. "Is that you?"

"You're wandering around late," said Harry, joining him. "You forget you brought your car?"

"No." Rimford's voice sounded brittle.

"Mind if I walk with you?"

"Suit yourself, Harry."

The wide lawns and tree-lined roads of the Space Flight Center were quiet. In the branches of a tree, something fluttered as they approached.

"Where are we going?"

"The lab."

Silence.

"Are you planning on working through the night?"

Rimford's answer was so long delayed that Harry thought he hadn't heard. "No," he said at last, staring straight ahead.

They crossed to the south side of Road 4, followed it past Building 6, the Space Sciences Laboratory, and turned right across the lawns. Two of the arclights were out, and they should have walked more slowly. "We've been having trouble with them," Harry said. "I think we got a defective shipment." The words hung in the cool night air.

Somewhere, far to the north, he heard a plane.

Rimford plowed relentlessly through the dark.

Directly ahead, the windows of the lower floors of the Research Projects Lab were visible through the trees. "Front door," said Harry, seeing that Rimford was headed for the side entrance, which, since the imposition of security restrictions, was kept locked.

"I forgot," Baines grumbled, altering his course slightly.

Suddenly—and Harry was never certain how it happened—they had stopped, and he saw that Rimford's face, revealed in the glow of lights from the parking lot, was a mask of agony.

"My God, Baines," breathed Harry, taking him by the shoulders, "what's wrong?"

He was staring past Harry, past the illuminated rectangle of asphalt with its half-dozen polished cars, into the dark beyond. A sudden burst of wind sucked at the trees.

"Harry," he said, "I've just erased the backup discs."

A chill exploded silently at the base of Harry's spine.

"I'm going to get the rest of them now. The ones in the lab." The old man trembled.

Inside the building, a radio played: soft music, Frank Sinatra probably. Somewhere a car door banged shut, but Harry saw nothing more in the lot nor beyond. "What did you find?"

The blue eyes blazed. "What's the last thing you'd *want* to find?"

"I don't know," Harry replied wearily. "Plague. A bigger bomb. We went all through this at the staff meeting today. You should show up once in a while."

"And what did we decide to do?"

"We're going to be careful what gets passed on to the White House."

"Really? I admire your confidence."

"Baines, *what is it?*"

Rimford pushed his hands into his jacket pockets and looked directly at him. "A cheap way to end the world. Any well-financed terrorist group could pull it off. I believe I could manage it myself with the resources of a medium-sized midwest college. By any reasonable measure, I have become the most dangerous man on the planet." He laughed, but the sound had an ugly edge to it. "*Me!*

"Among other things, I know the specifics of spatial curvature. Under normal circumstances there are fifty-seven million light-years to a degree of arc. Gambini would tell you that's far too small a figure, but the universe is not the hyperbolic sphere we'd thought it to be. It's a twisted cylinder, Harry. There's much of the four-dimensional Mobius in it."

Harry shrugged.

"Space can be *bent*," Rimford continued. "It can be bent by mass, or it can be bent by energy." His irises were small and round and hard. "A surprisingly *small* amount of energy. I can do it! I can do it with a generator! Harry, we're talking about gravity, and there don't appear to be any limits. I could make New York City fall into the sky. I could turn Maryland into a black hole!" He stared at Harry in cold, angry defiance. "Do you want to make that kind of knowledge available? Would you like to read the mechanics of it in the science section of the New York *Times?*"

Harry swayed, and his pulse pounded in his ears. Why? Why in God's name were the Altheans doing this to him? This terrible voice in the dark. Could it possibly be true that the Hercules signal was *intended* to destroy the listener, that it was after all a malicious cosmic prank? Or did they just not *care* what the consequences of their message could be? He was briefly, viciously, happy that they were dust. And all your kind, he thought. And yet he retained the image of frightened, lonely creatures not unlike himself. Could it be that they just didn't *realize* what their terrible gift could do?

What had Leslie said? *What practical reason have we for existence other than to learn things?* But what the hell was the entire effort *about* if knowledge, some knowledge, was indeed too dangerous to possess? The Frankenstein Syndrome. (The metal key with which he might unlock his son's diabetic cage was cold in his pocket.) "No!" he breathed. And he turned away, staring at Road 3, solid and familiar and *real*. "The price is too high, Baines. Destroy it tonight, and we'll never know the truth. We'll always wonder what we *might* have had."

"Don't you think I know that?" A security vehicle approached. It slowed long enough for the driver to scan the two men.

"They'll always remember, Gambini and the others. And the people who come after him. They'll never forgive you."

"You can stop me," Rimford said quietly. "If you wish."

In that moment, on the cool green lawn beneath the white stars, Harry conceived a terrible hatred for Baines Rimford.

"There are seven or eight people in there now," Harry said, "in the operating spaces. They aren't just going to stand there while you erase the discs." The security vehicle moved off.

"No, Harry, it'll be easy. There are a couple of electromagnetic motors in the storeroom. All I need to do is take one into the lab, turn it on and walk around. It won't literally erase the discs, but it'll scramble the transmissions beyond recovery. It'll get everything in the operating spaces, in the offices, and in ADP, before anyone realizes what's happening." He wiped the back of his hand against his mouth. "Unless you warn them."

The life had drained from the cosmologist's eyes, and Harry understood with dawning horror that Rimford *wanted* him to intervene, wanted Harry to seize the responsibility!

"The black hole . . . ?" he asked. "How difficult would it be to master the technology involved?"

"It wouldn't be easy," said Rimford. "But nowhere near as hard as making an atomic weapon."

Jesus. Poor son of a bitch of a bureaucrat. In the end it was *his* decision. He stared at Rimford until tears squeezed into his eyes, and his stomach tightened into a cold hard fist. For a long time neither man moved.

"Do what you have to do," Harry said at last. "I'll support you."

There was an instant in which Harry glimpsed rage in the older man's rigid features. But then Rimford nodded. He turned on his heel and walked across the lawn into the lights and through the front door into the Hercules operating spaces.

Harry watched him go. He and Rimford would be bound together now as no two men ever had before. Their names would live with those of Arnold and Quisling, probably. And they could expect to inherit the just rage of generations of thoughtful men.

And, God help them, they would never know whether they had been right.

Harry waited a few minutes more in the cold and the dark, tracing the pattern of the key with his index finger. Then he too turned away. ●

NEXT ISSUE

British writer **Ian Watson** has long been regarded as one of the most ingenious and inventive authors in science fiction, and he returns to *IAsfm* next issue with our December cover story, "Windows." The enigmatic Windows may be an alien lifeform, or the last remnants of the technology of an unimaginably ancient civilization . . .but lifeform or artifact, they *may* offer access to the whole expanse of the universe—if you dare to pay the price. "Windows" is Watson at his challenging and intriguing best. From the depths of space, **Cherry Wilder** then takes us to the inner regions of the mind and the hidden corners of the human heart, in the strange and evocative novelette "Dreamwood." Our jam-packed December issue also features: World Fantasy Award-winner **John M. Ford,** who returns to *IAsfm* after too long an absence with "Walkaway Clause," an affectionate *hommage* to space opera that also offers a few very new twists of its own; recent Nebula Award-winner **Nancy Kress** is on hand to tell the haunting and bittersweet tale of the consequences of some unusual "Phone Repairs"; new writer **John Barnes** makes his *IAsfm* debut with "Stochasm," a story in which he plays some very odd games both with number theory and with human nature; and new writer **Don Webb** makes *his IAsfm* debut with the very funny—and very strange—Wild West saga, "Jesse Revenged."

And of course, it wouldn't be the December issue without a Christmas story. This year we have two of them—by five different authors. **Connie Willis, Dan Simmons, Steve Rasnic Tem,** and **Edward Bryant** all join their considerable talents for one of them, "Presents of Mind," a four-way collaboration that gives us glimpses of some Christmas presents you'd probably rather *not* find under your tree this year. In the other, **Elissa Malcohn**—whose poignant story "Lazuli" stirred up a great deal of reader response here a couple of years ago—gives us an exclusive viewing of "The S.O.B. Show," a holiday extravaganza you definately will not soon forget.

Plus an array of columns and features, Letters, book-reviews, Isaac's Editorial, and more! Look for the December issue on your newsstands on October 21, 1986, or subscribe now, and be sure to miss none of our upcoming issues.

ON BOOKS

by Baird Searles

REFUGEES FROM THE FUTURE

Highway of Eternity

By Clifford Simak
Del Rey, $14.95

The Evans family are refugees —from a million years in the future. There are the two sisters, Enid and Emma, the latter married to Horace, who is something of a boor. Then the three brothers: David, the dreamer; Timothy, the scholar, and Henry, who is a ghost. Well, not really a ghost, but he's incorporeal, and slips in and out of view, as well as scaring the neighbors. Then there's Spike, a rather giddy globular alien that roams the woods and plays with the local animals.

The neighbors scared by Henry are seventeenth-century Englishmen. The Evanses live in a country manor which is enclosed in a time bubble, which they cannot leave (spatially, at least). They are joined by chance by two twentieth-century Americans, Boone and Corcoran, who have special talents (Boone "goes a round a corner"—i.e. vanishes into another dimension —when in mortal danger; Corcoran sees things no one else does). Because of these talents, they have run across another time refugee, borrowed his "traveler" (time machine), and ended up with the Evans family.

When a monster robot is sent from the future to get the refugees, everybody tumbles into the three available travelers and ends up in different epochs . . . But nobody stays put for very long. Incorporeal Henry can range through time on his own and goes searching for the others. Enid and Boone end up 50,000 years back, but are tracked by the robot monster. Enid escapes in the traveler; Boone is marooned, makes friends with a wolf, goes around a corner in a life-threatening situation, and is thereby transferred to the grey, formless highway of eternity (with the wolf) at a roadside diner run by a robot.

Here he is joined by Enid, who along the way has picked up an alien of repugnant visage named Horseface. Horseface has stolen a trunk which when opened spills out a 3D map of the Galaxy several hundred feet in diameter. In it, they find a star marked with an X. The alien also has a time-and-space traveling machine called the Net (sort of a tardis shaped like a multicolored jungle gym).

Corcoran joins them; he and David had tracked Enid and Boone

back to the past, where David was killed by a saber-toothed tiger. In the meantime, Emma, Horace, and Timothy have acquired an army of robots in the Earth of the future, after man more or less disappeared into incorporeity (having fallen prey to the dogma of a crusading band of aliens called the Infinites, from whom the Evans family were fleeing in the first place). Henry ends up talking to the last tree on Earth, who is friendly but no help.

Have you got all that? No? And that's only a tithe of the freewheeling, loony goings-on in Clifford Simak's new novel, *Highway of Eternity*. I haven't mentioned the Rainbow People, or the character called the Hat, which becomes the wolf's toss-about toy, or the Galactic Center for the study of something or other.

Simak, who has published SF since (gasp!) 1931, seems to have given up all pretense at plot or structure. This novel gives the impression of having been made up as it goes along, with *deus ex machinas* at every crisis and loose ends that even the characters admit are unexplained at the finale. It has the arbitrary surrealism of an Oz book, where anything can pop out of the woods or the woodwork, and there's always some crazy mode of transportation handy when things get dull in any particular locale. It breaks almost every rule of good SF.

Is this bad? Does it matter? In this case, not a bit. I haven't had so much fun since the Patchwork Girl fell into the fountain of Ozma's palace. Everything from the interrupted picnic of the indignant aliens to the matter of the ultimate purpose of the Universe is tossed off with an absolutely straight face; there's not a real joke in the book, but it's one of the funniest pieces of SF of the decade. And it's a pleasure to meet Simak's old themes recurring here. The friendly wolf and the polite-but-uppity robots could have come straight from his most famous work, *City*.

QUINTANA WHO?

Tales of the Quintana Roo
By James Tiptree, Jr.
Arkham House, $11.95

Where on Earth is the Quintana Roo?

It is a real place, and if you've ever been there, you're not likely to forget it. White and crystal is what one remembers; white heat and crystal waters. Yucatan, as the traveler to the South will discover if (s)he goes beyond the tourist traps, is about as Mexican as Corsica is French. Mexican Spanish gives way to the Mayan language; Mexican cuisine gives way to something else entirely. *The* Quintana Roo (and never forget the *the*) is the Yucatecan province (one of three) that occupies the east coast of the peninsula, on the Caribbean rather than the Gulf.

James Tiptree, Jr., in a brief but wonderfully informative introduction to her *Tales of the Quintana Roo*, provides some fascinating history to back up the three atmos-

pheric stories in the book. For instance, it's a little known fact that the Mayas revolted as recently as the nineteen-thirties. The U.S. backed the Mexican government, the British backed the Mayas, which is why if you're out in the bush and come across a small Maya with a large machete, as I did once, one says one is British, not *Yanqui*. (Nothing bad happened, but I'd have been better prepared if I'd read Tiptree at that point.)

In a switch from her usual, Tiptree here is not giving us SF; instead, the three tales amount to classic supernatural fantasies. (It's a slim volume, but compensatorily it's at a slim price—for a hardcover—and it's illustrated; the usual first class Arkham House book production.) In the traditional manner, all three are told to the author by second persons, and all are more or less ambiguous—was that second person hallucinating (drunk? delirious?) or could it really have been . . . ? But being Tiptree, each is distinguished by little twists and a total evocation of the strangeness that is the Quintana Roo.

In "What Came Ashore At Lirios," an American who wanders the long coastline comes across a half-sunken ship drifting onto shore. He rescues a person tied to the mast. In the dark, it's hard to tell if it's a man or a woman (a typical Tiptree touch). He (she?) is dressed in antique fashion and speaks pure Castilian Spanish. Who (or what) was it? "Beyond the Dead Reef" contemplates with horror (esthetic as well as supernatural) the pile-up of garbage in the glorious waters off the Quintana Roo. There is a hint of resemblance to Sturgeon's classic short story, "It". "The Boy Who Waterskied To Forever" concerns a beautiful Mayan superathlete, one of the greatest scuba divers of the country, who aimed to be the first to waterski from the island of Cozumel to the Mayan ruins of Tuluum on the mainland. En route he disappears, skis, tow ropes, accompanying porpoises and all. There is a sculpture at Tuluum, unique in all Mayan antiquities. It is a diving male, and there are some very odd accouterments . . .

These stories are indeed classically crafted tales of the supernatural. The icing on the cake, however, is Tiptree's wonderful capturing of the quality of a place, one that is like no other and yet real. If she ever wants to give up writing SF and fantasy, I have no doubt that she could be one of the great travel writers, an American Jan Morris.

ALEXANDER'S CROSSTIME BAND

A Choice of Destinies

By Melissa Scott

Baen Books, $2.95 (paper)

More and more SF and fantasy having to do with history is coming down the pike these days. So much so that one might cautiously call it a trend. History seems to be *in* in general—when Peter the Great can match Joan Collins' *Sins* in the TV ratings, *something* is up.

In our area, this opens the way for the alternate history novel, always a curious subgenre of science fiction—if it *is* a subgenre of science fiction. This may depend on whether one considers history a science. In any case, Melissa Scott's *A Choice of Destinies* is an excellent example; maybe a little too excellent for its own good, in a way.

My personal favorite turning point in history is the battle of Actium—what *would* the world be like today if Cleopatra and Antony had won against Rome and Octavius? The next most interesting speculation in time is a little less definite as a specific turning point. What would have happened if at *some* point Alexander the Great of Macedon had turned West and confronted Carthage and a much younger Rome, rather than continuing East after conquering Persia?

This is the *if* that Scott tackles. She picks up Alexander and his army in Bactra, after the Persian conquest (328 B.C.). He is heading toward India, and the first incident in the novel is the historically accurate one of the plot of several of his pages to murder him. But then things twist. There is a revolt of the Greek city states led by the consistently anti-Macedonian Demosthenes of Athens, which his regent is unable to put down. Alexander turns back from India, puts down the revolt and pursues Demosthenes to Syracuse, in Sicily. There he gets involved in the squabbles of the Greek colonies in Italy against Rome, and after a major battle, enters into an advantageous alliance with the Romans (Ptolemy is "elected" consul of Rome) and with them attacks Carthage, which ends that city as a major force in the Mediterranean. The implication is that Europe becomes Hellenized directly through the Macedonian Empire.

Basically *A Choice of Destinies* is a straightforward historical novel that happens to be based on speculative rather than historical events. As such it's a good one. Anyone writing about Alexander must inevitably come up against Mary Renault's masterful Alexandrian trilogy. Scott does not suffer by comparison. The major characters are Alexander's band of "Companions," boyhood friends who became his generals; they and Alexander all ring true, as do the campaigns and battles which are the main part of the narrative.

But—and it's a big but—if the reader *doesn't* know that era of history, the intriguing "if" of it all is lost. And the various interludes with which Scott interrupts the story periodically will be a complete mystery. Taking place variously in five different points in the story's future, they give the briefest of glimpses as to how this alternate history will work out. The latest is 1591 A. D. (our reckoning), in which the Alexandrian Empire has already established a space station, "Alexandria-in-orbit." If one *does* know one's history, these glimpses into a possible past are infuriatingly tantalizing—how, for

instance, did they get space travel four hundred years before we did?

Like a lot of high-tech science fiction, *A Choice of Destinies* will be a delight to those readers who know what concepts the author is playing with. To anyone else, it will probably be an utter enigma.

EPIC WHIMSY

Howl's Moving Castle
By Diana Wynne Jones
Greenwillow, $10.95

Diana Wynne Jones' fantasies are always daft, but this latest one, *Howl's Moving Castle*, just about takes the cake. There's no way in a few paragraphs to get in the magical, personal, and romantic complications that her unlikely characters get into. One can only try to give some idea of the craziness, and you readers will simply have to take it on faith that it all eventually makes some kind of sense (*what* kind is another matter).

There's this magic kingdom, see, that more or less takes for granted witches, warlocks, and things like seven-league boots—not that any of these necessarily make life simpler for the inhabitants, as this story proves. It is a truism there that the eldest of three children has a problem, since it's always the youngest that gets the princess/prince/treasure or whatever, and it's always the eldest that gets the worst of the deal. Our heroine, Sophie, is the eldest of three sisters, and is convinced that her lot will be unfortunate, even though her sisters, Lettie and Martha, are perfectly nice girls and her step-mother is as kind as a hard-working widow can be.

Her town of Market Chipping is bothered by the fact that the castle of the nefarious wizard, Howl, has been seen frequently in the neighborhood (it tends to wander), and Howl is reputed to collect and eat the hearts of maidens. Sophie is proved all too right (for the nonce, at least) about her future when she is turned into an old woman by a vengeful witch, and ends up as Howl's housekeeper (castlekeeper?). From there, things simply get too complicated to report coherently. There's the fire demon, Calcifer, who lives in Howl's fireplace, has a shady past, and seems to provide Howl's power. There's the live scarecrow that pursues Sophie for unknown reasons, and always catches up no matter how fast the castle goes.

There's the battle between Howl and the vengeful witch, wherein the two turn themselves into six different monsters at the same time (for the purpose of confusing the enemy, not to mention the onlookers). Lettie and Martha switch identities, and their suitors are equally muddled. Michael is Howl's apprentice, and is more or less together physically though a little scattered mentally, but the other may be the Wizard Suliman (who has gone missing some time ago) or Prince Justin (who has gone missing recently), or parts of both, all of which have been turned into

a dog (sometimes a setter, sometimes a sheepdog).

And there's the matter of the castle door; depending on which way you set the lock, it opens onto four different places. Three are more or less ordinary, the fourth (it is revealed mid-novel) lets you into a very odd place called Wales, where people watch magic boxes attached to the walls by stems. It seems that this is where Howl is from (Suliman, too, it turns out), and his termagent sister Megan can't figure out where her layabout brother keeps disappearing to. He pops in every once in a while to provide her son with computer games about moving castles.

As you can see, Ms. Jones has a chaotically fertile imagination. This could be called whimsey, but it is highly sophisticated whimsey indeed. Her books keep being published as juveniles. This is nonsense; like youth, as Shaw said, they're much too good to be wasted on children.

THE E.T. AND THE ECSTASY

Moondust and Madness

By Janelle Taylor

Bantam, $3.95 (paper)

In the case of Janelle Taylor's *Moondust and Madness*, I'm going to do something totally unprecedented for a reviewer. I'm going to quote the cover blurb in full, without comment, since it does a much better job than a mere critic could ever hope to.

"Now author Janelle Taylor, with ten consecutive trend-setting best-sellers including *First Love, Wild Love*, has written her most ambitious, imaginative romance yet . . .

"CAPTIVE TO HIS SAVAGE PASSION . . .

"A moan escaped Jana Grayson as this strong handsome stranger invaded her lips with his demanding kisses. He had stolen her from her world, made her his prisoner, and now enslaved her with the trembling rapture of his hunger . . . igniting a white-heat that melted her will to resist.

"SLAVE TO HER OWN DESIRE

"Commander Varian Saar had come from a place beyond imagining and claimed Jana for his own. His powerful hand left a fiery trail across her ivory skin, his cobalt eyes possessed her with their unrestrained longing . . . and now her fate rested in his quicksilver grasp. Forbidden partners . . . forbidden love . . . and soon their mad, tumultuous union became a pledge as boundless as the universe itself, a promise to seek their future among the glittering stars.

"THEIR LOVE BURNED BRIGHTER THAN THE STARS."

I can't resist *one* comment . . .

Gosh!

If you're not quite sure what it's all about, the slip that comes with the review copy I received is a little more explicit. "*Moondust and Madness*," it notes, "tells the story of Commander Varian Saar, an extraterrestrial creature, and Jana Grayson, a mortal being, forbidden partners . . ."

The cover shows a man (well, he looks like a man) in a silver-lamé mechanic's coverall which has slipped off one shoulder revealing a very hairy chest (but his eyes are closed, presumably in ecstasy, so one can't tell if they are really cobalt). He is holding on his lap a blonde lady (all too obviously a mortal being) wearing something I think is called a teddy, in black. Her eyes are closed, too.

It should be noted that *Moondust and Madness* is not part of its publisher's excellent *Spectra* line of science fiction. If you should by some chance want to find it, don't waste your efforts looking in the SF section of your bookstore. Try the "Ecstasy" department.

REFUGEES FROM FAERIE

Hawk In Silver
By Mary Gentle
Signet, $2.95 (paper)

A year or so ago, Mary Gentle caused a stir with her American debut novel, *Golden Witchbreed*, about an expertly created extraterrestrial society. Now there's a chance to see how she handles fantasy, in *Hawk In Silver*. It's a good deal less epic in execution (though not necessarily in conception), but comparison is a little unfair—*Hawk In Silver* was written some years before GW.

It's a story that seeks to blend high fantasy with the nitty-gritty of ordinary modern life, the sort of thing that Alan Garner has done so well. In this one, two young women who live in a seaside resort town in England get involved with the *elukoi* who live in the caves and hills of the vicinity unbeknownst to the human population. It all starts when Holly picks up a coin on the street. It is shiny, new, and totally unlike any other coin she's ever seen. Several efforts are made to relieve her of the coin, the most bizarre of which involves an attack by a cat and a seagull (who seem to be at odds with each other as well).

She confides in her girlfriend Chris, who goes along when a young man promises to reveal all about the coin. He takes them to the caves of the alien *elukoi*, who are beast friends, refugees long ago from Faerie who settled on Earth in the city of Ys. (The witch city of Ys, forgotten since A. Merritt's *Creep Shadow*, is having something of a revival—Poul and Karen Anderson's major upcoming novel has to do with it.) There their company split when one of the Houses joined with a malefic sea entity, and brought dissension and war into their midst. Three ships of the elukoi fled to Britain; there, led by Oberon, they have been more or less under siege by the sea faction, the *mor'kani*.

Chris and Holly are not trusted by the elukoi (for one thing, human presence makes their magic inoperable), but through circumstance become more and more involved in their doings. A climax is reached on Midwinter Night, when the two forces join battle on the beach. Chris is directly involved, em-

ployed by the elukoi to cancel any magic (they are outnumbered in the matter of magic-workers), while Holly goes through a moral crisis as to whether she should have anything to do with it. Needless to say, she does, willy nilly, as an unexpected force comes from Faerie to add yet another factor.

This one is as well-written as *Golden Witchbreed*, but not quite such a good juggling act. The problem is that the elukoi are so interesting that you get a little tired of seeing the action from Holly's often mundane life. That certainly adds *verismo*, but the two worlds are still very separate things; one doesn't get the wonderful sense, as in Garner's books, of a real world with magic lurking just out of sight in every corner. But Gentle's certainly a talent to reckon with; one looks forward to what she'll come up with next.

SHOPTALK

Charlotte MacLeod's funny and inventive cross-genre *The Curse of the Giant Hogweed* is out in paperback. Since it's both a classic murder mystery *and* a whacko magic-kingdom fantasy, and because MacLeod is best known as a mystery writer, it will probably be in the mystery section of your bookstore. It's worth going out of your way for. (Avon, $2.95, paper).

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. ●

MARTIN GARDNER (from page 87)

THIRD SOLUTION TO THANG, THE PLANET EATER

The only possible last step is for Thang to toss away ten planets on the tenth day, then eat 1/11 of no planets. Working backward, one finds that there were 100 planets at the start. The problem has endless variants. For example, change the fraction to 1/13 and the starting number becomes 144 and the number of days goes to 12.

Anyone familiar with my short story "Thang" will recall that while Thang was eating the Earth he was picked up and swallowed by a larger four-dimensional creature. I can now reveal for the first time that the beast who swallowed Thang somewhat resembled what we call a cow, only it had three heads and twelve arms. It is impossible to describe or imagine the beast because we are unable to visualize objects in dimensions higher than three.

As soon as Thang realized he had been swallowed by a hypercow, he curled himself up into a tight little ball. In the warmth and darkness of the hypercow's stomach, he fell asleep. When he woke the next day the hypercow was gone.

SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

Early Fall seems to be a big time for cons in Eastern Europe. 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 good to phone cons; let them know why you're calling right off. When writing cons, it's polite to send an SASE. Look for me behind an iridescent "Filthy Pierre" badge, with a musical keyboard.

SEPTEMBER, 1986

19–21—**EarthCon.** For info, write: **Box 5641, Cleveland OH 44101.** Or phone: **(216) 529-1940** (10 am to 10 pm only, not collect). Con will be held in: Cleveland OH (if city omitted, same as in address). Guests will include: Gordon Dickson, C. J. Cherryh, R. M. Meluch, D. C. Smith, Ted Rypel.

19–21—**MosCon.** Cavanaugh's Inn, Moscow ID. Artist M. Goodwin, Dean Ing, astronomer R. Quigley.

22–28—**PolCon, % R. Jasinski, 70 351 Szczecin, Ul. Bol. Smialego 14/16, Poland.** Warsaw, Poland.

26–28—**DeepSouthCon.** Galt House Hotel, Louisville KY. Dave Hartwell, S. Sucharitkul, artist Alex Schomburg, fan Ann Layman Chancellor. 24th annual Southern con. Masquerade, Hearts championship.

26–28—**Contact.** Hilton Hotel, Pasadena CA. Anthropology and SF. "A world-building weekend."

26–29—**XIICon.** Central Hotel, Glasgow UK. Harry (Stainless Steel Rat) Harrison. 350 expected.

OCTOBER, 1986

3–5—**MiniCon, % Jaroslav Olsa Jr., Anhaltova 41/987, 169 00 Prague 6, Czechoslovakia 2-355339.** Dates are approximate; held sometime in October. Guests, dealers, films, art, auctions, trivia.

3–5—**PulsarCon, % Kej Ditmar Vlashov B. B., Dom Na Mladi "25 Maj," 91000 Skopje, Yugoslavia, 38-00-091-233-755.** Dates are approximate; held sometime in October. Guests, films, art, lectures.

3–5—**ConTradiction, 1356 Niagara Ave., Niagara Falls NY 14305.** George R. R. Martin, Nancy Kress.

3–5—**JAFCon, Box 510232, Salt Lake City UT 84151. (801) 322-4437.** Zelazny, Claremont, Busby.

4–5—**Encounter, Box 1625, Wichita KS 67201.** Fritz (Fafhrd & Grey Mouser) Leiber, G. Roddenberry.

10–12—**RoVaCon, Box 117, Salem VA 24153. (703) 389-9400.** Alan Dean Foster, Hal Clement, Richard (Elfquest) Pini, Kelly Freas, Allen Wold, Star Trek actors. At Salem High School. James Bond films.

10–12—**NonCon, Box 4506, Edmonton AB T6E 4T7.** Judith Merril, Ken Maddin, Wm. Warren, D. Booker.

10–12—**Roc*Kon, Box 45122, Little Rock AR 72214. (501) 661-9581.** Masquerade & the usual things.

10–12—**BoucherCon, % 10449A Green Mt. Cir., Columbia MD 21044. (301) 730-1378.** Baltimore MD.

10–12—**ArmadilloCon, Box 9612, Austin TX 78766.** William Gibson, Lewis Shiner, Debbie Notkin.

AUGUST, 1987

27–Sep. 2—**ConSpiracy, 23 Kensington Ct., Hempstead NY 11550.** Brighton, England. WorldCon '87.

SEPTEMBER, 1987

5–8—**CactusCon, Box 1753, Phoenix AZ 85061.** Phoenix AZ. NASFiC 1987, held since WorldCon's abroad.

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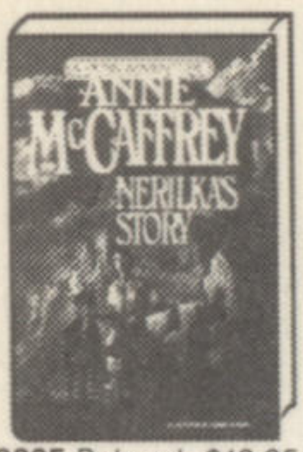

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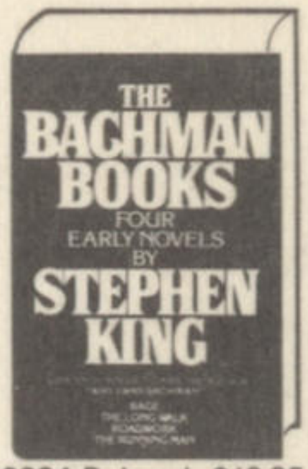

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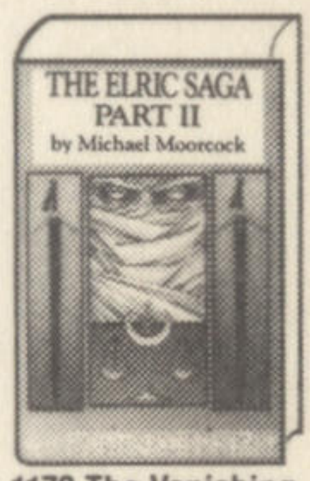

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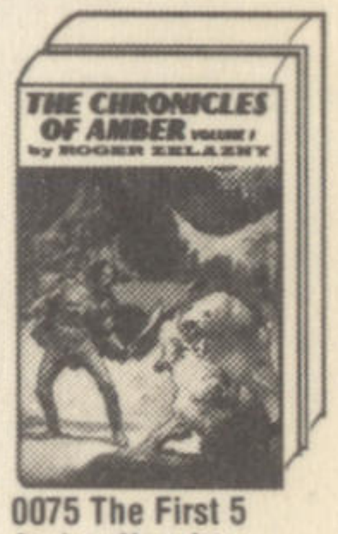

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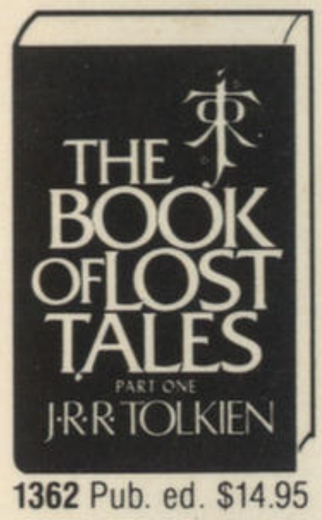

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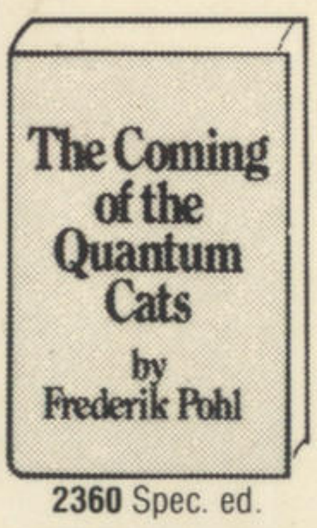

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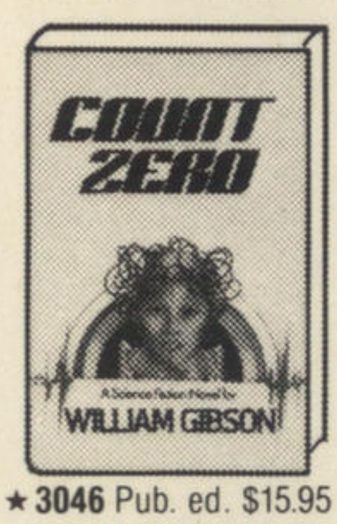

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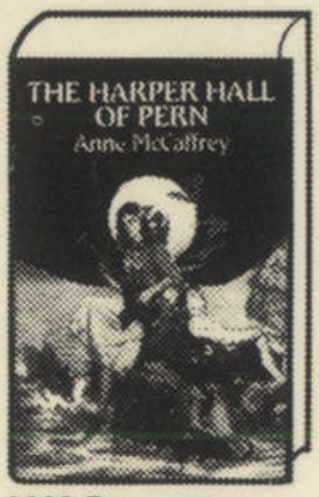

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