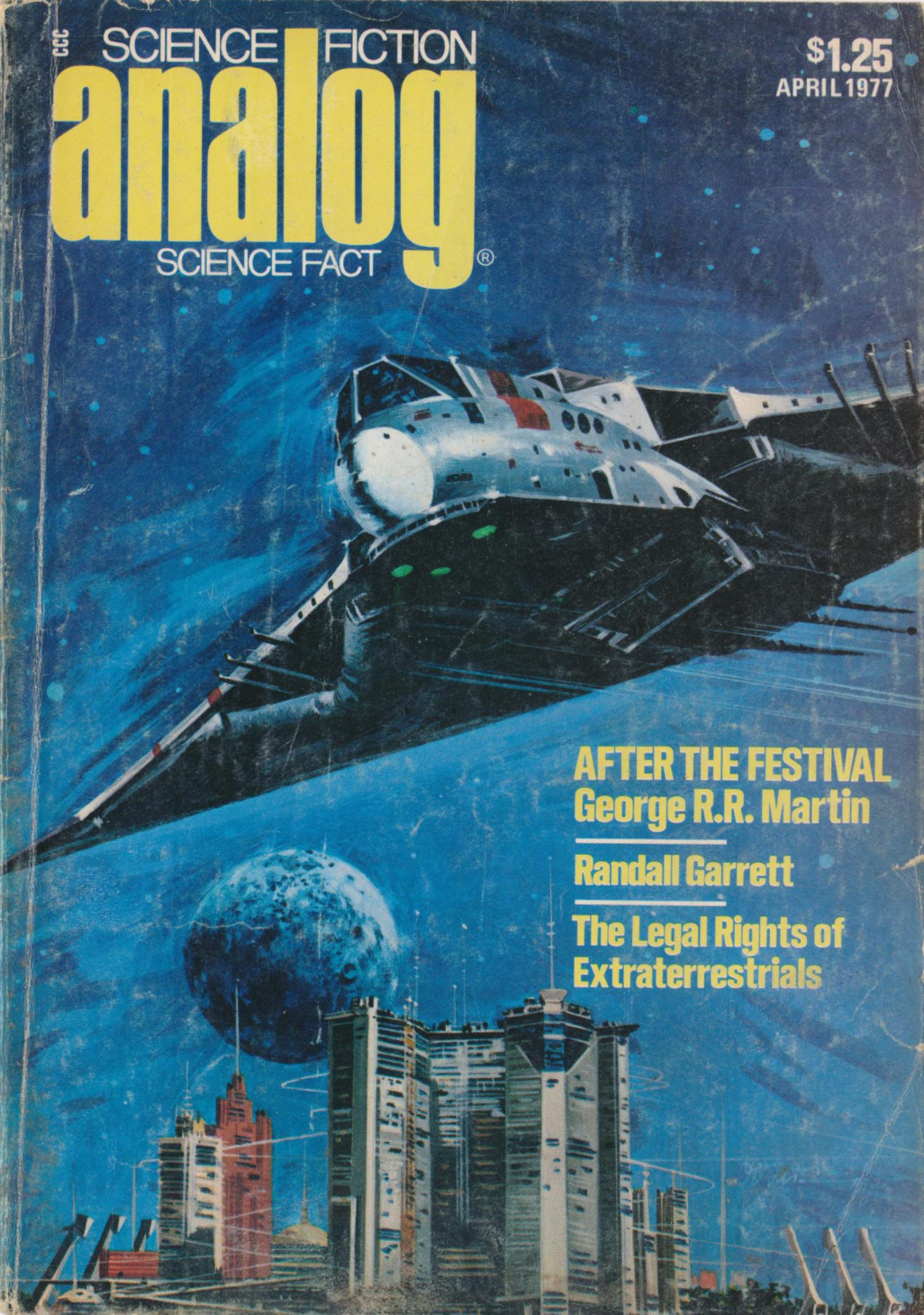
SCIENCE FICTION
analog
SCIENCE FACT®

$1.25
APRIL 1977



AFTER THE FESTIVAL
George R.R. Martin

Randall Garrett

The Legal Rights of Extraterrestrials

analog

A Calendar of Upcoming Events

1-3 April 1977
MON-CON 1 (West Virginia's first SF/Star Trek/Fantasy conference) at West Virginia University, Morgantown WV. Info: Mon Con—Student Organization Service, West Virginia University, Mountainlair, Morgantown WV 26506.

8-10 April 1977
LUNACON 77 (New York area regional SF conference) at Biltmore Hotel, New York City. Guest of Honor—L. Sprague & Catharine de Camp. Registration $6 until 5 March 1977, $8 thereafter. Info: Walter Cole, 1171 East 8th Street, New York NY 11230.

8-10 April 1977
BALTICON 11 (Baltimore area SF conference) at Hunt Valley Inn, Hunt Valley, Md. Guest of Honor—Philip Jose Farmer; Fan Guest of Honor—Meade Frierson III. Registration $4 until 20 March 1977, $6 thereafter. Info: Martin Deutsch, Jr., 6113 Waterloo Road, Endicott City MD 21043.

8-11 April 1977
LEICON (British National SF Convention) at the Holiday Inn, Leicester. Guest of Honor—John Bush. Registration £1 supporting. Info: Dave Upton, 49a Moor Street, Brierly Hall, West Midlands DY5 3SP, England.

15-17 April 1977
THE First West Coast Computer Faire at the Civic Auditorium, Civic Center, San Francisco, Calif. Conference and exposition on personal and home computers. Papers are solicited. Info: Box 1579, Palo Alto CA 94302. 415-851-7664 or 415-323-3111.

1-6 September 1977
SUNCON (35th WORLD SCIENCE FICTION CONVENTION) at the Hotel Fontainebleau, Miami Beach, Fla. Annual gathering of the SF World. Guest of Honor—Jack Williamson; Fan Guest of Honor—Robert Madle. Panels, talks, discussions, films, masquerade, art show. Presentation of the Hugos (SF Achievement Awards) and the John W. Campbell Award for Best New Writer. Info: SUNCON 35, Box 3427, Cherry Hill NJ 08002.

ANTHONY R. LEWIS

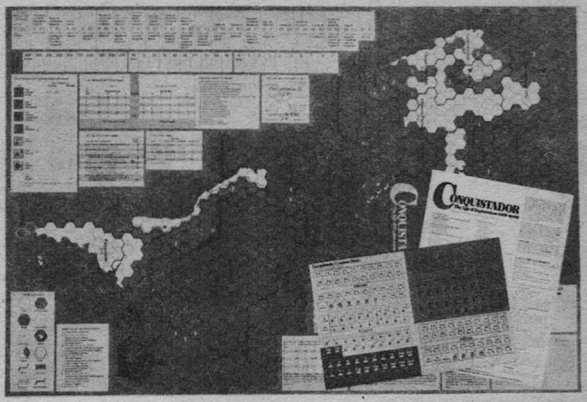
Strategy & Tactics

The military history magazine with a conflict simulation game in it!

Here are just a few of the fascinating simulation games that have appeared in **S&T:**

- **USN** (WWII Pacific)
- **Borodino** (Russia 1812)
- **"CA"** (Naval Tactics)
- **KampfPanzer**
- **PanzerArmee Afrika**
- **Tank!**
- **Operation Olympic**
- **American Civil War**
- **Sixth Fleet**
- **Battle for Germany**
- **World War I**
- **Panzergruppe Guderian**
- **Conquistador!**

(Note that these games are now available in their separate boxed editions. Send for free brochure.)



Strategy & Tactics Magazine is a paper time machine: you return to the point of decision and alter the course of history to explore alternative outcomes. Through the technique of conflict simulation, the famous battles and campaigns of military history become yours to re-create, substituting your judgment for that of the actual commanders. Other magazines and books can only speculate about the many paths that history could have taken: **Strategy & Tactics** enables you to truly find out for yourself—by redirecting the forces of change at the historical turning points.

Conflict simulations are serious, adult-level games. They are powerful analytical tools—paper computers that focus your mind on the critical elements of an historical problem. The games are played on maps portraying the battlegrounds, with playing pieces that simulate the characteristics of the participating military units. Although most games are designed for two players, they may be played by one (or three or more).

Strategy & Tactics also provides a full-length article dealing with the same subject as the game in the issue—plus other articles dealing with historical and contemporary military and conflict simulation subjects. Subscribers are eligible for many special offers and discounts on Simulations Publications large selection of historical games.

Simulations Publications, Inc. (publishers of Strategy & Tactics) also presents a broad line of independently packaged simulation games. See the coupon for a partial list. These games are available in stores, nationwide, as well as direct from SPI by mail.

Send check or money order to:

SPI Dept 902
44 East 23rd Street, New York, N.Y 10010

Please enter my subscription to **Strategy & Tactics** for

☐ **1 year** (6 issues): $14 ☐ **2 years** (12 issues): $26
☐ **3 years** (18 issues): $36 ☐ **6 mos.** (3 issues): $9
☐ Current issue: $5 (not pictured above) ☐ free brochure

Send me the following Simulation Series Games:

☐ **Firefight** (modern armor): $12 ☐ **World War II** (ETO): $8
☐ **Blue & Gray** (Civil War): $12 ☐ **Patrol** (infantry tactics):$8
☐ **StarForce** (space-war): $8 ☐ **Terrible Swift Sword:** $20
☐ **Dreadnought** (battleships). $8 ☐ **Fast Carriers:** $10

name _____

street _____ *apt#* _____

city _____ *state* _____ zip _____

Prices apply to US & APO/FPO, only; subject to change without notice.

OFFICE USE ONLY: CC Total $ Credit Post Tax

BEN BOVA
Editor
VICTORIA SCHOCHET
Associate Editor
R. K. FONES
Editorial Assistant
HERBERT S. STOLTZ
Art Director
GERALDINE PRASIOTIS
Advertising Production Manager

Next Issue on Sale
April 5, 1977

$9.00 per year in the U.S.A.
$1.25 per copy

Cover by Vincent Di Fate

Vol. XCVII, No. 4
APRIL 1977

SCIENCE FICTION
analog®
SCIENCE FACT

CONTENTS

serial

science fact

short stories

novelette

reader's departments

Analog Science Fiction/Science Fact is published monthly by The Condé Nast Publications Inc., Condé Nast Building, 350 Madison Avenue, New York, New York 10017. S. I. Newhouse, Jr., Chairman; Robert J. Lapham, President; Fred C. Thormann, Treasurer; Mary E. Campbell, Secretary.

Second class postage paid at New York, N.Y. and at additional mailing offices. Subscriptions in U.S. and possessions, $9.00 for one year, $16.00 for two years, $21.00 for three years; in Canada and Mexico, $11.00 for one year, $20.00 for two years, $27.00 for three years. Elsewhere, $12.00 per year, payable in advance. Single copies in U.S., possessions, and Canada, $1.00. For subscriptions, address changes and adjustments, write to Analog Science Fiction/Science Fact, Box 5205, Boulder, Colorado 80323. Eight weeks are required for change of address. Please give both new and old address as printed on the last label. Postmaster: Send form 3579 to Analog, Box 5205, Boulder, Colorado 80323. First copy of new subscription will be mailed within eight weeks after receipt of order. The editorial contents have not been published before, are protected by copyright and cannot be reprinted without the publisher's permission. All stories in this magazine are fiction. No actual persons are designated by name or character. Any similarity is coincidental. We cannot accept responsibility for unsolicited manuscripts or art work. Any material submitted must include return postage.

POSTMASTER: SEND FORM 3579 to ANALOG SCIENCE FICTION/SCIENCE FACT, BOX 5205, BOULDER, COLORADO 80323.

Editorial and Advertising offices: Condé Nast Building, 350 Madison Avenue, New York, New York 10017

Subscriptions:
Analog
Science Fiction/Science Fact,
Box 5205,
Boulder, Colorado 80323

DEMOCRACY IN ACTION

editorial

Now that the Presidential election of 1976 is over and the new Administration is installed in Washington, it is a good time to reexamine the way our electoral process has been working.

Lincoln talked about "Government of the people, by the people, for the people." The central question of American politics today is whether the U.S. Government is "of, by, and for" the people of the United States. And if not, why not?

Government of the people. Jimmy Carter was elected President largely because many voters felt that the power apparatus of the Federal Government had slipped out of the hands of "the people", and into the possession of a relatively small, powerful group of behind-the-scenes manipulators. Watergate and its related Washington scandals represented the tip of this iceberg. Below the level of the daily headlines was a deep-seated popular distrust of the kind of Government that runs like an inhuman machine.

Carter ran on the explicit promise to make the Federal Government more responsive to the needs and desires of the people. And although most of his Cabinet appointments have come from the fairly orthodox ranks of Washington insiders, the new President himself brings a distinctly "outsider" approach to the problems of foreign policy, defense, welfare, and the national economy.

Franklin Roosevelt became President forty-five years ago by campaigning as an "outsider" running against Washington insiders and the economic calamity that we still call the Great Depression. No idealogue, once Roosevelt was in office he attacked the economic problems on a pragmatic, day-to-day basis. Even though the economy did not really recover until the end of the thirties, when war preparations began, the

whole nation felt a lift of hope and confidence as soon as Roosevelt came into office, because it was obvious that he was doing *something*, many things, and he was trying actively to solve the problem.

Today's national economy may not burgeon into a new prosperity under Jimmy Carter's Administration. But there is a similar feeling of hope, even of trust, that the new President and his aides are actively working to solve the problems that have resulted in high inflation and high unemployment simultaneously.

Government by the people. At a time when most Americans feel that their Government is not responding to their needs, it is incredible that so many stayed away from the polling booths last November.

Only fifty-three percent of the citizens eligible to vote did so, the smallest turnout since 1948, when black voters were kept away from Southern ballot boxes by poll taxes, ignorance, and the threat (and reality) of violence. (The children of those blacks helped to elect Carter; indeed, Southern blacks provided the single greatest block of votes for the Carter-Mondale ticket.)

Younger voters, those between eighteen and thirty, did not even reach the national average of a fifty-three percent turnout, destroying the mythology of the sixties that somehow young Americans are more "with it" and "involved" than their elders. Like all Americans, once the eighteen-year-olds got their slice of the political pie—and end to the draft—their righteous political fervor lapsed into an apathy matched only by that of their parents.

During the long agony of Vietnam, through the Watergate crisis, the cheap bribery of Spiro Agnew, the revelations about corruption in the CIA and FBI, the sexual hijinks of Wilbur Mills and Wayne Hayes . . . through all this, literally millions of Americans have asked themselves, "How did this happen? How can we get our Government back on the right track again?"

The answer has always been so clear as to be, in Jefferson's words, self-evident. Our Government is designed to be run by the people. When the people take no interest in the day-to-day operations of their representatives in the Government, then they get the same kinds of corruption and power grabs that happen in governments where the people are prevented by law from participation.

But a nation in which almost half the voters don't even bother to show up at the polls is a nation asking for dictatorship.

Not that voting is by itself the be-all and end-all of political soundness. Voting is the end product of a long and arduous political process. Ask Jimmy Carter how much work must be done before that first Tuesday after the first Monday in November. Better still, ask Gerald Ford. Or Ronald Reagan. Or George Wallace,

Morris Udall, Henry Jackson, Hubert Humphrey.

Any American who is dissatisfied with the way his or her Government is operating, and who has not actively worked for a candidate, joined the local party structure, or even written a letter to his or her Congressional representatives–that citizen deserves whatever Government we are getting.

There are those who claim that it doesn't matter who you vote for, that both the candidates are idiots or thieves, and therefore it is better not to vote at all. This is hypocritical cowardice. Voting is the final step in the political process. The citizen who wants a better government gets involved in picking the candidates.

Have you ever worked in a Congressperson's or a Senator's office? Have you ever seen the panic on the faces of the staffers when a half-dozen letters come in, all taking the same stand on an issue? Man, that's a landslide! Ten phone calls can swing the average Senator's vote on most issues. And believe me, each letter and phone call is carefully noted down. If you think the Sporting News keeps detailed statistics about baseball, you have never seen how carefully a Senator's staff keeps a record of every voter's call, letter, or telegram.

The voters are the boss. Yet most of them sleep away, don't even know who their representatives are, and allow their Government to serve the people who *do* loudly and insistently tell the Congresspersons and Senators what they want.

The cranks decide the minor issues. Like abortion. Like gun control. Like what to name the first Space Shuttle. (Yes, science fiction people can be cranks in this sense; not all cranks are bad!)

The major corporations decide the big issues. Welfare, price controls, economic policy, new weapons systems, foreign trade . . . this is where the Big Boys and their expensive lobbyists come into the picture.

Should the CIA "intervene" in Chile? ITT votes yea. Anybody opposed? No answer. So we intervene. It may have been a good thing to do. It may have been a terrible thing to do. But what was your vote

on the question? You say you weren't consulted, that they kept it all a secret until well after the fact? Well then, did you ask your Senator to investigate to find out why we did what we did, and what benefits we have obtained from it? You paid for it, you know. You have the right to know what you're getting for your money.

Government for the people. Which brings us down to the ultimate question. Just who is the American Government working for? The Second Law of Thermodynamics applies here, you only get as much as you pay for, and not even that much.

How dare any citizen expect his Government to satisfy his desires when he does nothing to inform the Government of where he stands on the issues of the day?

Maybe in the next decade or so, when we all have interactive TV-telephone-computer systems in our homes and we can register our votes in straw ballots on every issue—when today's poll-taking techniques are rendered obsolete because everyone who cares about an issue can *tell* the Government what he wants with a simple phone call to a central computer (and those who don't bother to call don't count anyway)—maybe then we will get truly representational government. In the meantime, it takes a bit more determination and love of country (and self) to find your representatives and make your feelings known to them.

There are those who say that it doesn't matter what the little guy does, that no matter what guarantees we have in the laws and in the Constitution, the Big Boys will always run things their own way.

Patrick Henry faced that one and retorted, "They say, Sir, that we are weak. When will we be stronger? Will it be the next month, or the next year?" Delay does not build political strength. Or courage.

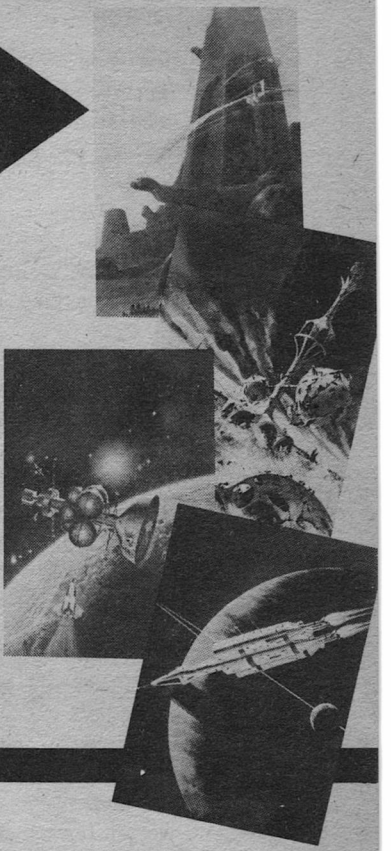
The power of the American citizen is not inconsequential. Within a little more than two years, the citizens of this nation dethroned a sitting President without firing a shot, without causing a Constitutional crisis, without even the casual violence you find in political campaigns almost everywhere else in the world. Then we elected to the Presidency a man who was quite literally unknown two years earlier to almost everyone who voted for him.

Think of what we can accomplish when we put our will to it: In the nineteen forties we quite literally conquered almost the whole world, militarily. In the fifties we solidified our military triumph with an economic conquest of the planet. In the sixties we decided to go to the Moon, and did it with almost ludicrous ease.

Can we afford to go back to "business as usual" after Jimmy Carter's thin electoral victory and assume that either the new Administration will do what we want it to

The results are in on the 1976 Analog cover reprint vote!

Thanks to an enthusiastic voter turnout, we have now finished the selection of the four covers from 1976 that will soon be available for purchase from Analog.
The winning covers are reprinted here . . . we are glad to see Vincent Di Fate represented here for the first time.
Thanks for your votes, and enjoy the reprints. An order coupon for the 1976 covers will appear in the May 1977 issue.



do, or we'll vote it out of office in 1980?

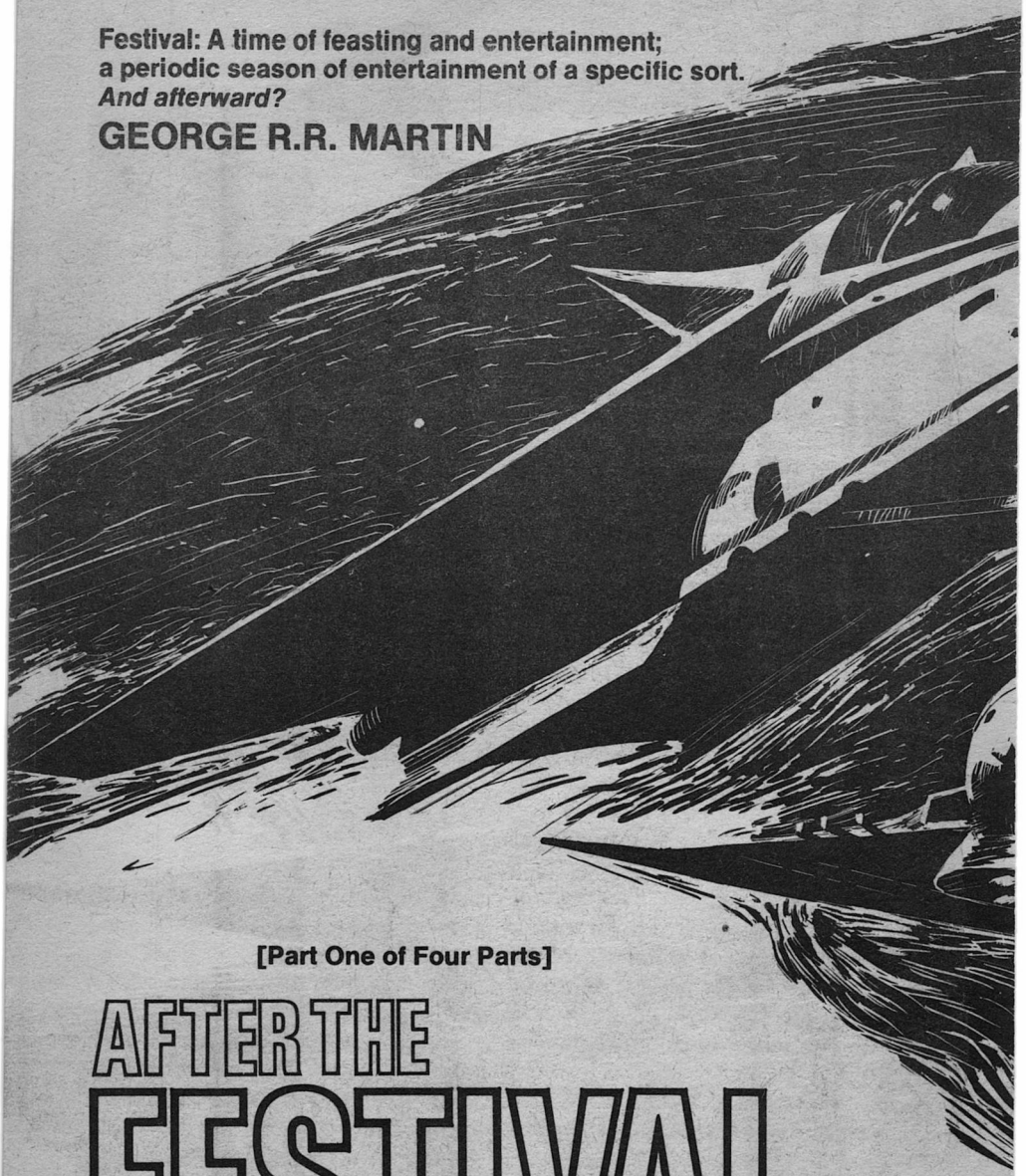
Even with the best intentions in the world, the Carter Administration will move in the direction where the heaviest pressures push it. If recent history has taught us anything, it is that the multinational corporations provide the most consistent pressure on the American Government. The average American citizen might show up at the polls once every four years; that's not pressure, that's almost a vacuum.

If you feel that a Government "of General Motors, by U.S. Steel, and for Gulf & Western" is what we need, then fine. Sit back and relax. It's all taken care of.

But if you think that maybe the people ought to be represented in there somewhere, then stop complaining and get down to your local political party headquarters and start working. The candidates for 1980 are being picked now. THE EDITOR

Festival: A time of feasting and entertainment; a periodic season of entertainment of a specific sort.
And afterward?

GEORGE R.R. MARTIN



[Part One of Four Parts]

AFTER THE FESTIVAL


Vincent Di Fate

A rogue, an aimless wanderer, creation's castaway; this world was all those things.

For uncounted centuries it had been falling, alone, without purpose, falling through the cold lonely places between the suns. Generations of stars had succeeded each other in stately sweeps across its barren skies. It belonged to none of them. It was a world in and of itself, entire. In a sense it was even part of the galaxy; its tumbling path cut through the galactic plane, like a nail driven through a round wooden tabletop. It was part of nothing.

And *nothing* was very close at hand. In the dawn of human history, the rogue world pierced a curtain of interstellar dust that covered a trifling small area near the up-edge of the galaxy's great lens. A handful of stars lay beyond; thirty or so, a mere handful. Then emptiness, a night greater than any the wandering world had known.

But before that night, the world called Worlorn was to have a day; a long bright day.

The constellation called the Wheel of Fire burned in every outworld sky; the wonder of it was notorious as far inward as Old Earth. The center of the formation was the red supergiant, the Hub, Helleye, Fat Satan—it had a dozen names. In orbit around it, equidistant, arrayed neatly like six marbles of yellow flame rolling around a single groove, were the others; the Trojan Suns, Satan's Children, the Hellcrown. The names did not matter. What mattered was the Wheel itself, six medium-sized yellow stars doing homage to their vast red master, at once the most unlikely and stable multiple-star system yet discovered. The Wheel was a seven-day sensation, a new mystery for a humanity jaded on the old mysteries. On the more civilized worlds, scientists put forth theories to explain it; beyond the Veil, a cult grew up around it, and men and women spoke of a vanished race of stellar engineers who had moved whole suns to build themselves a monument. Scientific speculation and superstitious worship both waxed feverish for a few decades and then began to wane; very shortly the matter was forgotten.

Worlorn would sweep around the Wheel of Fire once, in a wide slow hyperbola, never entering the system proper but coming close enough. Fifty standard years of sunlight; then out again into the darkness of the Fringe, past the Last Stars, into the Great Black Sea of intergalactic emptiness.

Those were the restless centuries, when High Kavalaan and the other outworlds were tasting their first pride and growing anxious to find a place in the shattered histories of humanity. The Wheel of Fire had always been the glory of the outworlds, but it had been a planetless glory, until now.

There was a century of storms as Worlorn neared the light; years of

melting ice and volcanic activity and earthquakes. A frozen atmosphere came, bit by bit, to life, and hideous winds howled like monster infants. All this the outworlders faced and fought.

The terraformers came from Tober-in-the-Veil, the weather wardens from Darkdawn, and there were other teams from Wolfheim and Kimdiss and ai-Emerel and the World of the Blackwine Ocean. The men of High Kavalaan supervised it all, since High Kavalaan claimed the rogue. The struggle took more than a century, and those who died are still half-myth to the children of the Fringe. But at last Worlorn was gentled. Then cities rose, and strange forests flowered beneath the light of the Wheel, and animals were set loose to give the planet life.

In ai-589 the Festival of the Fringe opened, with Fat Satan filling a quarter of the sky and his children bright around him. On that first day the Toberians let their stratoshield shimmer, so the clouds and the sunlight ran and swirled in kaleidoscope patterns. Other days followed, and the ships came. From all the outworlds, and from worlds beyond, from Tara and Daronne on the other side of the Veil, from Avalon and Jamison's World, from places as distant as Newholme and Old Poseidon and even Old Earth itself. For five standard years Worlorn moved towards perihelion; for five it moved away. In ai-599 the Festival closed.

Worlorn entered twilight, and fell toward eternal night.

CHAPTER ONE

The beginning came long after the end: a whisperjewel.

He was on Braque, for no particular reason, and he never knew how they found him. But they did, and Dirk t'Larien got his jewel back, wrapped in layers of silver foil and soft dark velvet, just as he had given it to her, years before.

He undid the package at night, sitting by the window of his room and overlooking a wide, scummy canal where merchants poled fruit barges endlessly up and down. The gem was just as Dirk recalled it: a deep red, laced with thin black lines, shaped like a tear. He remembered the day the esper had cut it for them, back on Avalon.

After a long time, he touched it.

It was smooth and very cold against the tip of his finger, and deep within his brain, it whispered. Memories and promises, promises and memories. He had not forgotten.

"Gwen," he said quietly, all to himself, just to shape the word again and feel the familiar warmth on his tongue. His Jenny, his Guinevere, mistress of abandoned dreams.

It had been seven standard years, he thought, while his finger stroked the cold, cold jewel. But it felt like seven lifetimes. And it was *over*—everything, everything. What could she want of him now? The man who had loved her, that *other* Dirk t'Larien, maker-of-promises and

giver-of-jewels, he was a dead man.

Dirk lifted his hand to brush a spray of gray-brown hair back out of his eyes. And suddenly, not meaning to, he remembered how Gwen would brush his hair away—the fine, lazy ringlets that were always tumbling across his forehead—whenever she meant to kiss him.

He felt very tired then, and very lost. His carefully nurtured cynicism trembled, and a weight fell upon his shoulders; a ghost weight, the heaviness of the person he had been once and no longer was. He had indeed changed over the years, and he had called it growing wise, but now all that wisdom abruptly seemed to sour.

Why did she make him remember? Too much time had passed, too much had happened to him—probably to both of them. Besides, *besides*, he had never really meant for her to use the whisperjewel. It had been a stupid gesture, the adolescent posturing of a young romantic. After all this time, Gwen could not possibly expect him to ship off to the outworlds just because . . .

He did not think the rest. Resentful, he reached out and took the jewel in his palm, and his fist closed around the smallness of it, closed hard. He would toss it through the window, he decided, out into the dark waters of the canal, out and away with everything that it meant. But once within his fist, the gem was an ice inferno, and the memories were knives.

. . . *because she needed him*, the jewel whispered. *Because he promised.*

His hand did not move. His fist stayed closed. The cold against his palm passed beyond pain, into numbness.

He *had* promised. But so had she, he remembered. Long ago on Avalon. The old esper, a wizened Emereli with a very minor Talent and red-gold hair, had cut two jewels. He had read Dirk t'Larien, had felt all the love Dirk had for his Jenny, his Guinevere, and then had put as much of that into the gem as his poor psionic powers allowed him to. Later, he had done the same for Gwen. Then they had traded jewels.

It had been his idea. *It may not always be so*, he had told her, quoting an ancient poem. So they had promised, both of them; send this memory, and I will come. No matter where I am, or when, or what has passed between us. Send this memory, and I will come, and there will be no questions.

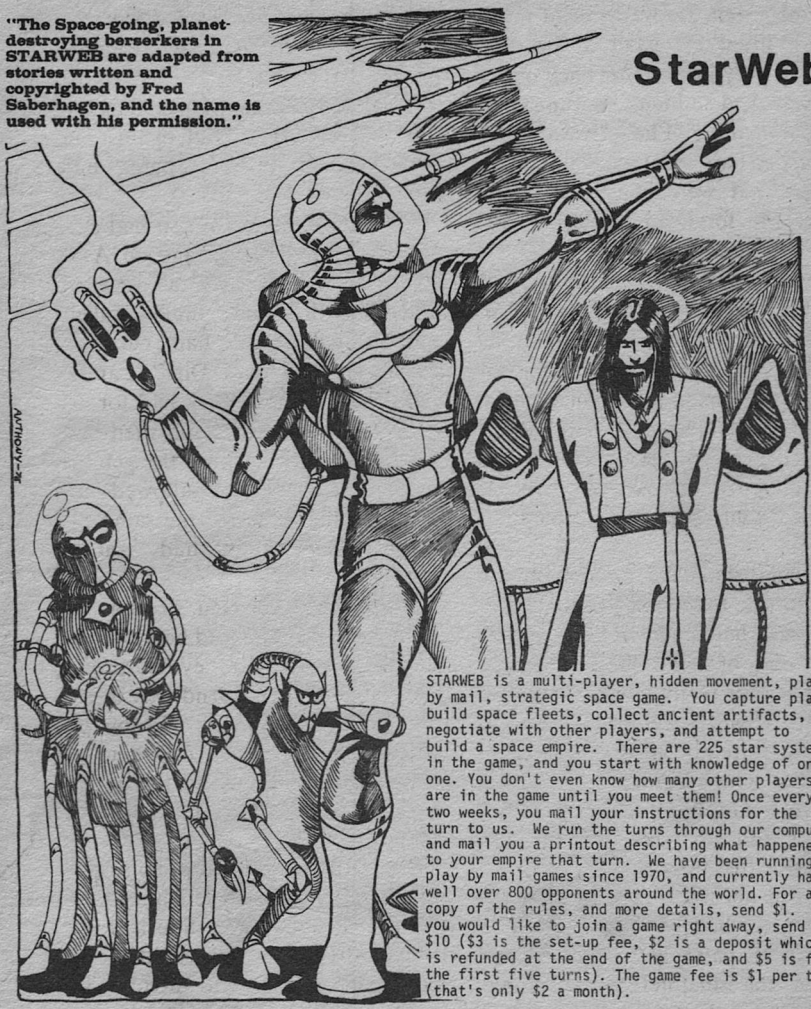
But it was a shattered promise. Six months after she had left him, Dirk had sent her the jewel. She had not come. After that, he could never have expected her to invoke *his* promise. Yet now she had.

Did she really expect him to come?

And he knew, with sadness, that the man he had been back then, *that* man would come to her, no matter what, no matter how much he might

"The Space-going, planet-destroying berserkers in STARWEB are adapted from stories written and copyrighted by Fred Saberhagen, and the name is used with his permission."

StarWeb



STARWEB is a multi-player, hidden movement, play by mail, strategic space game. You capture planets, build space fleets, collect ancient artifacts, negotiate with other players, and attempt to build a space empire. There are 225 star systems in the game, and you start with knowledge of only one. You don't even know how many other players are in the game until you meet them! Once every two weeks, you mail your instructions for the turn to us. We run the turns through our computer, and mail you a printout describing what happened to your empire that turn. We have been running play by mail games since 1970, and currently have well over 800 opponents around the world. For a copy of the rules, and more details, send $1. If you would like to join a game right away, send us $10 ($3 is the set-up fee, $2 is a deposit which is refunded at the end of the game, and $5 is for the first five turns). The game fee is $1 per turn (that's only $2 a month).

Send to:
Flying Buffalo Inc
PO Box 1467
Scottsdale, AZ 85252

___Enclosed is $1. Please rush me the rules. A

___Enclosed is $10. Please start me in a game right away!

___Please charge the $10 to my MasterCharge/BankAmericard

Card Number_____ Ex. Date_____

Name _____

Address _____ Signature: _____

hate her. Or love her. But that fool—that stupid, valorous fool—was long buried. Time and Gwen had killed him.

Beyond the window, water slapped against the pilings of the wooden sidewalk along the canal. Dirk looked up, and saw a low black barge drift slowly past in the moonlight. A solitary figure stood at the stern, leaning on a thin dark pole. Everything was etched quite clearly, for Braque's moon was riding overhead, big as a fist and very bright.

Behind it was a stillness and a smoky darkness, an unmoving curtain that hid the further stars. A cloud of dust and gas; the Tempter's Veil.

He opened his hand and looked at the jewel and listened to its whisperings and felt his old feelings and his new weariness. And finally he looked up and thought, well, perhaps it is not too late after all.

The ship was named the *Shuddering of Forgotten Enemies*, and it went from Braque to Tara and then through the Veil to Wolfheim and then to Kimdiss and finally to Worlorn, and the voyage, even by ftl drive, took more than three months standard. After Worlorn, Dirk knew, the *Shuddering* would move on, to High Kavalaan and ai-Emerel and the Last Stars, before it turned and began to retrace its tedious route.

They were there, waiting for him, just beyond the main doors of the terminal, more or less as he had expected. The captain of the *Shuddering* had lasered on ahead as soon as the ship emerged from drive into normal space.

Gwen Delvano had come to meet him, then, as he had asked her to. But she had not come alone. They were talking to each other in low, careful voices when he emerged from the terminal, Gwen and the man she had brought with her.

Dirk stopped just past the door, smiled as easily as he could manage, and dropped the single light bag he carried. "Hey," he said softly. "I hear there's a Festival going on."

She had turned at the sound of his voice, and now she laughed, a laughter so well-remembered that it hurt. "No," she said. "You're too late. By about ten years."

Dirk scowled and shook his head. "Hell," he said. Then he smiled again, and she came to him, and they embraced. The other man, the stranger, stood and watched without a trace of self-consciousness.

It was a short hug. No sooner had Dirk wrapped his arms about her than Gwen pulled back. After the break they stood very close, and each looked to see what the years had done.

She was older, yes, but much the same, and what changes he saw were probably only defects in his memory. Her wide green eyes were not quite as wide nor green as he remembered them, and she was a little taller than he recalled and perhaps a bit heavier. But still, still, she was close enough;

she smiled the same way and her hair was the same, fine and dark, falling past her shoulders in a shimmering stream blacker than an outworld night. She wore a white turtleneck pullover and belted pants of sturdy chameleon cloth (faded to night-black now) and a thick headband, and all that was much as she had liked to dress on Avalon. Now she wore a bracelet too, however, and that was new. It was a massive thing, cool silver set with jade, that covered half her left forearm. The sleeve of her pullover was rolled back to display it.

"You're thinner, Dirk," she said.

He shrugged, and thrust his hands into his jacket pockets. "Yes," he said. In truth, he was almost gaunt. The years had aged him in other ways as well; now his hair had more gray than brown, and he wore it nearly as long as Gwen, though his was a mass of curls and tangles.

"A long time," Gwen said.

"Seven years, standard," he replied nodding. "I didn't think . . ."

The other man, the waiting stranger, coughed then, as if to remind them that they were not alone. Dirk glanced up, and Gwen turned. The man came forward, and bowed politely. Short and chubby and very blond—his hair looked almost white—he wore a brightly colored silkeen suit, all green and yellow, and a tiny black knit cap that stayed in place despite his bow.

"Arkin Ruark," he said to Dirk.

"Dirk t'Larien."

"Arkin is working with me on the project," Gwen said.

"Project?"

She blinked. "Don't you even know why I'm here?"

He didn't, not really. The package, the whisperjewel, had been sent from Worlorn, so he had known where to find her, but not much else. "You're an ecologist," he said. "On Avalon you . . ."

"Yes. At the Institute. A long time ago. I finished there, got my credentials, and I've been on High Kavalaan since. Until I was sent here."

"Gwen is with the Ironjade Gathering," Ruark said. He had a small, tight smile on his face. "Me, I'm representing Impril City Academy. Kimdiss. You know?"

Dirk nodded.

"Impril and Ironjade, well, after the same thing, you know? Research on ecological interaction on Worlorn. Never really done properly during the Festival, the outworlds not being so strong on ecology, none of them. A science ai-forgotten, as the Emereli say. But that's the project. Gwen and I knew each other from before, so we thought, well, here for the same reason so it is good sense to work together and learn what we can learn."

"I suppose," Dirk said. "You'll have to tell me all about it, later." He picked up his bag. "Where to?" he asked. "I could probably do with a bath and some food."

Gwen exchanged glances with Ruark. "Arkin and I were just talking

about that. He can put you up. We're in the same building. Only a few floors apart."

Ruark nodded. "Gladly, gladly. Pleasure in doing for friends, and both of us are friend to Gwen, are we not?"

"I thought, somehow, that I would stay with you, Gwen."

She did not look at him for a time. She looked at Ruark, at the ground, at the black night sky, all that, before her eyes finally found his. "Perhaps," she said, not smiling now, her voice careful. "But not right now. But we'll go home, of course."

"This way," Ruark put in, before Dirk could frame his words. Something was very strange. He shrugged and followed as they led him to their aircar.

The walk was quite short. The car, when they reached it, took Dirk aback. He had seen a lot of different types of aircars in his travels, but none quite like this one; huge and steel-gray, with curved and muscled triangular wings, it looked almost alive, like a great aerial manta-ray fashioned in metal. A small cockpit with four seats was set between the wings, and beneath the wingtips he glimpsed ominous rods.

He looked at Gwen and pointed. "Are those lasers?"

She nodded, smiling just a little.

"What the hell are you flying?" Dirk asked. "It looks like a war machine. Are we going to be assaulted by Hrangans? I haven't seen anything like that since we toured the Institute museums, back on Avalon . . ."

Gwen laughed, took his bag from him, and tossed it into the back seat. "Get in," she told him. "It is a perfectly fine aircar, High Kavalaan manufacture. They've only recently started turning out their own. It's supposed to look like an animal, the black banshee. A flying predator, also the brother-beast of the Ironjade Gathering. Very big in their folklore, sort of a totem."

She climbed in, behind the stick, and Ruark followed a bit awkwardly, vaulting over the armored wing into the back. Dirk did not move. "It has *lasers*!" he insisted.

Gwen sighed. "They're not charged, and never have been. Every car built on High Kavalaan has weapons of some sort. The culture demands it. And I don't simply mean Ironjade's. Redsteel, Braith, and the Shanagate Holding are all the same."

Dirk walked around the car and climbed in next to Gwen, but his face was blank. "What?"

"Those are the four Kavalar hold-fast-coalitions," she explained. "Think of them as small nations, or big families. They're a little of both."

"But why lasers?"

"High Kavalaan is a violent planet," Gwen replied.

Ruark gave a snort of laughter. "Ah, Gwen," he said. "That is utter wrong, *utter*!"

"Wrong?" she snapped.

"Very," Ruark said. "Yes, utter, because you are close to truth, half and not everything, worst lie of all."

Dirk turned in his seat to look back at the chubby blond Kimdissi. "What?"

"High Kavalaan *was* a violent planet, truth. But *now* truth is, the violence is the Kavalars. Hostile folk, each and every among them, zenophobes often, racists. Proud and jealous. With their highwars and their code duello, yes, and *that* is why Kavalar cars have guns. To fight with, in the air! I warn you, t'Larien they . . ."

"*Arkin*!" Gwen said, between her teeth, and Dirk started at the edged malice in her tone. She threw on the gravity grid suddenly, touched the stick, and the aircar wrenched forward and left the ground with a whine of protest, rising rapidly. The port below them was bright with light where *Shuddering of Forgotten Enemies* stood. Around it was darkness to the unseen horizon where black ground blended with blacker sky. Only a thin powder of stars lit the night above. This was the Fringe, with intergalactic space above and the dusky curtain of the Tempter's Veil below, and the world seemed lonelier than Dirk had ever imagined.

Ruark had subsided, muttering, and a heavy silence lay over the car for a long moment.

"I don't understand," Dirk said.

"You are no outworlder," Ruark said. "Avalon, Baldur, whatever world, it doesn't matter, you people inside the Veil don't know Kavalars."

"Or Kimdissi," Gwen said.

Ruark grunted. "A sarcasm," he told Dirk. "Kimdissi and Kavalars, well, we don't get on, you know? So Gwen is telling you I'm all prejudiced, not to believe me."

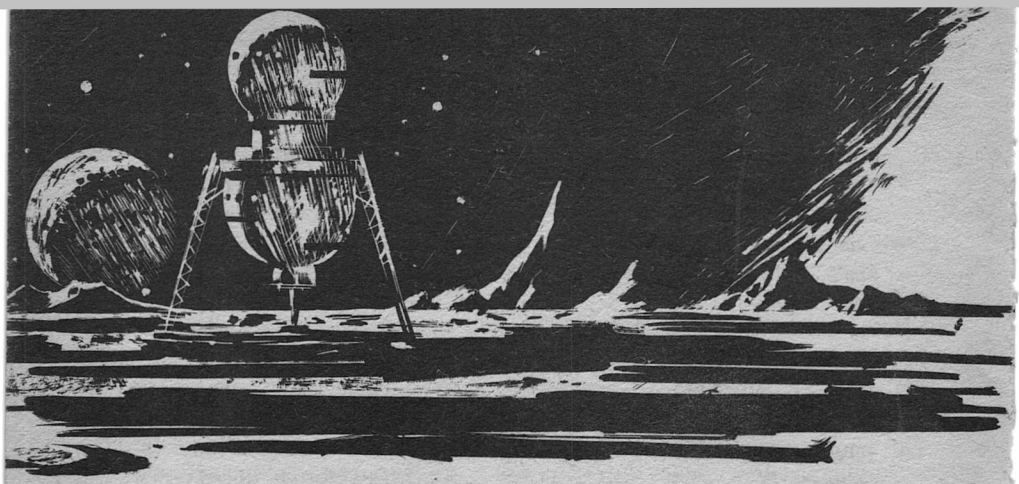
"Yes, Arkin," she said. To Dirk: "He doesn't know High Kavalaan, doesn't understand the culture or the people. Like all Kimdissi, he'll tell you only the worst, but everything is more complex than he would credit. So remember that when this glib scoundrel starts working on you."

"I still don't understand what this is all about, however," Dirk persisted. "Take the car—does it come with your job? Or do you have to fly something like this just because you work for the Ironjade Gathering?"

"Ah," Ruark said loudly. "You do not work for the Ironjade Gathering, Dirk. No. You are of them, you are not, two choices only. You are not *of* Ironjade, you do not work for Ironjade!"

"Yes," said Gwen, the edge returning to her voice. "And I am *of* Ironjade. I wish you'd remember that, Arkin. Sometimes you begin to annoy me."

"Gwen, Gwen," Ruark said, sounding very flustered. "You are a friend, a soulmate, very. We have tussled great problems, us two. I would never offend, do not mean to. You are *not* a Kavalar though, never.



For one, you are too much a woman, a true woman, not merely an *eyn-kethi* nor a *betheyn.*"

"No? I'm not? I wear the bond of jade-and-silver, though?" She glanced towards Dirk, and lowered her voice. "For Jaan," she said. "This is really his car, and that's why I fly it, to answer your original question. For Jaan."

Silence. The wind was the only noise, moving around them as they fell upwards into blackness, tossing Gwen's long straight hair and Dirk's tangles. It knifed right through his thin Braqui clothing. He wondered briefly why the aircar had no bubble canopy, only a thin windscreen that was hardly any use at all. Then he folded his arms tight against his chest, and slid down into the seat. "Jaan?" he asked, quietly.

"He doesn't know," Ruark said.

Gwen sighed, and Dirk could see her tense. "I'm sorry, Dirk. I thought you would know. It *has* been a long time. I thought, well, one of the people we both knew back on Avalon, one of them surely has told you."

"I never see anyone anymore," Dirk said, carefully. "That we knew, together. You know. I travel a lot. Braque, Prometheus, Jamison's World." His voice rang hollow and inane in his ears. "Who is Jaan?"

"Jaantony Riv Wolf high-Ironjade Vikary," Ruark said.

"Jaan is my . . ." She hesitated. "It is not easy to explain. I am *betheyn* to Jaan, *cro-betheyn* to his *teyn* Garse." She looked over, a brief glance away from the aircar instruments, then back again. There was no comprehension on Dirk's face.

"Husband," she said then, shrugging. "I'm sorry, Dirk. That's not quite right, but it is the closest I can come in a single word. Jaan is my husband."

Dirk, huddled low in his seat with his arms folded, said nothing. He was

cold, and he hurt, and he wondered why he was there. He remembered the whisperjewel, and he still wondered. She had some reason, surely, and in time she would tell him. And really, he could hardly have expected that she would be alone. At the port, he had even thought, quite briefly, that perhaps Ruark . . . and that hadn't bothered him.

When he had been silent for too long, Gwen looked over once again. "I'm sorry," she repeated. "Dirk. Really. You should never have come."

And he thought: yes, yes.

They flew on, the three of them, without speaking. Words had been said, and not the words that Dirk had wanted, but those words changed nothing. He sat slumped in his seat, alone with his thoughts, while a cold wind stroked his face.

Despair came first. On Braque, somehow, he had thought—never thinking it out loud, but thinking it nonetheless, expecting it—that the whisperjewel meant she was calling him back, that she wanted him again. That had not been it at all, he knew now. Why had he thought so?

Send this memory, and I will come, and there will be no questions. That was the promise, the only promise. Nothing more.

After despair, anger. Why was she doing this to him? How could she? No need of hers could be worth the price of this remembering.

Then, last, calm came back to Dirk t'Larien. And he remembered his resolve, to try again, to be as he *had* been, to come to her and give whatever he could give, whatever she might need. For himself, yes, for him as well as her.

He straightened with an effort, unfolded his arms and opened his eyes and sat up into the biting wind. Then, deliberately, he looked at Gwen and smiled his old shy smile for her. "Ah, Jenny," he said, "I'm sorry, too. But it doesn't matter. I didn't know, but that doesn't matter. I'm glad I came, and you should be glad, too. Seven years is too long, right?"

She glanced at him, then back at her instruments, and licked her lips nervously. "Yes. Seven years is too long, Dirk."

"Will I meet Jaan?"

She nodded. "And Garse too, his *teyn*."

There was a pause, then she continued. "How much do you know of Worlorn?" She smiled and quite suddenly Dirk felt better.

"A little," Dirk replied, still looking at her. "I know about the Festival, and that the planet is a rogue, and not much else. A woman on the ship told me that Tomo and Walberg discovered the place on their jaunt to the end of the galaxy."

"Not quite," said Gwen. "But the story has a certain charm to it. Anyway, the Festival. Everything you'll see is part of that, the whole planet. All the worlds of the Fringe took part, and the culture of each is

reflected here, in one of the cities. There are fourteen cities, for the fourteen worlds of the Fringe. In between you've got the spacefield and the Common, which is sort of a park. We're flying over it now. The Common is not very interesting, even by day. They had fairs and games there in the years of the Festival."

"Where is your project?"

"The wilderness," Ruark said. "Beyond the cities, beyond the mountainwall."

Gwen said, "Look."

Dirk looked. At the horizon, vaguely, he could make out a row of mountains, a jagged black barrier that climbed out of the Common to eclipse the lower stars. A spark of bloody light sat high upon one peak, and it grew as they drew near. Taller and higher it became, though not more brilliant; the color stayed a murky, threatening red that reminded Dirk somehow of the whisperjewel.

"Home," Gwen announced as the light swelled. "The city Larteyn. *Lar* is Old Kavalar for sky. This is the city of High Kavalaan. Some people call it the Firefort."

Built into the shoulder of the mountain, rock beneath it and rock to its back, the Kavalar city was square and thick, massively walled, with narrow slit windows. Even the towers that rose behind the city walls were heavy and solid. And short; the mountain loomed above them, its dark stone stained bloody by reflected light. But the lights of the city itself were not reflected; the walls and streets of Larteyn burned with a dull glowering fire of their own.

"Glowstone," Gwen told him, in answer to his unvoiced question. "It absorbs light during the day and gives it back at night. On High Kavalaan, it was used mostly for jewelry, but they quarried it by the ton and shipped it off to Worlorn for the Festival."

"Baroque impressive," Ruark said. "Kavalar impressive."

"You should have seen it in the old days," Gwen said. "Larteyn drank from the seven suns by day and lit the range by night. Like a dagger of fire. The stones are fading now—the Wheel grows more distant every hour. In another decade, the city will go dark as a burned-out ember."

"It doesn't look very big," Dirk said. "How many people did it hold?"

"A million, once. You're just seeing the tip of the iceberg. The city is built into the mountain."

"Very Kavalar," Ruark said. "A deep holding, a fastness in stone. But empty now. Twenty people, last count, us including."

The aircar passed over the outer wall, set flush to the cliff on the edge of the wide mountain ledge to make one long straight drop past rock and glowstone. Below them, Dirk saw wide walkways, and rows of slowly stirring pennants, and great carven gargoyles with burning glowstone eyes. The buildings were white stone

and ebon wood, and on their flanks the rock fires were reflected in long red streaks, like open wounds on some hulking dark beast. They flew over towers and domes and streets, twisting alleys and wide boulevards, open courtyards and a huge many-tiered outdoor theater.

Empty; all empty. Not a figure moved in the red-drenched ways of Larteyn.

Gwen spiraled down to the roof of a square black tower. As she hovered and slowly faded the gravity grid to bring them in, Dirk noted two other cars in the airlot beneath them: a sleek yellow teardrop and a formidable old military flyer with the look of century-old war surplus. It was olive green, square and sheathed in armor, with lasercannon on the forward hood and pulse-tubes on the rear.

She put their metal manta down between the two cars, and they vaulted out onto the roof. When they reached the bank of elevators, Gwen turned to face him, her face flushed and strange in the brooding reddish light. "It is late," she said. "We had all better rest."

Dirk did not question the dismissal. "Jaan?" he said.

"You'll meet him tomorrow," she replied. "I need a chance to talk to him first."

"Why?" he asked, but Gwen had already turned and started towards the stairs. Then the tube arrived and Ruark put a hand on his shoulder and pulled him inside.

They rode downward, to sleep and to dreams.

CHAPTER TWO

He got very little rest that night. Each time he started off to sleep, his dreams would wake him; fitful visions laced with poison and only half-remembered when he woke. Finally he gave up. Instead, he rummaged through his belongings until he found the jewel in its wrappings of silver and velvet, and he sat with it in the darkness and drank from its cold promises.

Hours passed. Then Dirk arose and dressed, slid the jewel into his pocket, and went outside alone to watch the Wheel come up. Ruark was sound asleep, but the door had been coded for him, so there was no problem getting in or out. He took the tubes back up to the roof and waited through the last dregs of night, sitting on the cold metal wing of the gray aircar.

It was a strange dawn, dim and dangerous, and the day it birthed was murky. First only a vague cloudy glow suffused the horizon, a red-black smear that faintly echoed the glowstones of the city. Then the first sun came up: a tiny ball of yellow that Dirk watched with naked eyes. Minutes later, a second appeared, a little larger and brighter, on another part of the horizon. But the two of them, though recognizably more than stars, still cast less light than Braque's fat moon.

A short time later, the Hub began to climb above the Common. It was a line of dim red at first, lost in the ordinary light of dawn, but it grew steadily brighter until at last Dirk saw that it was no reflection, but the crown of a vast red sun. The world turned crimson as it rose.

He looked down into the streets below. The stones of Larteyn had all faded now; only where the shadows fell could the glow still be seen, and there only dimly. Gloom had settled

over the city, like a grayish pall tinged slightly with washed-out red. In the cool weak light the nightflames all had died, and the silent streets echoed death and desolation.

Worlorn's day. Yet it was twilight.

"It was brighter last year," said a voice behind him. "Now each day is darker, cooler. Of the six stars in the Hellcrown, two are hidden now behind Fat Satan, and are of no use at all. The others grow small and distant. Satan himself still looks down on Worlorn, but his light is very red and growing feeble. So Worlorn lives in slow-declining sunset. A few more years and the seven suns will shrink to seven stars, and the ice will come again."

The speaker stood very still as he regarded the dawn, his boots slightly apart and his hands on his hips. He was a tall man, lean and well-muscled, barechested even in the chill morning. His red-bronze skin was made even redder by the light of Fat Satan. He had high angular cheekbones, a heavy square jaw, and receding shoulder-length hair as black as Gwen's. And on his forearms—his dark forearms matted with fine black hair—he wore two bracelets, equally massive. Silver-and-jade on his left arm, black iron and red glowstone on his right.

Dirk did not stir from the wing of the manta. The man looked down at him. "You are Dirk t'Larien, and once you were Gwen's lover."

"And you are Jaan."

"Jaan Vikary, of the Ironjade Gathering," the other said. He stepped forward and raised his hands, palms outward and empty.

Dirk stood and pressed his own palms against the Kavalar's. As he did so, he noticed something elsē. Jaan wore a belt of black oiled metal, and a laser pistol was at his side.

Vikary noticed his look, and smiled. "We all go armed. It is a custom, one we value. I hope you are not as shocked and biased as Gwen's friend, the Kimdissi. If so, that is your failure, not ours. Larteyn is part of High Kavalaan, and you cannot expect our culture to conform to yours."

Dirk sat down again. "No. I should have expected it, perhaps, from what I heard last night. I do find it strange. Is there a war on somewhere?"

Vikary smiled very thinly; a even, deliberate baring of teeth. "There is always a war somewhere, t'Larien. Life itself is a war." He paused. "Your name: t'Larien. Unusual. I have not heard its like before, nor had my *teyn* Garse. Where is your homeworld?"

"Baldur. A long way off, on the

other side of Old Earth. But I scarcely remember it. We came to Avalon when I was very young."

Vikary nodded. "And you have traveled, Gwen has told me. Which worlds have you seen?"

Dirk shrugged. "Prometheus, Rhiannon. Thisrock, Jamison's World, among others. Avalon, of course. A dozen altogether, mostly places more primitive than Avalon, where my knowledge is in demand. It's usually easy to find work if you've been to the Institute, even if you're not especially skilled or talented. Fine with me. I like traveling."

"Yet you have never been beyond the Tempter's Veil, until now. Only in the jambles, never to the outworlds. You will find things different here, t'Larien."

Dirk frowned. "What was that word you used? Jambles?"

"The jambles," Vikary repeated. "Ah. Wolfman slang. The jambled worlds, the jumbled worlds, what you will. A phrase that I acquired during my studies on Avalon. Several Wolfmen were among my friends. The phrase refers to the star sphere between the outworlds and the first- and second-generation colonies near Old Earth. It was the jambles where the Hrangans saturated the stars and ruled their slaveworlds and fought the Earth Imperials. Most of the planets you named were known then, were touched hard by the ancient war and jumbled by the collapse. Avalon itself is a second-generation colony, once a sector capitol. That is some distinction, don't you think, for a world so very far in these centuries ai-shattered? To have been settled by Newholme itself? And Prometheus was home to the Corps of Ecological Warfare, and Thisrock was a naval strikebase. Sunless and artificial, is it not?"

Dirk nodded agreement. "Yes. I know the history, a little. You seem to know a lot of it."

"I am a historian," Vikary said. "Most of my work has been devoted to making history out of the myths of my own world, High Kavalaan. Ironjade sent me to Avalon at great expense to search the data banks of the old computers for just that purpose. Yet I spent two years of study there, and had much free time, and developed an interest in the broader history of man."

Dirk said nothing, but only looked out again toward the dawn. The red disc of Fat Satan was half-risen now, and a third yellow star could be seen. It was slightly to the north of the others, and it was only a star. "The red star is a supergiant," Dirk mused, "but up there it seems only a bit larger than Avalon's sun. It must be pretty far away. It should be colder, the ice should be here now. But it's only chilly."

"That is our doing," Vikary told him with some pride. "Not High Kavalaan, in truth, yet outworld work nonetheless. Tober kept much of the lost force field technology of the Earth Imperials during the collapse, and the Toberians have

built on it in the centuries since then. Without their shield no Festival could ever have been held. At perihelion, the heat of the Hellcrown and Fat Satan would have burned off Worlorn's atmosphere and boiled its sea, but the Toberian shield blocked off that fury and we had a long bright summer. Now, in like manner, it helps to hold in the heat. Yet it has its limits, as does everything. The cold will come."

"I did not think we'd meet like this," Dirk said. "Why did you come up here?"

"A chance. Long years ago, Gwen told me that you liked to watch the dawn. And other things as well, Dirk t'Larien. I know far more of you than you of me."

Dirk laughed. "Well, that's true. I never knew you existed until last night."

Jaan Vikary's face was hard and serious. "But I do exist. Remember that, and we can be friends. I hoped to find you alone and tell you this before the others woke. This is not Avalon now, t'Larien, and today is not yesterday. It is a dying Festival world, a world without a code, so each of us must cling tightly to whatever codes we bring with us. Do not test mine. Since my years on Avalon, I have tried to think of myself as Jaan Vikary, but I am still a Kavalar. Do not force me to be Jaantony Riv Wolf high-Ironjade Vikary."

Dirk stood up. "I'm not sure what you mean," he said. "But I think I can be cordial enough. I certainly have nothing against you, Jaan."

That seemed to be enough to satisfy Vikary. He nodded slowly, and reached into the pocket of his trousers. "This will be an emblem of my friendship and concern for you," he said. In his hand was a black metal collar-pin, a tiny manta. "Will you wear it during your time here?"

Dirk took it from his hand. "If you want me to," he said, smiling at the other's formality. He fixed it to his collar.

"Dawn is gloomy here," Vikary said, "and day is not much better. Come down to our quarters, and I will rouse the others, and we can eat."

The apartment that Gwen shared with the two Kavalars was immense. The high-ceilinged living room was dominated by a fireplace two meters high and twice as long, and above was a slate gray mantle where glowering gargoyles perched to guard the ashes. Vikary led Dirk past them, over an expanse of deep black carpet, into a dining chamber that was nearly as large. Dirk sat in a high-backed wooden chair, one of twelve along the great table, while his host went to fetch food and company.

He returned shortly, bearing a platter of thinly-sliced brown meat and a basket of cold biscuits. He set them in front of Dirk, then turned and left again.

No sooner had he gone than

another door opened and Gwen entered, smiling sleepily. She wore an old headband, faded trousers, and a shapeless green top with wide sleeves. He could see the glint of her heavy jade-and-silver bracelet, tight on her left arm. With her, a step behind, came another man, nearly as tall as Vikary but several years younger and much more slender, clad in a short-sleeved jumpsuit of brown-red chameleon cloth. He glanced at Dirk out of intense blue eyes, the bluest eyes that Dirk had ever seen, set in a gaunt hatchet-face above a full red beard.

Gwen sat down. The red beard paused in front of Dirk's chair. "I am Garse Ironjade Janacek," he said. He offered his palms. Dirk rose to press them.

Garse Ironjade Janacek, Dirk noted, wore a laser pistol at his waist, slung in a leather holster on a silvery mesh-steel belt. Around his right forearm was a black bracelet, twin to Vikary's; iron and what looked to be glowstone.

"You probably know who I am," Dirk said.

"Indeed," Janacek replied. He had a rather malicious grin. Both of them sat down.

Gwen was already munching on a biscuit. When Dirk resumed his seat, she reached out across the table and fingered the little manta pin on his collar, smiling at some secret amusement. "I see that you and Jaan found each other," she said.

"More or less," Dirk replied, and just then Vikary returned, with his right hand wrapped awkwardly around the handles of four pewter mugs, and his left hand holding a pitcher of dark beer. He deposited it all in the center of the table, then made one last trip to the kitchen for plates and ironware and a glazed jar of a yellow paste that he told Dirk to spread on the biscuits.

While he was gone, Janacek pushed the mugs across the table at Gwen. "Pour," he said to her, in a rather peremptory tone, before turning his attention back to Dirk. "I am told you were the first man she knew," he said, while Gwen was pouring. "You left her with an imposing number of vile habits," he said, smiling coolly. "I am tempted to take insult and call you out for satisfaction."

Dirk looked baffled.

Gwen had filled three of the four mugs with beer and foam. She set one in front of Vikary's place, the second by Dirk, and took a long draught from the third. Then she wiped her lips with the back of her hand, smiled at Janacek, and handed him the empty mug. "If you're going to threaten poor Dirk because of my habits," she said, "then I suppose I must challenge Jaan for all the years I've had to suffer yours."

Janacek turned the empty beer mug in his hands, and scowled. "*Betheyn*-bitch," he said in an easy conversational voice. He poured his own beer.

Vikary was back an instant later.

He sat down, took a swipe from his own mug, and they began to eat. Dirk discovered very soon that he liked having beer for breakfast. The biscuits, smeared over with a thick coating of the sweet paste, were also excellent. The meat was rather dry.

Janacek and Vikary questioned him throughout the meal, while Gwen sat back and looked bemused, saying very little. The two Kavalars were a study in contrasts. Jaan Vikary leaned forward as he spoke (he was still barechested, and every so often he yawned and scratched himself absently) and maintained a tone of general friendly interest, smiling frequently, seemingly much more at ease than he had been up on the roof. Yet he struck Dirk as somehow *deliberate*, a tight man who is making a conscious effort to loosen; even his informalities—the smiles, the scratching—seemed studied and formal. Garse Janacek, while he sat more erect than Vikary and never scratched and had all the formal Kavalar mannerisms of speech, nevertheless seemed more genuinely relaxed, like a man who *enjoyed* the restrictions his society had laid on him and would not even think of trying to break free. His speech was animated and abrasive; he tossed off insults like a flywheel tossing sparks, most of them directed at Gwen. She tossed a few back, but feebly; Janacek played the game much better than she did. A lot of it gave the appearance of casual, affectionate give-and-take, but several times Dirk thought he caught a hint of real hostility. Vikary tended to frown at every exchange.

"Will you be going out into the wild, t'Larien?" Vikary asked at one point, deliberately wrenching the conversation away from Garse.

"I don't know," Dirk said, sipping at his beer. "Should I?"

"I'd never forgive you if you didn't," Gwen said, smiling.

"Then I'll go. What's so interesting?"

"The ecosystem—it's forming and dying, all at the same time. Ecology was a forgotten science in the Fringe for a long time. Even now, the outworlds boast less than a dozen trained ecoengineers between them. When the Festival came Worlorn was seeded with life forms from fourteen different worlds with almost no thought as to the interaction. Actually *more* than fourteen worlds were involved, if you want to count multiple transplants—animals brought from Earth to Newholme to Avalon to Wolfheim, and thence to Worlorn, that sort of thing.

"What Arkin and I are doing is a study of how things have worked out. We've been at it a couple years already, and there's enough work to keep us busy for a decade more. The results should be of particular interest to farmers of all the outworlds. They'll know which Fringe flora and fauna they can safely introduce to their homeworlds, and under what conditions, and which are poison to an ecosystem."

"The animals from Kimdiss are proving particularly poisonous," Janacek growled. "Much like the manipulators themselves."

Gwen grinned at him. "Garse is annoyed because it looks as though the black banshee is heading towards extinction," she told Dirk. "It's a shame, really. On High Kavalaan itself they've been hunted to the point where the species is clearly endangered, and it had been hoped that the specimens turned loose here twenty years ago would establish themselves and multiply, so they could be recaptured and taken back to High Kavalaan before the cold came. It hasn't worked out that way. The banshee is a fearful predator, but at home it can't compete with man, and on Worlorn it has had its niche appropriated by an infestation of tree-spooks from Kimdiss."

"Most Kavalars see the banshee only as a plague and a menace," Jaan Vikary explained. "In its natural habitat it is a frequent man-killer, and the hunters of Braith and Redsteel and the Shanagate Holding think of banshee as the ultimate game, with a single exception. Ironjade has always been different. There is an ancient myth, of the time Kay Iron-Smith and his *teyn* Roland Wolf-Jade were fighting alone against an army of demons in the Lameraan Hills. Kay had fallen, and Roland, standing over him, was weakening by the moment, when from over the hills the banshees came, many of them flying together, black and thick enough to block out the sun. They fell hungrily onto the demon army and consumed them, one and all, leaving Kay and Roland alive. Later, when that *teyn*-and-*teyn* found their cave of women and established the first Ironjade holdfast, the banshee became their brother-beast and sigil. No Ironjade has ever killed a banshee, and legend says that whenever a man of Ironjade is in danger of his life, a banshee will appear to guide and protect him."

"A pretty story," Dirk said.

"It is more than a story," Janacek said. "There is a bond between Ironjade and banshee, t'Larien. Perhaps it is psionic, perhaps the things are sentient, perhaps it is all instinct. I do not pretend to know. Yet the bond exists."

"Superstition," Gwen said. "You really must not think too badly of Garse. It's not his fault that he never got much of an education."

Dirk spread paste across a biscuit, and looked at Janacek. "Jaan mentioned that he was a historian, and I know what Gwen does," he said. "What about you? What do you do?"

The blue eyes stared coldly. Janacek said nothing.

"I get the impression," Dirk said, continuing, "that you are not an ecologist."

Gwen laughed.

"That impression is uncannily correct, t'Larien," Janacek said.

"What are you doing on Worlorn, then? For that matter,"—he shifted

his gaze to Jaan Vikary—"what does a historian find to do in a place like this?"

Vikary cradled his beer mug between two large hands and drank from it thoughtfully. "That is simple enough," he said. "I am a highbond Kavalar of the Ironjade Gathering, bonded to Gwen Delvano by silver-and-jade. My *betheyn* was sent to Worlorn by vote of the highbond council, so it is natural that I am here too, and my *teyn*."

"You keep Gwen company, then?"

Janacek appeared very hostile. "We *protect* Gwen," he said icily. "Usually from her own folly. She should not be here at all, yet she is, so we must be here as well. I am an Ironjade, *teyn* to Jaantony high-Ironjade. I can *do* anything that my holdfast might require of me. That is what I *do*. What I *am*—you know. I have told you my name."

Vikary glanced at him and bid him silent with a short chopping motion of his right hand. "Think of us as late tourists," he told Dirk. "We study and we wander, we drift through the forests and the dead cities, we amuse ourselves. We would cage banshees so they might be brought back to High Kavalaan, except that we have not been able to find any banshees." He rose, draining his mug as he did so. "The day ages and we sit," he said after he had set it back on the table. "If you would go off to the wild, you should do it soon. It will take time to cross the mountains, even by aircar, and it is not wise to stay out after dark."

"Oh?" Dirk finished his own beer and wiped his mouth with the back of his hand. Napkins did not seem to be part of a Kavalar table-setting.

"The banshees were never the only predator on Worlorn," Vikary said. "There are slayers and stalkers from fourteen worlds in the forests, and they are the least of it. The humans are the worst."

"You would do best to go armed," Janacek said. "Or better still, Jaan and I should go with you, for the sake of your safety."

But Vikary shook his head. "No, Garse. They must go alone, and talk. It is better that way, do you understand? It is my wish." Then he picked up an armful of plates, and walked toward the kitchen. But near the door he paused and glanced back over his shoulder, and briefly his eyes met Dirk's.

And Dirk remembered his words, out on the rooftop at dawn. *I do exist*, Jaan had said. *Remember that.*

"How long since you rode a sky-scoot?" Gwen asked him a short time later, when they met on the roof. She had changed into a one-piece chameleon cloth coverall, a belted garment that covered her from boots to neck in dusky grayish-red. The headband that held her black hair in place was of the same fabric.

"Not since I was a child," Dirk said. His own clothing was twin to

hers; she'd given it to him so they could blend into the forest. "Since Avalon. But I'm willing to try. I used to be pretty good at it though."

"You're on, then," Gwen said. "We won't be able to go very fast, but that shouldn't matter." She opened the storage trunk on the gray manta-shaped aircar and took out two small silvery packages and two pairs of boots.

Dirk sat on the aircar wing again while he changed into the new boots and laced them up. Gwen unfolded the scoots, two small platforms of soft tissue-thin metal barely large enough to stand upon. When she spread them on the ground, Dirk could trace the crosshatched wires of the gravity grids built into their undersides. He stepped on one, positioning his feet carefully, and the metal soles of his boots locked tightly in place as the platform went rigid. Gwen handed him the control device and he strapped it around his wrist so that it flipped out into the palm of his hand.

"Arkin and I use the scoots to get around the forests," Gwen told him while she knelt to lace up her own boots. "An aircar has ten times the speed, of course, but it isn't always easy to find a clearing big enough to land. The scoots are good for close-in detail work, as long as we don't try to carry too much equipment or get in too much of a hurry. Garse says they're toys, but . . ." She stood up, stepped onto her platform, and smiled. "Ready?"

"You bet," Dirk said, and his finger brushed the silver wafer in the palm of his right hand. Just a little too hard. The scoot shot up and out, dragging his feet with it and whipping him upside down when the rest of him lagged behind. He barely missed cracking his head on the roof as he flipped, and ascended into the sky laughing wildly and dangling from underneath his platform.

Gwen came after him, standing on her platform and climbing up the twilight wind with skill born of long practice, like some outworld djinn riding a silver carpet remnant. By the time she reached Dirk he had played with the controls long enough to right himself, though he was still flailing back and forth in a wild effort to keep his balance. Unlike aircars, sky-scoots had no gyros.

Gwen settled down to his level and moved in beside him, sure-footed and confident, her dark hair streaming behind her like a wild black banner. "How you doing?" she yelled, as they flew side by side.

"I think I've got it!" Dirk announced. He was still upright.

"Good. Look down!"

He looked down, past the meager security of the platform under his feet. Larteyn with its dark towers and faded glowstone streets was no longer beneath him. Instead there was a long *long* drop through an empty twilight sky to the Common far below. He glimpsed a river down there, a thread of wandering dark waters in the dim-lit greenery. Then

his head swam dizzily, his hands tightened, and he flipped over again.

Gwen dipped underneath him as he hung upside down. She crossed her arms again and smirked up at him. "You sure are a dumbshit, t'Larien," she told him. "Why don't you fly right side up?"

He growled at her, or tried to growl, but the wind took away his breath and he could only make faces. Then he turned himself over.

Gwen was beside him again. She looked him over and nodded. "You are a disgrace to the children of Avalon, and sky-scooters everywhere," she said. "But you'll probably survive." She held out her free hand and took his and together they swung around in a wide spiral, up and back, to face Larteyn and the mountainwall. The city looked gray and washed-out from a distance, its proud glowstones a sun-doused black. The mountains were a looming darkness.

They rode toward them together, gaining altitude steadily until they were far over the Firefort, high enough to clear the peaks. Holding hands and shouting infrequent comments, leaning this way and that into the wind, Gwen and Dirk rode up over one mountain and down its far slope into a shadowed rocky valley, then up and down another and still another, past dagger-sharp outcroppings of green and black rock, past high narrow waterfalls and higher precipices. At one point Gwen challenged him to race, and he shouted his acceptance, and then they streaked forward as fast as the scoots and their skill could take them until finally Gwen took pity on him and came back to take his hand again.

The range dropped off as suddenly to the west as it had risen in the east, throwing up a tall barrier to shield the wild from the light of the still-climbing Wheel. "Down," Gwen said, and he nodded, and they began a slow descent toward the scrambled dark greenery below. They landed well inside the forest, beside a lake they had seen as they came down.

Gwen helped him detach his boots from the sky-scoot, and together they brushed damp sand and moss from their clothes and hair. Then she sat down beside him and smiled. He smiled back and kissed her.

Or tried to. As he reached and put his arm around her, she pulled away, and he remembered. His hands fell, and the shadows swept across his face. "I'm sorry," he said, mumbling. He looked away from her, toward the lake. The water was an oily green, and islands of violet fungus dotted the still surface. The only motion was the half-seen stirring of insects skimming the shallows nearby. The forest was even darker than the city, for the mountains still hid most of Fat Satan's disc.

Gwen reached out and touched him on the shoulder. "No," she said softly. "*I'm* sorry. I forgot too. It was almost like Avalon."

He looked at her and forced a faint

smile, feeling lost. "Yes. Almost. I've missed you, Gwen, despite it all. Or should I be saying that?"

"Probably not," she said. Her eyes avoided his again and went wandering from him, out across the lake. The far side was lost in haze. She gazed into the distance for a long time, not moving except once, when she shivered briefly from the cold. Dirk watched her clothing slowly fade to a mottled off-white and green to match the shade of the ground she sat upon.

Finally he reached to touch her, his hand tentative. She shrugged it away. "No," she said.

Dirk sighed and picked up a handful of cool sand, running it through his fingers as he thought. "Jenny, I don't know . . ."

She glanced at him and frowned. "That's not my name, Dirk. It never was. No one ever called me that, except you."

He winced, hurt. "But why . . ."

"Because it isn't *me*!"

"No one else," he said. "It just came to me, back on Avalon, and it fit you and I called you that. I thought you liked it."

She shook her head. "Once. You don't understand. You never understand. It came to mean more to me than it did at first, Dirk. More and more and more. and the things that name meant to me were not good things. I tried to tell you, even then. But that was a long time ago. I was younger, a child. I didn't have the words."

"And now?" His voice was edged with overtones of anger. "Do you have the words *now*, Gwen?"

"Yes. For you, Dirk. More words than I can use." She smiled at some secret joke, and shook her head so her tair tossed in the wind. "Listen, private names are fine. They can be a special sharing. With Jaan it is like that. The highbonds have long names because they fill many roles. He can be Jaan Vikary to a Wolfman friend on Avalon, and high-Ironjade in the councils of Gathering, and still Riv in worship and Wolf in highwar and yet another name in bed, a private name. And there is a *rightness* to it, because all those names are *him*. I recognize that. I like some of him better than other parts, like Jaan more than Wolf or high-Ironjade, but they are all true for him. The Kavalars have a saying, that a man is the sum of all his names. Names are very important on High Kavalaan. Names are very important everywhere, but the Kavalars know that truth better than most. A thing without a name has no substance—if it existed, it *would* have a name. And, likewise, if you give a thing a name, somewhere, on some level, the thing named will exist, will come to be. That's another Kavalar saying. Do you understand, Dirk?"

"No."

She laughed. "You're as muddled as ever. Listen, when Jaan came to Avalon he was Jaantony Ironjade Vikary. That was his name, his whole name. The most important part of it

was the first two words—Jaantony is his true name, his birth-name, and Ironjade is his holdfast and his alliance. Vikary is a made-up name he took at puberty. All of the Kavalars take such names, usually the names of highbonds they admire, or mythic figures, or personal heroes. A lot of Old Earth surnames have survived that way. The thought is that by taking the name of a hero, the boy will gain some of the man's qualities. On High Kavalaan it actually seems to work.

"Jaan's chosen-name—Vikary—is a bit unusual in several respects. It sounds like an Old Earth hand-me-down, but it isn't. From all accounts Jaan was an odd child, dreamy, very moody, much too introspective. He liked to listen to the *eyn-kethi* sing and tell stories when he was very little, which is bad for a Kavalar boy—the *eyn-kethi* are the breeding women, the perpetual mothers of the holdfast, and a normal child is not suppposed to associate with them any more than he has to. When Jaan was older he spent all his time alone, exploring caves and abandoned mines in the mountains. Safely away from his holdfast-brothers. I don't blame him. He was always an object of torment, essentially friendless, until he met Garse. Who is notably younger, but still wound up as Jaan's protector through the later stages of his childhood. Eventually that all changed—when Jaan approached the age when he would be subject to the code duello, he turned his attention to weaponry and mastered it very quickly—he is really a fantastic study—today he is terribly fast and considered deadly, better even than Garse, whose skill is mainly instinctual. It wasn't always like that, however. Anyway, when it came time for Jaantony to choose a name, he had two great heroes, but he did not dare name either one to the highbonds. Neither of them were Ironjades, and worse, both were semipariahs, villains of Kavalar history, charismatic leaders whose causes had lost and then been subjected to generations of oral abuse. So Jaan sort of shoved their names together and juggled the sounds around until the product looked like an old family name imported from Earth. The highbonds accepted it without a thought. It was only his chosen-name, the least important part of his identity. It's the part that comes last, after all."

She frowned. "Which is the point of this whole story. Jaantony Ironjade Vikary came to Avalon, and he was mostly Jaantony Ironjade. Except that Avalon is a surname-conscious world, and there he found that he was mostly Vikary. The Academy registered him under that name, and his instructors called him Vikary, and it was the name he had to live by for two years. Pretty soon he *became* Jaan Vikary, in addition to being Jaantony Ironjade. I think he rather liked it. He's tried to stay Jaan Vikary ever since, although it was not easy after we returned to

High Kavalaan. To the Kavalars he'll always be Jaantony."

"Where did he get all the other names?" Dirk found himself asking, despite himself.

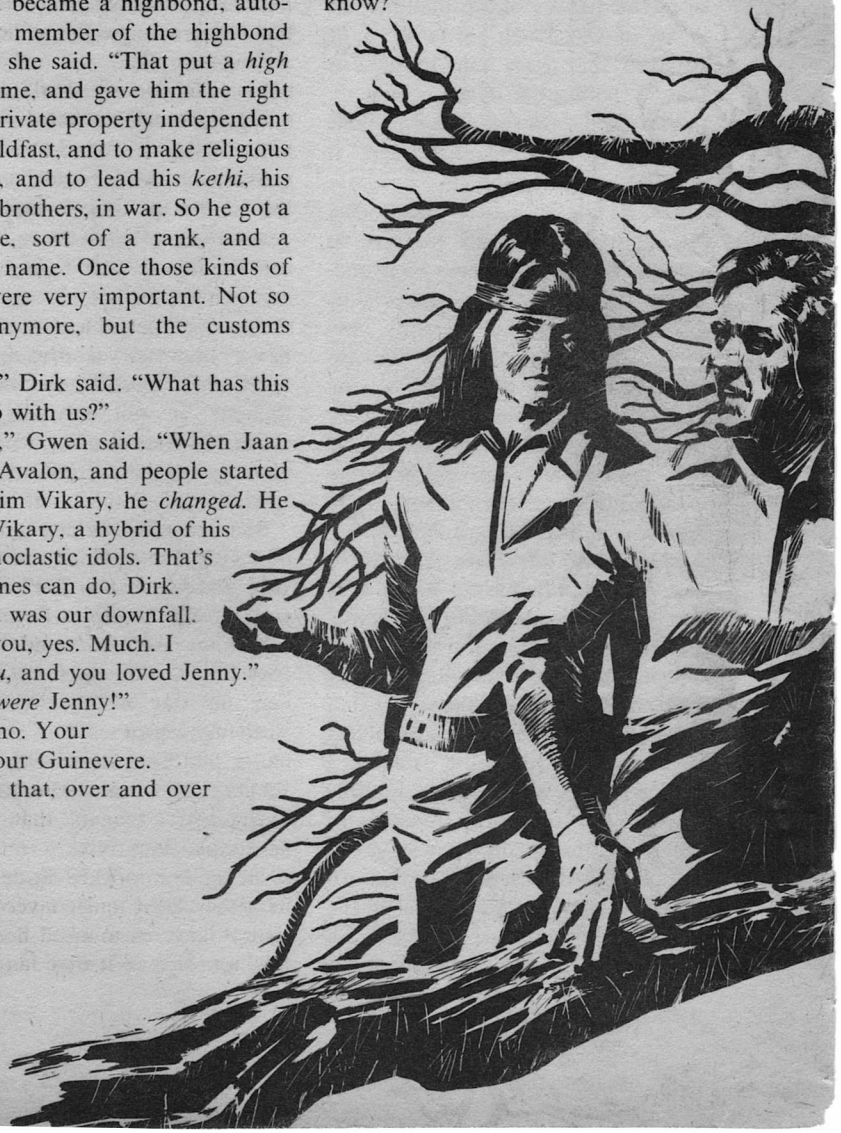
"When we were married, he brought me back to Ironjade with him, and became a highbond, automatically member of the highbond council," she said. "That put a *high* in his name, and gave him the right to own private property independent of the holdfast, and to make religious sacrifices, and to lead his *kethi*, his holdfast-brothers, in war. So he got a war-name, sort of a rank, and a religious name. Once those kinds of names were very important. Not so much anymore, but the customs linger."

"I see," Dirk said. "What has this got to do with us?"

"A lot," Gwen said. "When Jaan reached Avalon, and people started calling him Vikary, he *changed*. He *became* Vikary, a hybrid of his own iconoclastic idols. That's what names can do, Dirk. And that was our downfall. I loved you, yes. Much. I loved *you*, and you loved Jenny."

"You *were* Jenny!"

"Yes, no. Your Jenny, your Guinevere. You said that, over and over again. *Yours*. You called me those names as often as you called me Gwen, but you were right, they were your names. Yes, I liked it. What did I know of names or naming? Jenny is pretty enough, and Guinevere has the glow of legend. What did I know?



"But I learned, even if I never had the words for it. The problem was that you loved Jenny, truly loved her, I don't deny it. Only Jenny wasn't me. Based on me, perhaps, but mostly she was a phantom, a wish, a dream maiden you'd fashioned all your own. You fastened her on me and loved us both, and in time I found myself *becoming* Jenny. Give a thing a name and it will somehow come to be. All truth is in naming, and all lies as well, for nothing distorts like a false name can, a false name that changes the reality as well as the seeming.

"I wasn't Jenny, Dirk. I wanted you to love me, not her. I was Gwen Delvano and I wanted to be the best Gwen Delvano I could be, but still myself for all that. I fought being Jenny, and you fought to keep her, and never understood. And that was why I left you."

And he did understand, at last, at first. For seven years he never had, but now, briefly, he grasped it. This then, he thought, was why she sent the whisperjewel. Not to call him back, no, not that. But to tell him, finally, why she had sent him away. And there was a sense to it. His anger had suddenly faded into weary melancholy. Sand ran cold and unheeded through his fingers.

She saw his face, and her voice softened. "I'm sorry, Dirk," she said.

"I had hoped . . ."

"Don't," she warned. "Don't start it, Dirk. Not again. Don't even try. We're over. Recognize that. We'll kill ourselves if we try."

He sighed, blocked at every turn. Through all the long conversation, he had never even touched her. He felt helpless. "I take it that Jaan doesn't

call you Jenny?" he said finally, with a bitter smile.

Gwen laughed. "No. As a Kavalar, I have a secret name, and he calls me that. But I've taken the name, so there's no problem. It is *my* name."

"You're happy, then?"

Gwen rose, and brushed loose sand from her legs. "Jaan and I—well, there is a lot that is hard to explain. You were a friend once, Dirk, and maybe my best friend. But you've been gone a long time. Don't press too hard. Right now, I need a friend. I talk to Arkin, and he listens and *tries*, but he can't help much, he's too involved, too blind about Kavalars and their culture. Jaan and Garse and I have problems, yes, if that's what you're asking. But it's hard to speak of them. Give me time. Wait, if you will, and be my friend again."

The lake was very still in the perpetual red-gray sunset. He watched the water, thick with its spreading scabs of fungus, and he flashed back to the canal on Braque. Then she *did* need him, he thought. Perhaps it was not as he had hoped, but there was still something he could give her. He clung to that tightly; he wanted to give, he *had* to give. "Whatever," he said, as he rose. "There's a lot I don't understand, Gwen. Too much. I keep thinking that half the conversation of the past day has gone past me, and I don't even know the right questions to ask. But I can try. I owe you, I guess. I owe you for something or other."

"You'll wait?" Gwen said.

"And listen, when the time comes."

"Then I'm glad you've come," she said. "I needed someone, an outsider. You're well-timed, Dirk. A luck."

How strange, he thought, to send off for a luck. But he said nothing. "Now what?"

"Now let me show you the forest. That was why we came here, after all."

They walked away from the silent lake, toward the thick of the waiting forest. There was no trail to follow, but the underbrush was light and walking easy. Dirk was quiet; Gwen did all the talking. When she spoke, her voice was low and reverent as a child's whisper in a great cathedral.

The trees around the lake were all familiar friends that Dirk had seen a thousand times before. For this was the so-called 'forest of home', the wood that man carried with him from sun to sun, and planted on all the worlds he walked. It had its roots on Old Earth, the home forest, but it was not all of Earth. On each new planet humanity found new favorites, plants and trees that soon were as much a part of the blood as those that came out from Earth in the beginning.

Dirk and Gwen passed through that forest slowly. Sugar maples there, and fire maples, and mockoak and oak itself, and silverwood and poison-pine and asten. The outworlders had brought them here

even as their ancestors had brought them to the Fringe, to add a touch of home, wherever home might be.

But here these woods looked different.

It was the light, Dirk realized after a time. The drizzling light that leaked so meagerly from the sky, the wan red gloom that passed for Worlorn's day. This was a twilight forest. In the slowness of time—in a far-extended autumn—it was dying.

They moved further into the forest, away from the lake and the mountainwall. The suns were nearly overhead by now, Fat Satan dim and bloated like a blood-drenched moon, unevenly ringed by four small yellow star-suns. Worlorn had receded too far and in the wrong direction; the Wheel effect was lost.

They had been walking for more than an hour when the character of the forest around them began to change. Slowly, subtly, the change seeped in, almost too gradual for Dirk to notice. But Gwen showed him. The familiar blend of home forest was giving way, yielding to something stranger, something wilder, something unique. Gaunt black trees with gray leaves, high walls of red-tipped briar, drooping weepers of pale phosphorescent blue, great bulbous shapes infested with dark flaking splotches; to each of these Gwen pointed and gave a name. One type became more and more common; a towering yellowish growth that sprouted tangled branches from all over its waxy trunk, and smaller offshoots from those branches, and still smaller ones from *those*, until it had built itself into a tight wooden maze. *Chokers*, Gwen called them, and Dirk soon saw why. Here in the deep of the wood one of the chokers had grown alongside a regal silverwood, sending out crooked yellow-wax branches to mingle with straight, stately gray ones, burrowing roots under and around those of the other tree, constricting its rival in an ever-tightening vise. And now the silverwood could scarce be seen; a tall dead stick lost in the swelling choker.

"The chokers are native to Tober," Gwen said. "They're taking over the forests here, just as they did there. We could have told them it would happen, but they wouldn't have cared. The forests were all doomed anyway, even before they were planted. Even the chokers will die, though they'll be the last to go."

They walked on, and the chokers grew steadily thicker, until soon they dominated the forest. Here the woods were denser, darker; passage was more difficult. Half-buried roots tripped them underfoot, while tangled branches interlocked above them like the straining arms of giant wrestlers. Where two or three or more chokers grew close together, they seemed to merge into a single twisted knot, and Gwen and Dirk were forced to detour. Other plant life was scarce, except for beds of black and violet mushrooms near the feet of the yellow trees, and ropes of

parasitic scumweb.

But there were animals.

Dirk saw them moving through the dark twistings of the chokers and heard their high, chittering call. Finally he saw one. Sitting just above their heads on a swollen yellow branch, looking down on them; fist-sized, dead still, and somehow—transparent. He touched Gwen's shoulder and nodded upward.

But she just smiled at him, and laughed lightly. Then she reached up to where the little creature sat, and crumpled it in her hand. When she offered it to Dirk, her palm held only dust and dead tissue.

"There's a nest of tree-spooks around," she explained. "They shed their skins four or five times before maturity, and leave the husks as guards to scare away other predators." She pointed. "There's a live one, if you're interested."

Dirk looked, and caught a fleeting glimpse of a tiny yellow scampering thing with sharp teeth and enormous brown eyes. "They fly, too," Gwen told him. "They've got a membrane that goes from arm to leg and lets them flit between the trees. Predators, you know. They hunt in packs, can bring down creatures a hundred times their size. But generally they won't attack a man unless he blunders into their nest."

The tree-spook was gone now, lost beneath a labyrinth of choker branches, but Dirk thought he saw another, briefly, from the corner of his eye. He studied the woods around him. The transparent skin-husks were everywhere, staring fiercely into the twilight from their perches, all small grim ghosts. "These are the things that get Janacek so upset, aren't they?" he asked.

Gwen nodded. "The spooks are a pest on Kimdiss, but here they've really found their element. They blend perfectly with the chokers, and they can move through the tangles faster than anything I've ever seen. We studied them pretty thoroughly. They're cleaning out the forests. In time, they would kill off all the game and starve themselves to death, but they won't have time. The shield will fail before that, and the cold will come." She moved her shoulders in a tiny, weary shrug, and rested her forearm on a low-drooping limb. Their coveralls had long ago become the same dirty yellow color as the woods around them, but her sleeve slid up and back as she brushed the branch, and Dirk saw the dull sheen of silver-and-jade gleaming against the choker.

"Is there much animal life left?"

"Enough," she said. Pale red light made the silver strange. "Not as much as there used to be, of course. Most of the wildlife has deserted the home forest. Those woods are dying, and the animals know it. But the outworld trees are sterner, somehow. Where the forests of the Fringe were planted you'll find life, still strong, still hanging on. The chokers, the ghost trees, the blue widowers—they'll flourish right until the end.

And they'll have their tenants, old and new, until the cold comes." Gwen moved her arm idly, this way and that, and the armlet winked at him, screamed at him. Bond and reminder and denial, all at once, love sworn in silver-and-jade. And he had only a small whisperjewel, shaped like a tear and full of memories. But fading. "Let's go back," he told Gwen. "This place depresses me."

He got no argument. They found a clear spot away from the chokers that pressed around them, a place to spread the tissue-metal of their scoots. Then they rose together for the long flight back to Larteyn.

CHAPTER THREE

They raced again above the mountains, and Dirk did better this time, losing by less than he had before, but the improvement did not lighten his mood. For most of the trip they flew in silence, apart, Gwen meters ahead of him. Their backs were to the Wheel of Fire as they went, and Gwen was a witch-figure vague against the sky and always out of reach. The melancholy of Worlorn's forests had seeped into his flesh, and he saw Gwen through tainted eyes, a doll figure in a suit as faded as despair, her hair oily with red light. She was not his Jenny, was not and never had been.

The gray manta aircar and the green war machine were both gone from the rooftop lot when they reached Larteyn. Only Ruark's yellow teardrop was unmoved. They landed nearby and left the sky-scoots and flight boots out on the roof where they removed them.

In his rooms at the base of the tower, Arkin Ruark was waiting patiently. Dirk found a recliner amidst the pastel walls and sculpture and the potted Kimdissi plants. He reclined, wanting only to rest and not to think, but Ruark was there, thrusting a tall green glass into his hand. He drank, and the wine was very cold, incense and cinnamon down his throat.

"Utter tired you look, Dirk," the Kimdissi said, after he had found a drink of his own and seated himself.

"A long day," he replied noncommittally.

"Truth," Ruark agreed. "A day of Kavalars, heh, *always* long. Sweet Gwen and Jaantony and last Garsey, enough to make any day last forever. What do you say?"

Dirk said nothing.

"But now," Ruark said, smiling. "You have seen. Me, I wanted that, for you to see. Before I told you. But I was sworn to tell you, yes, a swearing to myself. Gwen, she has told me—we talk, you know, as friends, and I have known her and Jaan too since Avalon. But here we've grown closer. She cannot talk of it easily, ever, but she talks to me, or has, and I can tell you. Not violating trust. You are the one to know, I think."

The drink sent icy fingers down

into his chest, and Dirk felt his weariness lifting. It seemed as if he had been half-asleep, as if Ruark had been talking for a long time and he had missed it all. "What are you talking about?" he said. "What should I know?"

"Why Gwen needs you," Ruark said. "Why she sent . . . the thing. The red tear. You know. I know. She has told me."

Suddenly Dirk was quite alert. "She told you," he began.

"You must help her, Dirk t'Larien, somehow, I don't know."

"Help her *how*?"

"To be free. To escape."

Dirk set his drink down and scratched his head. "Who?"

"Them. The Kavalars."

He frowned. "Jaan, you mean? I met him this morning, him and Janacek. She *loves* Jaan. What . . . ?"

Ruark laughed, sucked from his drink, laughed again.

"Loves him, yes, she said that?" Ruark said. "You are sure of it, are you? Well?"

Dirk hesitated, trying to remember her words, when they had talked by the still green lake. "I'm not sure," he said. "But something to that effect. She is his—what was it—"

"*Betheyn*?" Ruark suggested.

Dirk nodded. "Yes, *betheyn*, wife."

Ruark chuckled. "No, utter wrong. In the car, I listened, Gwen said it wrong. Well, not really, but you took the wrong impression. *Betheyn* is not wife. Part truth the biggest lie of all, remember? What do you think *teyn* is?"

The word stopped him. *Teyn*. He had heard the word a hundred times on Worlorn. "Friend?" he guessed, not knowing what it meant.

"*Betheyn* is more of wife than *teyn* is friend," Ruark said. "Learn the outworlds better, Dirk. No. *Betheyn* is woman-to-man word in Old Kavalar, for a heldwife bound by jade-and-silver. Now, there can be much affection in jade-and-silver, much love, yes. Though, you know, the word used for that, the standard Terran word, there is no like word in Old Kavalar. Interesting, eh? Can they love without a word for it, t'Larien friend?"

Dirk did not reply. Ruark shrugged and drank and continued. "Well, no matter, but think of it. I spoke of jade-and-silver, and yes, often the Kavalars have love in that bond, love from *betheyn*-to-highbond, from highbond-to-*betheyn* sometimes. Or liking, if not love. But not always, and not necessarily! You see?"

Dirk shook his head.

"Kavalar bonds are custom and obligation," Ruark said, leaning forward very intently, "with love latecoming accident. Violent folk, I told you. Read history, read legends. Gwen met Jaan on Avalon, you know, and she did not read. Not enough. He was Jaan Vikary of High Kavalaan, and what was that, some planet? She never knew. Truth. So their liking grew—call it love, perhaps—and sex happens and he offers

her jade-and-silver wrought in his pattern, and suddenly she is *betheyn* to him, still not quite knowing. Trapped."

"Trapped? How trapped?"

"Read history! The violence of High Kavalaan is long past, the culture is unchanged. Gwen is *betheyn* to Jaan Vikary, *betheyn* held-wife, his wife, yes, his lover, and more. Property and slave, she is that too, and gift. She is his gift to Ironjade Gathering, with her he bought his highnames, yes. She must have children if he orders, whether she wishes or no. She must take Garse as lover also, whether she wishes or no. If Jaan dies in duel with a man of a holdfast other than Ironjade, a Braith or a Redsteel, Gwen passes to that man like baggage, property—to become his *betheyn*, or mere *eyn-kethi* if the victor already wears jade-and-silver. If Jaan dies of natural causes, or in duel with another Ironjade, Gwen goes to Garse, her will in the matter is no concern, who cares that she hates him?—not the Kavalars. And when Garsey dies, eh? Well, when that time comes, she is *eyn-kethi*, holdfast breeder, degraded forever, free to use for any of the *kethi*. That last meaning holdfast-brothers, more or less, the men of the family. Ironjade Gathering is all huge family, thousands and thousands of family, and any can have her. What did she call Jaan, husband? No. Jailer. That is what he is, he and Garse, loving jailers maybe if you think such can love truly as you or I would. Jaantony honors our Gwen, and should, for he is high-Ironjade now, she is his *betheyn*-gift, and if she dies or leaves him, he is fre-Ironjade, an old man, mocked, empty-armed, without voice in council. But he slaves her, does not love her, and she is years after Avalon now, older and wiser, and now she knows."

Dirk hesitated. "He doesn't love her, then?"

"As you love your property, so a highbond and his *betheyn*. It is a tight bond, jade-and-silver, never to be broken, but it is a bond of obligation and possession. No love. That is elsewhere, if the Kavalars have it at all, to be found in chosen-brother, the shield and soulmate and lover and warrior-twin, the ever-loyal bringer-of-pleasure and taker-of-blows and lifter-of-pain, the lifetime strong-bond."

"*Teyn*," Dirk said, a little numbly, his mind racing ahead.

"*Teyn*!" Ruark nodded. "The Kavalars, all violent as they are, have great poetry. Much celebrates the *teyn*, the bond of iron-and-glowstone, none the jade-and-silver."

"You are saying," Dirk began, "that she and Jaan don't love each other, that Gwen is a slave. Yet she doesn't leave?"

Ruark's chubby blond face was flushed. "*Leave*? Utter nonsense! They would only force her back. A highbond must keep and protect his *betheyn*. And kill the one who tries to steal her."

"And she sent the jewel to me so that . . ."

"Gwen talks to me, I know. What other hope has she? The Kavalars? Jaantony has twice killed in duels, no Kavalar would touch her, and what good if they did? Me? Am I a hope?" His soft hands swept down his body, and he dismissed himself in contempt. "You, t'Larien, *you* are Gwen's hope. You who loved her once."

Dirk heard his own voice, as if from far away. "I still love her."

"Good. I think, you know, that Gwen . . . though she would never *say* it, yet I think . . . she, too, still feels. As she did. As she never has for Jaantony Riv Wolf high-Ironjade Vikary."

" . . . no insult is intended," Vikary was saying. "You are not a fool, Lorimaar, but in this I think you act foolishly."

Dirk froze in the doorway, the door he had opened without thinking swinging away before him. All of them turned to regard him, four pairs of eyes, Vikary's last and not until he had finished what he was saying. Gwen had told him to come up to breakfast when they had parted the night before, and this was the correct time, just shortly after dawn. But the scene was not one he had expected to enter.

There were four of them in the cavernous living room. Gwen, hair unbrushed and eyes full of sleep, was seated on the edge of the low wood-and-leather couch that stretched in front of the fireplace and its gargoyle guards. Garse Janacek stood just behind her, with his arms crossed and a frown on his face, while Vikary and a stranger confronted each other by the mantle. All three of the men were dressed formally, and armed.

The newcomer, the stranger, was the first to address Dirk. His back was to the door, but he turned when the others looked up, and frowned. Taller by a head than either Vikary or Janacek, he towered over Dirk, even at a distance of several meters. His skin was a hard brown, very dark against the milk-white suit he wore beneath the pleated folds of a violet half-cape. Gray hair, shot through with white, fell to his broad shoulders, and his eyes—flints of obsidian set in a brown face with a hundred lines and wrinkles—were not friendly. Neither was his voice. He looked Dirk over quickly, then said, very simply, "Get out."

"What?"

"I said get out," the giant in white repeated. Like Vikary, both of his forearms were bare to display the bracelets, the almost-twins of jade-and-silver on his left arm and iron-and-fire on his right. But the patterns and settings of the stranger's armlets were very different. The only thing that was the same, exactly, was the gun on his hip.

Vikary folded his arms, just as Janacek had already folded his. "This is my place, Lorimaar high-Braith. You have no right to be rude

to those who come at my invitation."

"An invitation you yourself lack, Braith," Janacek added, with a tiny venomous smile.

Vikary looked over at his *teyn*, shook his head sharply and vigorously. *No.*

"I come to you in high grievance, Jaantony high-Ironjade, with serious talking to do," the white Kavalar rumbled. "Must we treat before an offworlder? A mockman, for all I know."

Vikary's voice was quiet but stern when he replied. "We are done dealing, friend. I've told you my answer. My *betheyn* has my protection, and the Kimdissi, and this man too,"—he indicated Dirk with a wave of his hand, then folded his arms again—"and if you take any among these, then prepare to take me."

Janacek smiled. "He is no mockman either," the gaunt red-bearded Kavalar said. "This is Dirk t'Larien, *korariel* of Ironjade, whether you like it or no." Janacek turned very slightly in Dirk's direction, and indicated the stranger in white. "t'Larien, this is Lorimaar Reln Winterfox high-Braith Arkellor."

"A neighbor of ours," Gwen said from the couch, speaking for the first time. "He lives in Larteyn too."

"Far from you, Ironjades," the other Kavalar said. He was not happy. His black eyes, full of cold anger, moved from one of them to the next before coming to rest on Vikary. "You are younger than I, Jaantony high-Ironjade, and your *teyn* younger still, and I would not willingly go to face you and yours in duel. Yet code has its demands, as you know, and I, and neither of us should venture too far. You young highbonds oft press that line closely, I feel, and the highbonds of Ironjade most of all, and . . ."

"And I most of all the highbonds of Ironjade," Vikary said.

Arkellor shook his head. "Once, when I was but an unweaned child in the holdfasts of Braith, it was duel to so much as interrupt another, as you have done now to me. Truly, the old ways have gone. The men of High Kavalaan turn soft before my eyes."

"You think me soft?" Vikary asked quietly.

"Yes and no, high-Ironjade. You are a strange one. You have a hardness none can deny, and that is good, but Avalon has put the stench of the mockman on you, touched you with the weak and foolish. I do not like your *betheyn*-bitch, and I do not like your 'friends'. Would that I were younger. I would come at you in fury and teach you again the old wisdoms of the holdfast, the things that you forget so easily."

"Do you call us to duel?" Janacek said. "You speak strongly."

Vikary unfolded his arms and waved casually with his hand. "No, Garse. Lorimaar high-Braith does not call us to duel. Do you, friend, highbond?"

Arkellor waited several heartbeats

too long before his answer came. "No," he said. "No, Jaantony high-Ironjade, no insult is intended."

"And none is taken," Vikary said, smiling.

The Braith highbond did not smile. "Good fortunes," he said, begrudging it. He went to the door in long strides, pausing only long enough to let Dirk step hurriedly aside, then proceeding out and up towards the roof stairs.

Janacek, with a frown and a shake of his head, turned and left quickly for another room. Gwen rose, pale and looking shaken, and Vikary took a step toward Dirk.

"That was not a good thing for you to witness," the Kavalar said. "But perhaps it will be enlightening to you. Still, I regret your presence. I would not have you think of High Kavalaan as the Kimdissi do."

"I didn't understand," Dirk said. Vikary put an arm around his shoulder and drew him off toward the dining room, Gwen just behind them. "What was he talking about?"

"Ah, much. I will explain. But I must tell you a second regret also, that your promised breakfast is not set and ready for you." He smiled.

"I can wait." They went into the dining room and sat, Gwen still silent and troubled. "What did Garse call me?" Dirk asked. "*Kora*-something, what does that mean?"

Vikary appeared hesitant. "The word is *korariel*. It is an Old Kavalar word. Its meanings have changed over the centuries. Today, here in this place, when used by Garse or myself, it means protected. Protected by us, protected by Ironjade."

"That is what you would like it to mean, Jaan," Gwen said. "Tell him the real meaning!"

Vikary crossed his arms and his eyes went from one of them to the other. "Very well, Gwen, if you wish it." He turned to Dirk. "The full, older meaning is 'protected property'. I can only hope you do not take insult at this. None is intended. *Korariel* is a word for people not part of a holdfast, yet still guarded and valued."

Dirk remembered the things Ruark had told him, the words dimly perceived through a haze of green wine. He felt anger creeping like a red tide up his neck, and fought to hold it down. "I am not accustomed to being property," he said bitingly, "no matter how highly valued. And who are you supposed to be protecting me *against*?"

"Lorimaar and his *teyn* Saanel," Vikary said. He leaned forward across the table, and took Dirk's arm in a powerful grip. "Garse used the word perhaps too hastily, t'Larien, yet to him it no doubt seemed right at that moment, an old word for an old concept, wrong—yes, I can recognize the wrongness—wrong in that you are a human, a person, no one's property. Yet it was an apt word to use to one like Lorimaar high-Braith, who understands such things and little else. If it disturbs you so greatly,

as I know the concept disturbs Gwen, then I am grievously sorry my *teyn* used it."

"Well," Dirk said, trying to be reasonable, "I thank you for the apology, but who is Lorimaar? And why do I have to be protected against him?"

Vikary sighed and released Dirk's arm. "It will not be a simple matter to answer your question. I must tell you of the history of my people, a little that I know and much that I have guessed." He turned to Gwen. "We can eat while we talk, if no one objects. Will you bring food?"

She nodded and left, returning several minutes later carrying a tray piled with black bread and cheese and hard-cooked eggs in bright blue shells. Vikary talked while the others ate.

"High Kavalaan has been a violent world," he said. "It is the oldest outworld except for the Forgotten Colony, and all its long histories are histories of struggle. Sadly, those histories are also largely fabrication and legend, full of ethnocentric lies. Yet these tales were believed right up until the time that the starships came again, following the interregnum.

"In the holdfasts of the Ironjade Gathering, for example, boys were taught that the universe has only thirty stars, and High Kavalaan is its center. Mankind originated there, when Kay Iron-Smith and his *teyn* Roland Wolf-Jade were born of a mating between a volcano and a thunderstorm. They walked steaming from the lips of the volcano into a world full of demons and monsters, and for many years they wandered far and near, having various adventures. At last they came across a deep cave beneath a mountain, and inside they found a dozen women, the first women in the world. The women were afraid of the demons and would not come out. So Kay and Roland stayed, seizing the women roughly and making them *eyn-kethi*. The cave became their holdfast, the women birthed them many sons, and thus began Kavalar civilization.

"The path upward was no easy one, the stories say. The boys born of the *eyn-kethi* were all the seed of Kay or Roland, hot-tempered and strong-willed. There were many quarrels. One son, the wily John Coal-Black, habitually killed his *kethi*, his holdfast-brothers, in fits of envy because he could not hunt as well as they. Then, hoping to gain some of their skill, he fell to eating their bodies. Roland found him engaged in such a feast one day, and chased the child across the hills, beating him with a great flail. Afterwards John did not return to Ironjade, but started his own holdfast in a coal mine, and took to *teyn* a demon. That was the origin of the cannibal highbonds of the Deep Coal Dwellings.

"Other holdfasts were founded in like manner, although the Ironjade histories give the other rebels a good deal more credit than Black John. Shan the Swordsman, for example, was a good strong boy, who left with

his *teyn* and *betheyn* after a violent fight with Kay, who would not respect his silver-and-jade. Shan was the founder of the Shanagate Holding. Ironjade recognizes his line as fully human, and always did. So it was with most of the great holdfasts. Those that died out, like the Deep Coal Dwellings, fared less well in the legends.

"Those legends are quite extensive, and many are enlightening. There is the tale of the disobedient *kethi*, as an instance—the first Ironjades knew that the only fit home for a man was deep under rock, a fastness in stone, a cave or a mine. Yet those who came later did not believe; the plains looked open and inviting to their naive eyes. So they went out, with *eyn-kethi* and children, and erected tall cities. That was their folly. Fires fell from the sky to destroy them, melting the towers they had thrown up, burning the city-men, sending the survivors fleeing underground where the flames could not reach. And when their *eyn-kethi* gave them births, the children were demons. Sometimes they ate their way free of the womb."

Vikary paused. Dirk, almost finished with his breakfast, pushed a few crumbs of cheese aimlessly across his plate, and frowned. "This is all fascinating," he said, "but I don't see the relevance, I'm afraid."

Vikary took a quick bite of cheese. "Be patient," he said.

"I can speed things up a little," Gwen said dryly. "Dirk, the histories of the four surviving holdfast-coalitions differ in many respects, but there are two great events on which they agree. All of them have a version of that last story—the burning of the cities. It is called the Time of Fire and Demons. A later story, the Sorrowing Plague, is also repeated virtually word-for-word in every holdfast."

"Truth," Vikary said. "These stories—these were the only accounts of ancient days that I was given to work with. By the time of my birth, no sane Kavalar believed any of this—"

Gwen coughed politely.

Vikary smiled. "Yes, Gwen corrects me," he said. "*Few* sane Kavalars believed any of this." He went on. "Yet the doubters had nothing else to believe, no alternate truth to adhere to. Most of them did not particularly care. When star travel resumed, and the Wolfmen and Toberians and later the Kimdissi came to High Kavalaan, they found us eager to learn the lost arts of technology, and that is what they taught us in return for our gems and heavy metals. Soon we had starships, but still no history." He smiled. "*I* found what truth we now have during my studies on Avalon. It was little enough, and yet sufficient. Hidden in the great databanks of the Academy, I found records of the original colonization of High Kavalaan.

"It was fairly late in the Double War. A group of settlers left from Tara for a world beyond the Tempt-

er's Veil, where they hoped to find safety from the Hrangans and the Hrangan slave-races. For a time they did. They discovered a planet harsh and strange, yet rich—quickly they built a high-level colony, based on mining operations. There are records of trade between Tara and the colony for about twenty years, then the planet beyond the Veil abruptly vanishes from human history. Tara hardly noticed. Those were the cruelest years of the war."

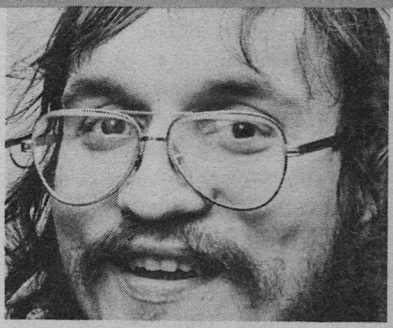
"And you think the planet was High Kavalaan?" Dirk asked.

"It is known for a fact," Vikary replied. "The coordinates match, and other fascinating pieces of data as well. The colony was named Cavanaugh. Perhaps even more intriguing, the leader of the first expedition was a starship captain named Kay Smith. A woman."

Gwen smiled at that.

"There was something else I discovered as well," Vikary continued, "quite by chance. You must remember that most of the outworlds were never involved in the Double War—the Fringe civilizations are children of the collapse, or even post-collapse. No Kavalar had ever seen a Hrangan, much less any of the slave-races. I had not, until I came to Avalon and grew interested in the broader aspects of human history.

George R. R. Martin



A class A chess player, George "Railroad" Martin spent much of his waking time on the game until fairly recently. He was deeply immersed in the chess world, organizing and running chess tournaments in Chicago and the midwest. In science fiction writing, he advanced to master class in 1975, receiving a Hugo for his novella "A Song for Lya" at the World Science Fiction Convention in Australia.

Early in his writing career, George submitted an article on chess to Analog, "The Computer Was A Fish," (August 1972), which the astounded editor discovered read like a real-life enactment of a story by another chess playing writer. Fritz Leiber's "The 64 Square Madhouse" was actually inspired by the same achievements of computer intelligence that Martin treated factually.

Now living in Dubuque, Iowa, and married to a girl who has been a science fiction fan since her early teens, George spends much less time "pushing wood" and a lot more at the typewriter. AFTER THE FESTIVAL, simultaneously his first Analog serial and first novel, begins in this issue.

Jay Kay Klein's **BIOLOG**

Then, in one account of the conflict in the jambles, I lucked upon illustrations of the various semisentient slaves the Hrangans used as shock troops on worlds they did not deem worthy of their own immediate attention: the nocturnal Hruun, heavy-gravity warriors of immense strength and savagery, who see well into the infrared; winged dactyloids, who got their name from some chance resemblance to a beast of human prehistory; worst of all, the *githyanki*, the soulsucks, with their terrible psionic powers. I looked at the illustrations I had found for a long time. Finally, *finally*, I puzzled out the truth. The Hruun, the dactyloids, the *githyanki*—each bore a vague semblance to the gargoyles that sit at the door of every Kavalar holdfast. They were the demons of our myth-cycles, Dirk!"

Vikary stood up and began to pace slowly up and down the length of the room, still talking, his voice even and controlled, his excitement showing only in the act of pacing itself. "When Gwen and I returned to Ironjade I put forward my theory, based on the old legends, the *Demonsong* cycle of the great poet-adventurer Jamis-Lion Taal, and on the Academy data-banks. Consider its truth. The colony Cavanaugh stands, with its cities on the plains and its far-flung mining operations. The Hrangans level the cities with a nuclear bombardment. Survivors live only in the deep shelters and out in the wild, in the mines. To make the planet their own, the Hrangans also land contingents of their slave-races. Then they depart, not to return for a century. The mines become the first holdfasts. Their cities gone, the miners revert to a more primitive level of technology, and soon establish a rigid survival-oriented culture. For endless generations they war against the slave-races and against each other. At the same time, beneath the radioactive ruins of the cities, human mutations begin to arise . . ."

Now Dirk stood up. "Jaan," he said.

Vikary stopped his pacing, turned, frowned.

"I have been very damn patient," Dirk said. "I understand that all this is of great concern to you. But I want some answers and I want them now. Who is Lorimaar? And why do I have to be protected against him?"

Gwen rose too. "Dirk," she said, "Jaan is only giving you the background you need to understand. Don't be so—"

"No!" Vikary quieted her with a wave of his hand. "No, t'Larien is correct, I grow too enthusiastic whenever I speak of these matters." To Dirk: "I will answer you directly, then. Lorimaar is a very traditional Kavalar, so traditional that he is out of place even on High Kavalaan itself. He is a creature of another age. Do you recall yesterday morning, when I gave you my pin to wear, and Garse and I both expressed concern about your safety after dark?"

Dirk nodded. His hand went up and touched the small pin, still snugly fastened to his collar. "Yes."

"Lorimaar high-Braith and others like him were the cause of our concern, t'Larien. The reasons are not easy to tell."

"Let me," Gwen said. "Dirk, listen. The highbond Kavalars, the holdfast folk, always respected each other throughout the centuries—oh, they fought and warred, so much that some twenty-odd holdfasts and coalitions were destroyed utterly, leaving only the four survivors of modern times—still, they recognized each other as human, subject to the rules of highwar and the code duello. But the others—solitary people in the mountains, people under the cities, farmers—those are just guesses, mine and Jaan's, but the point is such people *did* exist, survivors outside the holdfasts—those the highbonds would not recognize as men and women. Jaan left something out of all that history, you see—you remember all that about the slave-races and three corresponding demons of Kavalar myth? Well, the only problem with that is there are three slave-races, but *four* kinds of demons. The worst and most evil demons of all were the mockmen."

Dirk frowned. "Mockmen. Lorimaar called me a mockman. I thought it was something like not-man, more or less."

"No," Gwen said. "Not-man is a common term, mockmen are unique to High Kavalaan. Shape-changers, the legends say, weres and liars. They can wear any form, but most often that of men, and they want to infiltrate the holdfasts. Inside, disguised as humans, they can secretly strike and kill.

"Those other survivors—the farmers and the mountain families and the mutants and the unlucky, the *other* humans on Cavanaugh—*those* were the mockmen, the werefolk. They were not allowed to surrender, the rules of highwar did not apply. The Kavalars exterminated them, never trusting any to be human. They were alien animals. After centuries, those that remained were hunted for sport—the holdfast men always hunted in pairs, *teyn*-and-*teyn*, so each could swear to the humanity of the other when they returned."

Dirk looked aghast. "Does this still go on?"

Gwen shrugged. "Seldom. Modern Kavalars admit the sins of their history. Even before the starships came, the Ironjade Gathering and Redsteel had banned the taking of mockmen. The hunters had a custom—when they did not wish to kill a mockman immediately, for whatever reason, but wanted him as their personal prey later, they would brand him *korariel*, and no one else would touch him under penalty of duel. The Ironjade and Redsteel *kethi* went out and ran down all the mockmen they could, set them up in villages and tried to bring them back to civilization from the savagery they

had fallen into. All they caught they named *korariel.* There was a brief highwar over it, Ironjade against Shanagate. Ironjade won, and *korariel* took on a new meaning, protected property."

"And Lorimaar?" Dirk demanded. "How does he fit in?"

She smiled wickedly, for a second reminding him of Janacek. "In any culture, a few diehards remained, true believers and fundamentalists. Braith is the most conservative coalition, and about a tenth of them—Jaan's estimate—still believe in mockmen. Mostly hunters, who *want* to believe. Lorimaar and his *teyn* and a handful of his *kethi* are here to hunt. The game is more varied than on High Kavalaan, and no one enforces any game laws. In fact, there are no laws. The Festival pacts ended long ago. Lorimaar can kill anything he wants to."

"Including humans," Dirk said.

"If they can find them," she said. "Larteyn has twenty citizens, I believe—twenty-one with you. Us, and a poet named Kirak Redsteel Cavis who lives in an old watchtower, and a pair of legitimate hunters from Shanagate. The rest are Braiths. Hunting mockmen, and other game when they can't find mockmen. A generation older than Jaan, chiefly, and quite bloodthirsty—except for a few illicit mankills in the Lameraan Hills, they know nothing of the old hunts except the legends. All of them are bursting with tradition and frustration."

"And this goes on? No one does anything?"

Jaan Vikary crossed his arms. "I have a confession to make, t'Larien," he said gravely. "We lied to you yesterday, Garse and I, when you asked us why we are here. In truth, I was the one who lied. Garse told at least the partial truth—we must protect Gwen. She is an offworlder, no Kavalar, and the Braiths would gladly kill her for a mockman without the shield of Ironjade. The same is true for Arkin Ruark, who knows nothing of this, not even that he has our protection. Yet he does. He too is *korariel* of Ironjade.

"Our reasons for being here go beyond that, however. It was vital that I leave High Kavalaan at the time I did. When I took on my highnames and published my theories, I became at once very powerful and celebrated in highbond council, and very hated. Many religious men took personal insult from my contention that Kay Iron-Smith was a woman. I was challenged six times on that account alone. I was not willing to let this go on. At my urging, the Ironjade council dispatched Gwen on her project.

"Yet at the same time, I became aware of Lorimaar's activity here. He had already taken his first trophy, and word had come back to Braith and spread to us. Garse and I discussed the matter and determined to stop it. The situation is explosive in the extreme. If the Kimdissi should learn that the Kavalars are

hunting mockmen again, they would gladly spread the news to all the outworlds. There is little love lost between Kimdiss and High Kavalaan, as you may know. We do not fear the Kimdissi themselves, who espouse a religion and a philosophy as nonviolent as the Emereli. Other Fringe worlds are more dangerous. The Wolfmen are always volatile and erratic, the Toberians might end their trade agreements if they learn that Kavalars are hunting their laggardly tourists. Perhaps even Avalon would turn against us, should the news go beyond the Veil, and we would be barred from the Academy. Lorimaar and his fellows do not care, and the holdfast councils can do nothing. They have no authority here. Thus Garse and I act against the Braith hunters alone.

"Up to now, it has not come to open conflict. We travel as widely as we can, visiting each of the cities, searching for those who remain on Worlorn. Any we find we make *korariel*. We have found only a few—a wild child lost during the Festival, a few lingering Wolfmen in Haapala's City, an ironhorn hunter from Tara. To each I give a token of my esteem"—he smiled—"a little black iron pin, shaped like a banshee. It is a proximity beacon, to warn a hunter who gets too close. Should they touch any wearing such a pin, any of my *korariel*, it would be a dueling offense. Lorimaar may rant and rage, but he will not duel us. It would be his death."

"I see," said Dirk. He reached up to his collar, unfastened the little iron pin, and tossed it on the table amid the remains of their breakfast. "Well, that's lovely, but you can have your little pin. I am nobody's property. I've been taking care of myself for a long time, and I can keep on taking care of myself."

Vikary frowned. "Gwen," he said, "can you not convince him that it would be safer if—"

"No," she said sharply. "I appreciate what you are trying to do, Jaan, you know that. But I understand Dirk's feelings. I don't like being protected either, and I refuse to be property." Her voice was curt, decisive.

Vikary regarded them helplessly. "Very well," he said. He picked up Dirk's discarded pin. "I should tell you something, t'Larien. This morning Lorimaar high-Braith came to me in grievance, because the previous day he had come across likely game while hunting with his *teyn*, and had been prevented from taking that game.

"The prey he sought was a man on a sky-scoot, flying alone above the mountains." He held up the banshee-shaped pin. "Without this," he said, "he would have forced you down, run you through the wilderness, and finally killed you." He put the pin into his pocket, stared at Dirk meaningfully for a minute, and left them.

TO BE CONTINUED

THE LEGAL RIGHTS OF EXTRA

When an alien lands on the White House lawn, who should greet him (her? it?): someone from the Immigration and Naturalization Service, or someone from the Fish and Wildlife Commission?

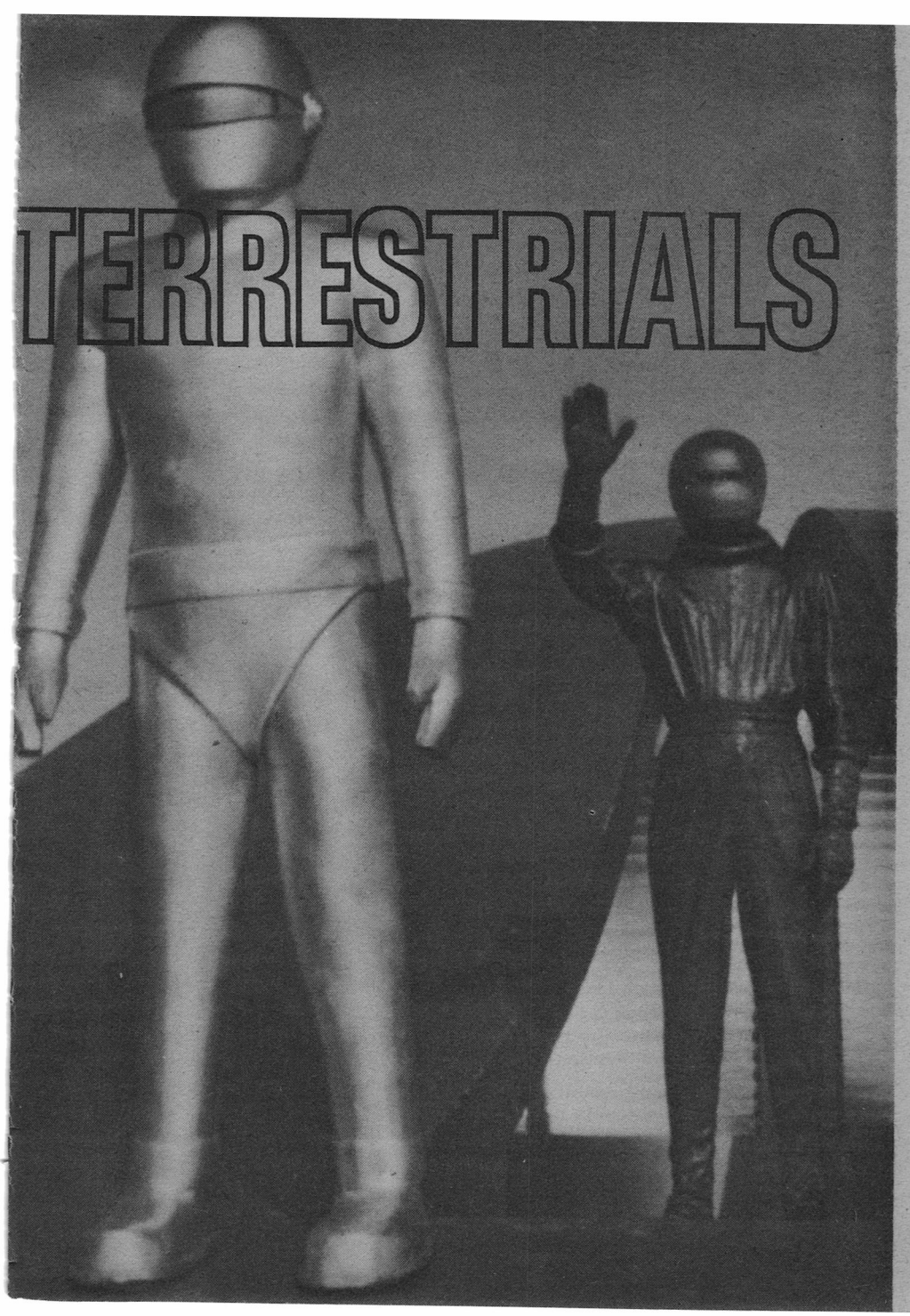
Robert A. Freitas, Jr.

How, one might ask, can an extraterrestrial (ET) visitor have any rights at all? The ET is not a member of our society, our species, or our planet. And, loosely speaking, these three qualifications are the most fundamental bases for justice under modern human law. Must we then sadly admit that any ET visitor must necessarily remain totally rightless?

In the most general sense, a right is a power or privilege, a fair claim of freedom of action inherent in one person as against all other persons. It may be based upon any one of a variety of legal theories, ranging from the doctrine of natural rights ("equal and inalienable rights of all members of the human family") and civil rights (equality of treatment for all inhabitants), to civil liberties or legal rights created by law and dependent upon the existence of civilized society (as opposed to natural rights).

In practice, it has proven exceedingly difficult to apply the doctrine of natural rights. In this country, as elsewhere, there exist no *absolute* privileges for any individual. There is no justice in a legal vacuum or state of anarchy.

Rights must therefore be defined by law. That is, the value society places on a particular right (through its laws) may be measured by the complexity of procedure and burden of proof that must be borne—to destroy it. While one's driver's license can be revoked rather easily, the right of a person to his life is very highly valued by society, and can only be wrested away by substantial


TERRESTRIALS

justification before several batteries of juries and appellate courts.

If rights are defined by law, then to whom are rights of various kinds accorded under American jurisprudence? In general, both our Constitution and our statutes speak of "persons" as the entities to whom rights may accrue. Nonpersons, such as animals, trees, rocks and machines, have no rights and are treated as property. Property may not bring legal actions on its own behalf, although the human owner of property may do so to recover his own losses. (Private groups and governmental authorities can also initiate lawsuits against an owner for misuse of his property, such as in nuisance or animal cruelty cases. But the reparation rarely flows to the benefit of the property itself.)

The history of the scope of protection and legal rights in general is most illuminating. In *The Descent of Man* (1871), Charles Darwin pointed out that among primitive tribal states it was widely accepted behavior to commit what we would regard as serious crimes (robbery, murder) against strangers or innocent travelers. As an example, he cited the "North-American Indian . . . [who] is well-pleased with himself and honored by others, when he scalps a man of another tribe. . . . In a rude state of civilization the robbery of strangers is generally considered as honorable."

The tales of Homer tell us that Odysseus, returning home after the Trojan wars, summarily executed at least a dozen of his slave girls—for suspected "misbehavior" in his absence. At that time, slave girls were regarded as mere property, possessed of no rights whatsoever. As one commentator put it, "the disposal of property was . . . a matter of expediency, not of right and wrong."

In early Roman times prior to the introduction of Justinian law, a father retained *jus vitae necisque*—the right of life and death—over his children. Male parents could banish or execute their children, or sell them into slavery. Children (nonadult humans) were thus not legal persons, in our modern understanding of the term.

More recently, certain other classes of humans have had less than complete rights under American law. For instance, in the well known *Dred Scott v. Sanborn* (1857) case, Supreme Court Justice Roger B. Taney wrote with solemn judicial punctilio that blacks were "a subordinate and inferior class of beings, who had been subjugated by the dominant race." A Virginia court (one year later) articulated this position with even greater clarity: "So far as civil rights and relations are concerned, the slave is not a person but a thing." Hence, little more than a century ago in this country, human beings of a particular race were deemed nonpersons (and therefore mere property) in the eyes of the law.

Over the years, the status of personhood has gradually been ex-

tended to include blacks, children, women, aliens (foreigners) and prisoners, and has come to signify in most recent times a "human being." But it should be noted that in each case it was a long, hard battle to extend rights to any new class of entities. It will be no different in the case of the extraterrestrial.

On the other hand, there are a few liberal trends on the horizon. The law has long recognized that groups of humans—such as corporations and municipalities—may be considered as legal persons for some purposes. A corporation is sometimes referred to as a "citizen" of a country, though in reality it is just a fictitious entity. Also, there are many groups working for an increase in the rights of animals. (While enforcement remains a problem, dolphins and other marine mammals may be killed only in very well-defined and specific situations under federal law.) And at least one jurist has suggested that trees and rivers be granted a measure of legal personhood.

There is ample material to construct either a liberal or a conservative view of the ET visitor under American law. In any *prima impressionis* situation, the legislators and courts must draw upon all arguments available to them. But we must bear in mind that the law is primarily a product of social problems and conflicts. If there are few problems, there is little law. Hence, there is not and cannot be any body of substantive doctrine to direct us in assessing the rights of the ET.

There are, however, a few basic guidelines that have been established. "Metalaw" is that branch of theoretical law which deals with a generalized *jus naturale* (natural law) relating to all sentient beings, be they on Earth or on other worlds.

Metalaw Today

How *should* we treat extraterrestrial visitors? This fundamental ethical question must first be dealt with before we may address ourselves to their rights under the law. As we sift through the mountains of philosophical and sacred writings which represent our species' collective anthropocentric wisdom, we find the

so-called "Golden Rule" cropping up again and again. For example: "What is hateful to thyself, do not unto thy neighbor" (Babylonian Talmud); "A man should treat all living creatures as he himself would be treated" (Sutra-Kritanga); "You must expect to be treated by others as you have treated them" (Seneca); "Do naught to others which if done to thee would cause thee pain" (Hindu Mahabharata 5.1517); "We should behave to friends as we would wish friends to behave to us" (Aristotle); "Hurt not others with that which pains yourself" (Buddhist Udanavarga 5.18); and, of course, "As you wish men to do to you, so also do you to them" (Christian Bible, Luke vi. 31). Should we, then, apply the Golden Rule in dealing with sentient extraterrestrial beings?

The world's first space lawyer, the late Andrew G. Haley, addressed just this question at the Seventh International Astronautical Conference in Rome (September 17-22, 1956). The Washington D.C. attorney stated that Metalaw, defined as "the law governing the rights of intelligent beings of different natures and existing in an indefinite number of different frameworks of natural laws," would require a different moral basis than present earthly law.

The Golden Rule, Haley observed, is starkly anthropocentric. It promotes as a standard of ethical behavior the subjective needs and wishes of humans. In his paper "Space Law and Metalaw—A Synoptic View," he pointed out that to treat other sentient creatures as *we* would desire to be treated might well mean their destruction. There is no equitable or ethical basis by which we may be allowed to impose our values on ETs. Instead, we must find out how *they* wish and require us to treat them.

Haley framed the Great Rule of Metalaw in a deceptively simple form: *Do unto others as they would have you do unto them.* This is the only way to ensure justice for beings that are "scarcely imaginable." Absolute equity is the only principle of the laws of mankind that we should permit ourselves to project into our considerations of intelligent extraterrestrial life forms. The Great Rule preserves this principle, by granting individual sovereignty to each sentient race in the cosmos.

What of the possibility of malevolent ETs? Surely we must violate the Great Rule and ruthlessly defend ourselves at all costs? Haley argued not unconvincingly that virtually all extraterrestrial civilizations will either be inferior to us by a fair margin, or will be far superior technologically. (This is also the finding of modern exobiological theory.) Of the inferior ones, we should have little trouble physically restraining them from doing us harm. Of the superior ones, they should have no fear of us whatsoever and will most likely treat us with benevolence as a result.

This is, of course, an old argument—and not fully satisfying, since

it solves the problem by defining it away. The solution to our dilemma lies in the Great Rule itself and the principle of absolute equality. Each set of facts must be examined on its own merits. More specifically, we should authorize the use of "reasonable force" in dealing with less-than-benevolent ET visitors: Just enough force to restrain them from damaging us, but only exactly that much, and no more.

The next great leap forward in the development of Metalaw occurred in 1970, with the publication of the first full-length book on the subject. *Relations with Alien Intelligences*, written by the Austrian jurist Dr. Ernst Fasan, represents an excellent attempt to evolve a sophisticated set of metalaws consistent with *jus naturale*. Dr. Fasan relies on a theory of absolute equity in the form of an ethical "litmus test"—the Categorical Imperative, as proposed by the 18th century German philosopher Immanuel Kant.

In Kant's own terminology, the Imperative proposes a moral axiom which is true *a priori* for every sentient being: "Act in such a way that the maxim of your will can at the same time always be valid as a principle of general legislation." In other words, when considering a particular course of conduct, judge whether or not it is desirable that it become a general rule. For instance, if one contemplates murder, he should ask: "Would it be desirable for everyone to murder?" Clearly it would not, since acceptance of this proposition would lead to the death of the murderer himself!

Using the Categorical Imperative, the Great Rule, and a few very basic assumptions about the character of the extraterrestrial creature (alive, three-dimensional and physically detectable, intelligent and possessing a "will to live"), Dr. Fasan derives eleven fundamental metalaws of general validity. In descending order of importance, they are:

(1) No partner of Metalaw may demand an impossibility.

(2) No rule of Metalaw must be complied with when compliance would result in the practical suicide of the obligated race.

(3) All intelligent races of the universe have in principle equal rights and values.

(4) Every partner of Metalaw has the right of self-determination.

(5) Any act which causes harm to another race must be avoided.

(6) Every race is entitled to its own living space.

(7) Every race has the right to defend itself against any harmful act performed by another race.

(8) The principle of preserving one race has priority over the development of another race.

(9) In case of damage, the damager must restore the integrity of the damaged party.

(10) Metalegal agreements and treaties must be kept.

(11) To help the other race by one's own activities is not a legal but

a basic ethical principle.

Unfortunately, these fine metalegal concepts have not found their way into American law. Fasan's metalaws provide an elaborate ethical-legal superstructure upon which practical statutes and juridical decisions may eventually be constructed. But the rules do not now have the force of law—hence, they are not *directly* applicable to the early phases of first contact on planet Earth. What will our government, and our present legal system, do in a first contact situation?

First Contact Jurisdiction

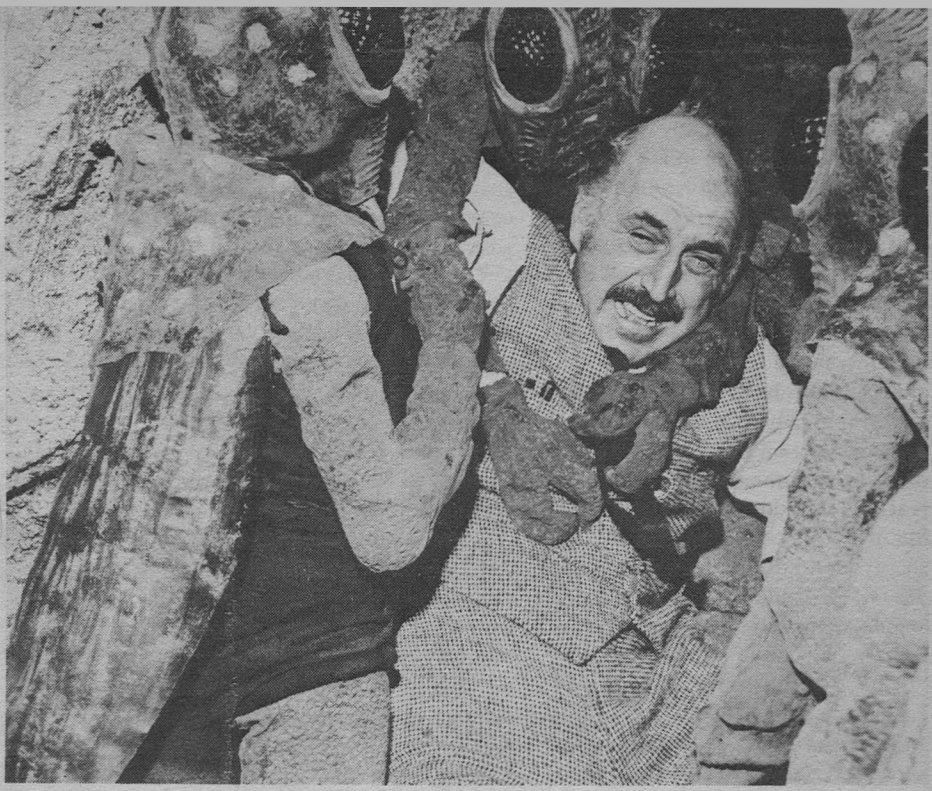
There are innumerable ways in which first contact may occur. Relations may take place with the whole extraterrestrial race, or with representative organizations of their race, or with individual members. Similarly, interaction may occur with all of humanity, a part of humanity, or single persons. The scenario frequently discussed by exobiologists involving radiotelescope communication would be a case of race meeting race. Murray Leinster's science fiction classic "First Contact" is an example of a meeting between two representative organizations—a subgroup within each race.

Contact may also be classified according to the intensity of interaction. Remote Contact, probably the safest method, would involve interstellar or galactic radio links. Direct Contact might entail a well-publicized (authorized) landing at an Air Force base, with clear prior notice given us by the ETs—or perhaps an arranged rendezvous on the Moon. The most dangerous and controversial of all, however, is Surprise Contact—a sudden confrontation without warning or advance preparation.

Let us analyze such a case of Surprise Contact: A single extraterrestrial visitor, landed in a relatively conspicuous location (park, open field, etc.) in a typical state.

First of all, unless the ET is buzzing houses in his spacecraft, has a grossly nonhuman appearance, or it wreaking destruction far and wide, his presence may actually go unnoticed for quite some time. But eventually a passing motorist or pedestrian will spot the creature, who perhaps is garbed in a spacesuit or other unconventional attire. The local police station will receive a report of a strange creature roaming the streets.

Since local authorities get mountains of cranks calls, they probably won't dispatch a patrol unit until several reports have been received or until the ET inadvertently maims someone. The police cruiser will arrive at the scene shortly thereafter. Depending on the alienness of the extraterrestrial, the policemen may suspect a prankster at first (as has happened many times!), until the creature either reveals its primary physiological differences or displays command of superior technology.



When the long-awaited "first contact" with an alien race takes place, things just might not go exactly the way we planned!

If a large crowd has gathered, the ET may be in trouble. There are cases on record of crowds mobbing and killing "admitted space beings" (who were really human pranksters, as it turned out). The officers will immediately call in local reinforcements, which should arrive in ten minutes or less. The county sheriff will also be notified, as well as the State Police or Highway Patrol—these groups will dutifully respond within twenty minutes, but will make no decisions.

The police will also quickly alert the local Civil Defense authorities; from there the buck passes swiftly up through the county Civil Defense office to the state Civil Defense office, at which point the governor of the state will be apprised of the situation. He has the authority to declare a state of emergency or invasion and call out the National Guard (state militia) for assistance.

The militia maintains local bases equipped with jeeps, tanks, and cannons, should these be required.

The Guard can probably be mobilized and on the scene in less than an hour to assist in the apprehension and detention of the extraterrestrial, and in crowd and riot control. The governor, in the meantime, will have notified the Federal Department of Defense, and, of course, the President.

The Defense Department will place the Army Area Commander in immediate charge of maintaining order, and the local Air Force and Naval District authorities will probably also enter the picture, but with clearly subordinate roles. Pending direct Presidential orders, the Army commander remains in temporary control.

The President will undoubtedly notify Congress immediately, calling an emergency session to obtain legislative direction. But it is important to realize that, on his own, the President already possesses sweeping authority should he care to exercise it. A vigorous, "expansionist" Chief Executive would be likely to assume far greater personal control than a more passive, wait-and-see President. The personality of the man in the White House may therefore be a decisive factor in the early stages of first contact.

The United States is presently in a state of national emergency. (It has been continuously since the early 1930s!) This fact is not generally known or appreciated by the public. The Presidential proclamations of national emergency issued under Roosevelt (1933), Truman (1950), and Nixon (1970, 1971) were not terminated when the crises that spawned them had passed. Our country remains under four separate active declarations of emergency.

This means that broad Presidential authority is available to dispose of the ET as the Chief Executive sees fit. Another declaration of national emergency could also be forthcoming at this point. But even if the President *does* assert full, immediate control, considerable confusion will still result.

Federal agencies will jockey for jurisdiction, based on entwining statutes and overlapping authority that would put a Gordian knot to shame. The CIA and FBI, suspicious of the possibility of a foreign hoax and the dangers to national security caused thereby, may try to intervene at the holding area and assert some influence of their own. Even more important, they will be trying to protect the ET—a potentially valuable military resource—from foreign agents, saboteurs, kidnappers and assassins. (The entire American defense establishment will probably be placed on full alert status.) The Treasury Department, also suspecting a hoax and fearing for the President's life, may try to get into the act by sending in Secret Service agents to verify the authenticity of the ET. Of course, Army Intelligence, Naval Intelligence, Air Force Intelligence, and the Defense Intelligence Agency will all be vying for power as well.

The Public Health Service, under

the Department of Health, Education and Welfare (HEW), will want to establish local quarantine and detention authority under 42 U.S.C. §264 et seq of the Federal Code. (The Department of Agriculture may try a similar trick under 21 U.S.C. §101 et seq, if they argue that the extraterrestrial is an animal and not a "person"—see discussion below). The Attorney General, under 8 U.S.C. §1222, has the legal authority to order immigrations officers to "temporarily detain" the ET in contemplation of deportation proceedings. And naturally, the Department of Transportation will be anxiously searching for the space traveler's vehicle, as will the military and various intelligence agencies.

A host of civilian organizations will clamor to be heard, probably within hours of first contact. The SPCA, Humane Society and other animal protection groups will want assurances that the ET is receiving "adequate housing, ample food and water, reasonable handling, decent sanitation, sufficient ventilation, shelter from extremes of weather and temperature" and so forth, as required by the "Animal Welfare Act" (7 U.S.C. §2131 et seq, as amended to include any warm-blooded animal used for "laboratory purposes") and state animal cruelty laws. NASA will probably have some complaints to make, along with the National Academy of Sciences, assorted astronomical and zoological societies, and many other scientific groups. And, sooner or later, the United Nations will get wind of the "capture." Although the UN has no real authority within domestic borders, vehemently unfavorable world opinion could easily be roused to a fever pitch.

My point is simply this: Our federal laws provide no clear and unambiguous legal direction. Without the leadership of a strong President, tremendous confusion and jurisdictional squabbles will erupt almost instantly. And we have assumed a rather passive, obeisant extraterrestrial. If he is in any sense more active, there could be fearful and unfortunate complications.

The creature will at last be safely in military custody, under very heavy guard and probably under quarantine. (I suspect a contingency plan lies dusty in some half-forgotten Pentagon file.) As for his future legal rights, our visitor must await a final adjudication by Congress.

Animal or Person?

As suggested earlier, an entity cannot be said to hold legal rights unless some judicial or administrative body is authorized to review the actions of those who threaten to usurp those rights. Futhermore, most of our laws, codes, statutes and constitutions afford rights only to "persons." The distinction between animals and persons is therefore of critical importance.

The strict legal definition of

"animal" is: " Any living being, not a human, endowed with the power of voluntary motion." The ET is clearly not a member of the species *Homo sapiens*, and is therefore nonhuman. He does, however, appear capable of voluntary motion. Hence, a rebuttable presumption of animalhood will arise; the ET will be considered a legal animal by default!

There are several kinds of animals. Under Roman law all animals were considered *ferae nature* (wild animals)—they were regarded as common property having no owner. As the law developed, and animals began to play more important roles in society, the courts created a second class, *domitae naturae* (domesticated animals). These were further subdivided into "generous" (of commercial value to man—cows, sheep, and other herbivores) and those of "base nature" (animals not useful for work—household dogs, cats, etc.). Domestic animals can be the subject of ownership, and can therefore be *estrays* (a kind of wandering property). Estrays may be impounded as public nuisances and destroyed after thirty days if no owner makes a claim.

If the ET visitor is to be regarded as an animal, he will undoubtedly be classified as *ferae naturae*, no proof of tameness or ownership being evident. A wild animal running loose on private property may be hunted and killed, and thus reduced to personal possession. Such an animal on federal lands is subject to the Department of the Interior's Fish and Wildlife Commission; on state lands, it is subject to the state's department of fish and game. Either authority may declare a "special open season on said game," or the department itself may destroy the animal causing damage to property.

Even if the extraterrestrial is somehow regarded as being tame, his position is not improved. The fact that animal cruelty laws exist in virtually all states does not alter the creature's basic rightlessness. Also, most cruelty statutes specifically exclude invertebrate animals. If our ET resembles a cross between a sea scorpion and a grasshopper, he'll be out of luck!

The whole idea of treating the extraterrestrial visitor as an animal may seem outrageous to many at first, but this is the letter, if not the spirit, of the law. We've seen that human beings have often been denied the elementary status of personhood. (It should come as no surprise that in the thirteenth century, a law was passed in England proclaiming humans of the Jewish faith to be "men *ferae naturae*, protected by a quasi-forest law. Like the roe and the deer, they form an order apart.")

But with a little luck we can chart a course to legal personhood for the ET. This may best be accomplished by demonstrating the wider implications of humanness. While some may myopically argue that the essence of humanity is strictly defined by the

human genome, the sounder view is that the essence of man is mind—the rationality of a sentient organism. Attempts to articulate this elusive characteristic have included "mental ductility," "ability to transmit culture," "ability to fashion tools," "ability to symbol," "predisposition to learn from experience," and "self-awareness."

Raw intellect is not enough, however, to qualify one for personhood. Dolphins and whales, elephants, dogs, pigs, and other animals are able to demonstrate surprisingly high intelligence in certain situations—and the law doesn't consider them legal persons. Yet infants, drugged people, insane or retarded people, all are considered legal persons, though their mental faculties may be practically nonexistent. Intelligence is perhaps a necessary, but not sufficient, condition for personhood.

High technology is not good enough either. Although *they* have visited *us*, and so possess superior technology *a priori*, this does not presuppose the existence of intelligence. For instance, it is possible that a society of antlike creatures could develop a technology without any single member possessing independent intelligence.

In his book *Persons—A Study of Possible Moral Agents in the Universe*, Dr. Roland Puccetti, Professor of Philosophy at the University of Singapore, proposes another kind of test for personhood. The basic assumption—and it is a persuasive one—is that "moral persons" should also be considered "legal persons." The Puccetti Test thus asks the following of the extraterrestrial: Can he take a moral attitude? Alternatively, is he capable of making moral judgments? If so, if he possesses some system of ethics, Puccetti would class him as a moral and legal person. (Puccetti allows that intelligent machines could be considered persons using this test—a perfectly acceptable result.)

If the ET visitor can pass the Puccetti Test, and demonstrates his intelligence, Congress would doubtless be justified in granting him legal personhood under our laws.

Extraterrestrial Persons

In ancient and medieval times, as well as in primitive tribal states, the general tendency was to view the foreigner as an outlaw, criminal, or enemy. The *jus gentium* (the equitable law of nations) of the Romans, and the unity of all humans promoted by Christianity ("You shall have but one law for alien and native alike." Leviticus xxiv. 22), helped to encourage a greater universality of attitude. However, it was not until modern times that the legal alien acquired significant rights under law.

As far as basic rights for the extraterrestrial visitor are concerned, once he has been declared a legal person he has crossed the most fundamental juridic threshold. Our Constitution speaks of the rights of "people" and

"persons," and the 14th Amendment extends this mantle of protection into state jurisdictions as well. Hence, any person physically present within the borders of our country will be protected by the Bill of Rights—whether citizen, alien, or extraterrestrial.

As far as the specifics of classification are concerned, there are many ways to judicially view the ET. For example, he may be considered a refugee. A refugee is a technically stateless person—he is neither citizen (or national) nor subject of any foreign government on Earth. One definition of the refugee is as follows: "Any person uprooted from his home, who has crossed a frontier—natural or artificial—and looks for protection and sustenance to a government other than his former one." This seems to fit the extraterrestrial rather well!

In many foreign countries, where the United Nations Convention relating to the Status of Stateless Persons is operative, refugees are guaranteed minimal legal rights commensurate with foreign nationals. In the United States, however, even stateless persons are protected by the Bill of Rights.

Another way the ET may be viewed is as an alien, defined as "any person owing allegiance to a foreign government." The home planet of the extraterrestrial is certainly "foreign," in a very broad sense, and so the ET may be classified accordingly.

There are several kinds of aliens. An *illegal alien* is one who has entered the country illegally, without passing through the normal channels of admission (i.e., the U. S. Immigration and Naturalization Service, under the Department of Justice). Our extraterrestrial has certainly made an illegal entry, and theoretically should be subject to immediate deportation proceedings. But a decision to "deport" the ET would create more problems than it would solve.

Another kind of alien is the *alien enemy* (a citizen of some hostile foreign power). If the President proclaims that the landing of the ET is a prelude to or threat of invasion and war, he is authorized under 50 U.S.C. §21 to order a federal marshal to "apprehend, restrain, secure and remove" all alien enemies. This course of action seems unlikely in the extreme, since the creature is already in Army custody and, in a practical sense, cannot be "removed" (deported—where?).

A way around the immigration problem is to classify the ET as an *essential alien.* 50 U.S.C. §403h provides that, with the concurrence of the Director of the CIA, the Attorney General, and the Commissioner of Immigration, any alien deemed "essential to the furtherance of the national intelligence mission" or vital to the interests of national security may be admitted for permanent residence (and ultimately naturalization and citizenship) without regard to admission procedures. This

would seem quite possible in the case of the extraterrestrial, since a major foreign policy consideration will be the creature's advanced technology. Any nation on Earth in possession of the visitor and his hardware would theoretically gain a significant psychological and military advantage.

The ET might also be classed simply as an *alien amy*—a friendly alien. Although this normally requires proper immigration, there are ways around this rule. *Alien crewmen* of foreign vessels, and *aliens in transit,* are exempt because their stay in the country is very temporary. If the ET visitor is viewed as having entered the country for "business or pleasure," or as a "bona fide student, scholar, specialist, or leader in a field of specialized knowledge or skill," he is again exempt under 8 U.S.C. §1101 as a *visiting alien.*

Another distant possibility is the granting of ambassadorial status to the extraterrestrial. As a full diplomat, the ET would serve as the representative of his own government while on Earth. (Diplomats have full immunity from prosecution.) Or the ET may be seen only as a consul, a mere commercial agent for his government, entitling him to fewer immunities. Normally, however, there must be diplomatic reciprocity before a foreign envoy of any kind is afforded ambassadorial rank. Since we know nothing of the extraterrestrial government, such unilateral diplomatic relations are highly improbable.

As a last resort (in my view the wiser course), Congress may decide to entirely junk the above anthropocentric pigeonholes. A new legal classification might be created—the "pseudoperson"—which grants the ET a measure of rights and responsibilities in keeping with the basic principles of Metalaw. At long last, *jus naturale*, galactic consciousness and universal equity may find a home in American jurisprudence.

References

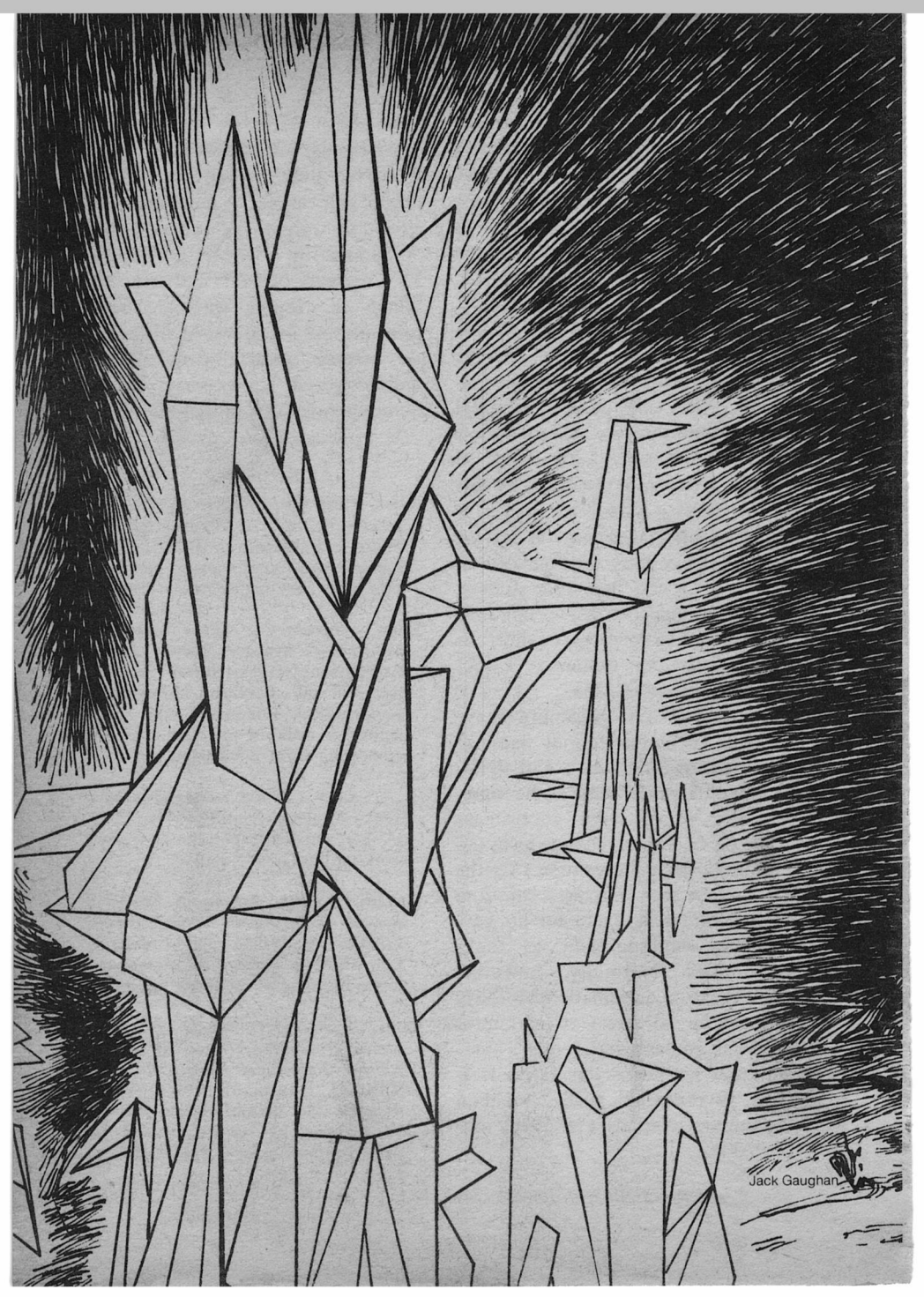
Fasan, Ernst. *Relations with Alien Intelligences.* Berlin-Verlag: Arno Spitz, 1 Berlin 33, Ehrenbergstrafse 29, 1970. (A sophisticated formulation of metalegal principles—very highly recommended.)

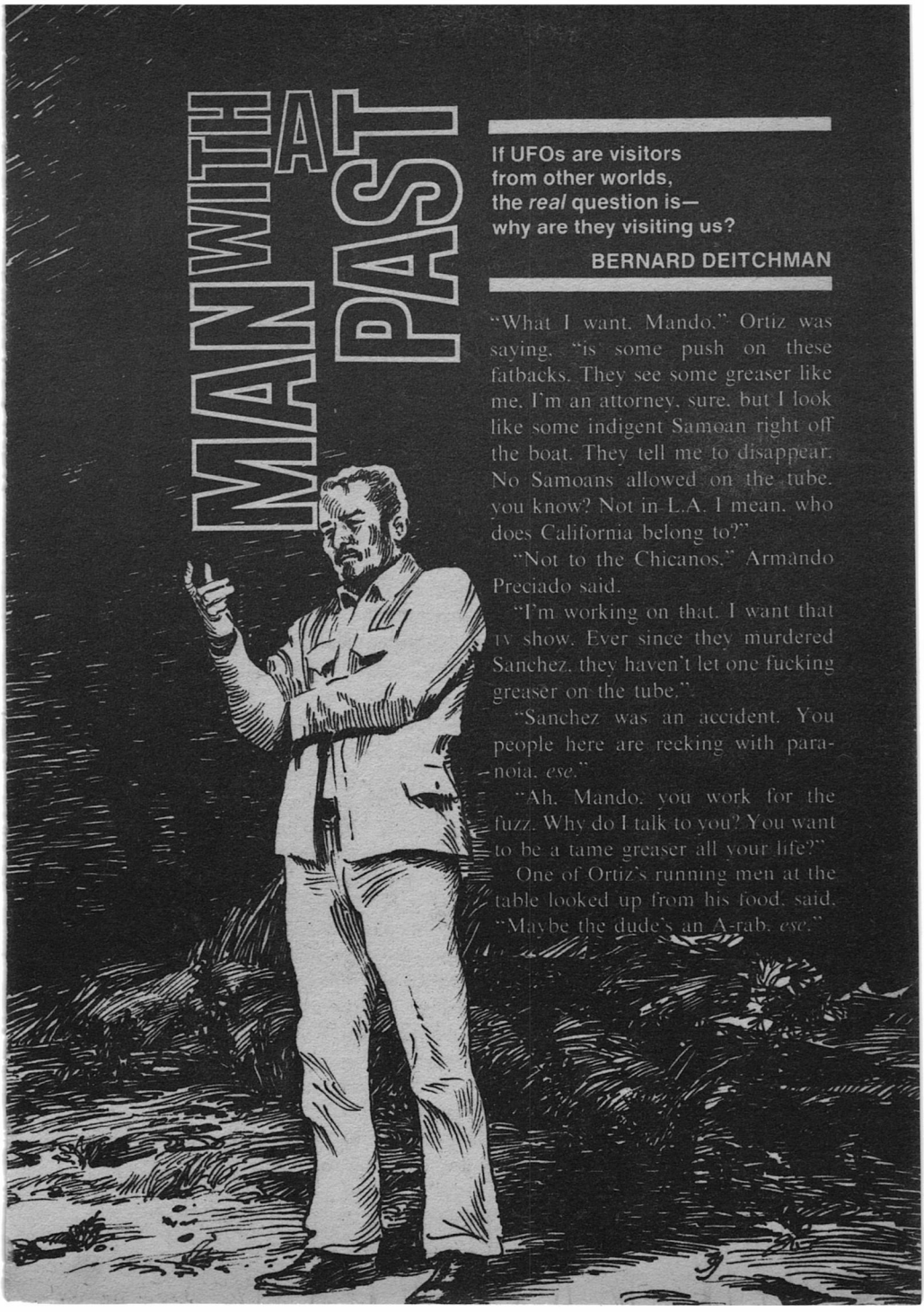
Haley, Andrew G. "Space Law and Metalaw—A Synoptic View." Rome: Associazione Italiana Razzi, Proceedings of the Seventh International Astronautical Congress, 1956. (The landmark work in the field—the first pioneering effort in Metalaw.)

_____ *Space Law and Government.* New York: Appleton-Century-Crofts, 1963. (A more detailed exposition of Haley's work on the Great Rule.)

Puccetti, Roland. *Persons—A Study of Possible Moral Agents in the Universe.* London: Macmillan and Company, Ltd., 1968. (A study of the ethical and moral meaning of the term "person.")

Stone, Christopher D. *Should Trees Have Standing? Toward Legal Rights for Natural Objects.* Los Altos, California: William Kaufmann, Inc., 1974. (Suggests that natural objects, and the environment in general, should be treated as having legal rights.) ■


Jack Gaughan



If UFOs are visitors from other worlds, the *real* question is— why are they visiting us?

BERNARD DEITCHMAN

"What I want, Mando," Ortiz was saying, "is some push on these fatbacks. They see some greaser like me, I'm an attorney, sure, but I look like some indigent Samoan right off the boat. They tell me to disappear. No Samoans allowed on the tube, you know? Not in L.A. I mean, who does California belong to?"

"Not to the Chicanos," Armando Preciado said.

"I'm working on that. I want that tv show. Ever since they murdered Sanchez, they haven't let one fucking greaser on the tube."

"Sanchez was an accident. You people here are reeking with paranoia, *ese*."

"Ah, Mando, you work for the fuzz. Why do I talk to you? You want to be a tame greaser all your life?"

One of Ortiz's running men at the table looked up from his food, said, "Maybe the dude's an A-rab, *ese*."

"Might be. But he's all we got right now. Sam Yorty ain't here to preach revolution to us."

Ortiz dug into his Manuel Special, a giant burrito that sagged off the plate at both ends. Preciado watched him eat. Ortiz was an immense brown man whose gut spilled out from under his T-shirt, who really was an attorney, and who had seen the inside of several jails for not behaving like one.

"*Ese*, I've got no influence with the TV stations. They know my name, but it doesn't mean much to them. Besides, why would they want an announcer who has been arrested for a half-dozen felonies, who is liable to say the damnedest, most libelous racist bullshit imaginable right on the air?"

"I was never convicted," Ortiz said serenely. "I'm an attorney, I still got my license to steal."

Behind them, the door had opened and closed. A new customer had come into El Tepeyac. Preciado and Ortiz did not look around, but one of the running men looked up, looked again, said, "Hey, *ese*. Stone fuzz."

Ortiz and Preciado looked around, across the tiny, crowded restaurant. Preciado saw a large, sandy-haired man standing by the door, apparently trying to decide how to reach their table.

"What now, *ese*?" Preciado said.

"Nothing, Mando, but nothing. I'm clean."

The man squeezed between tables, muttering apologies. He ignored Ortiz and his running men when he reached the table. "Mr. Preciado? Your secretary said you'd be here. I'm Agent Freeman, FBI."

"Oh, shit, Mando!" Ortiz said. "You mean I'm going to be busted for having lunch with a crooked cop?"

"Mr. Ortiz," Freeman said.

"You know me?"

"Seen your picture. But I'm not here to bust anybody."

"What do you want?" Preciado said.

"It's about your son. You want to talk here?"

"No, outside. Be right back, *ese*."

"Sure, Mando, I've heard that before. You need a good attorney, I'm between cases."

Outside the restaurant, Preciado and Freeman walked past the line of people waiting to get into El Tepeyac. On a street corner they talked.

"When's the last time you saw your son?"

"Friday afternoon. Carlos said he might be out of town for the Corporation. He didn't say how long."

"He was supposed to check in every day by phone. They haven't heard from him since Saturday, and today his car was found on a back road near Paso Robles. We can't find Carlos."

"I see. Can you tell me what he was working on?"

"Everything the Corporation does is covered by national security."

SCIENCE FICTION BUFFS! FANTASY FANS! DUNGEONS & DRAGONS ENTHUSIASTS! TSR NOW BRINGS YOU...

METAMORPHOSIS ALPHA

SCIENCE FICTION ROLE-PLAYING GAME

Have you ever encountered a moose with quills? Or a teleporting woodpecker with a double brain and a poison beak? How about a nearly invincible jaguar, complete with the ability to change its body density and emit a sonic shriek, but which fears birds? These are but a small sampling of the mutations which could inhabit the many worlds of METAMORPHOSIS ALPHA.

A vast starship, a virtual world in itself, carrying colonists, livestock, and the flora and fauna of Terra is struck by a cloud of an unknown form of radiation while enroute to a distant star. Chaos reigns when the radiation kills most of the crew, and in the ensuing madness the knowledge of what the ship is and where its destination lies is lost to the survivors -- and there are many survivors. Intelligent mutated animals and plants now populate the vessel, and these compete or perhaps cooperate with the humans aboard.

In METAMORPHOSIS ALPHA, you are aboard the stricken starship and struggling to survive, trying to gain knowledge of the strange devices and mechanical apparatus of the vessel, attempting to learn the secrets of the strange "world" you inhabit. As a player, you may be a human or mutant -- human or otherwise. Your course is up to your skill and imagination.

METAMORPHOSIS ALPHA IS A ROLE-PLAYING GAME IN THE GRAND TRADITION OF DUNGEONS & DRAGONS. IF YOU ENJOY THE WORLDS OF MEDIEVAL SWORDS AND SORCERY, YOU WILL LOVE WHAT YOU FIND IN THE FANTASTIC AND FASCINATING WORLDS OF SCIENCE FICTION.

Available at better hobby and book stores everywhere, or order direct

$5.00 postpaid

Also available are polyhedra dice for unique random number generation and usable with METAMORPHOSIS ALPHA!

Set of two 20-sided dice for generating numbers 01 through 00 (100) at only $1.50

Set of five dice: one each 4-, 6-, 8-, 12-, and 20-sided for all random numbers $2.50

And to find out the latest on fantasy games subscribe to THE DRAGON - the magazine of Fantasy, Swords & Sorcery and Science Fiction Gaming and Fiction. This bi-monthly publication is printed on glossy paper, with exterior and interior color. THE DRAGON contains the best in articles and stories by top-name gaming and literary authors.

TSR HOBBIES, INC.
P. O. BOX 756
LAKE GENEVA, WI 53147

Send check or money order to:

TSR HOBBIES, INC.
P.O.B. 756, Dept. AN
Lake Geneva, WI 53147

- ☐ METAMORPHOSIS ALPHA — $5.00
  Science Fiction Role-Playing Game
- ☐ POLYHEDRA DICE Set of Five — $2.50
- ☐ PERCENTILE DICE Set of Two — $1.50
- ☐ THE DRAGON — $9.00
  Six issues of the magazine of fantasy, Swords & Sorcery, and Science Fiction Gaming and Fiction.
- ☐ COMPLETE CATALOG — $2.00
  Games, rules, miniature figures and accessories for wargaming. Price refundable with first order for $10.00 or more of miniature figures.

Name _____

Address _____

City _____ State _____ Zip _____

Overseas: Write for address of local distributor.

"I know, but I wondered if it was sensitive enough to be dangerous."

Freeman sighed. "To be honest, Mr. Preciado, the Corporation doesn't even tell the FBI things like that. We were just told to find him, fast."

"I can't help you. I didn't even know where he was going."

"But he may contact you. Or, you might come across something he left behind that would help us. In either event, call me." He gave Preciado a card with his name and three telephone numbers on it.

Freeman walked away, and Preciado started back to the restaurant to finish his meal and try to dissuade Ortiz from dynamiting television stations or threatening to dynamite them. But his mind was on Carlos, and at the door he turned back. Let Ortiz think he had been run in by the FBI. It would save answering questions.

Preciado drove to Parker Center, where he worked with the Los Angeles Police as a Chicano community relations officer. He spent most of the afternoon at his desk. Late in the day the telephone buzzed, and his secretary said, "Mr. Alan Walters on the line."

The name was familiar, though Preciado could not immediately connect it with a face. "I'll talk to him."

There was a click, then the sound of an outside line.

"Mr. Preciado?"

"Yes."

"I don't think you'll remember me, my name is Alan Walters. I'm an investigator, we've met once or twice."

The voice connected with the name. Preciado remembered a paunchy, sloppily-dressed, whiskey-breathing detective who was said to be honest if not always punctual.

"Yes, Mr. Walters. You're the private eye. Except the eye is usually either bloodshot or half-closed."

Walters laughed. "That's me." He paused, cleared his throat. "I'm calling about your son. Is he—that is, I'm at the hospital here in Atascadero, and there's someone here I think is your son. I'm not sure, I've only seen your son a few times."

"The mental hospital at Atascadero?"

"Yeah."

"It's possible that's Carlos. He's been missing for four days. He works for one of the local think tanks, and the FBI is looking for him. They're worried about security."

"They think he came up here?"

"They found his car abandoned near Paso Robles."

"Um. This guy was picked up in Paso Robles."

"What for?"

"I'll let one of the doctors tell you about it. Hold on."

Preciado heard the telephone change hands, then a new voice came on. "Morris Goldstein, Mr. Preciado. I've been trying to get through to this patient, but without much luck. Of course, the man we have here may

not be your son at all. Could you give me a description?" Preciado pictured Carlos in his mind, told Goldstein what he saw.

"It fits. Of course, there could be any number of young men in California like that."

"The FBI found Carlos's car near Paso Robles."

"But not Carlos?"

"No."

"Then going on the assumption that this man is your son Carlos, has he ever had any sort of personality disorders before?"

"No, he always seemed normal."

"Good. That would indicate a much better chance of recovery than if he had a history of such episodes. At present he is in an acute state of paranoid schizophrenia. He's incoherent. We can't learn anything about him. He carries no identification. The police think he was robbed, but considering his delusional state, I believe he threw away anything he had that might help his imaginary enemies track him down."

"Can you describe his delusions?"

"They're very grandiose. They center around—uh, UFOs, and Carlos's place in some scheme of cosmic importance. We had a UFO sighting near Paso Robles a few weeks ago. Whether his delusions are related to that sighting, or something he saw himself, or something he only imagined he saw, I can't even guess. Is he interested in UFOs?"

"Not that I know of. But his employers might be. He works for a research corporation, and he was on the job up there, whatever the job is."

"That might be a start, for therapy. In any case, I think he should achieve a fair measure of recovery."

But don't bet on it, Preciado thought. Not if Carlos was out hunting saucers. There was more than irony in that.

"You're telling me not to worry?"

"Naturally. How soon do you think you could come up and see him? We still need a positive identification."

"I'll have to get some things out of the way here before I can take the time off. I'll try to be at the hospital by tomorrow afternoon."

"Fine."

"One other thing. When the FBI shows up—and they will, because I'm going to have to tell them about this call—they can see Carlos for purposes of identification, but they can't question him without me there. I've just appointed myself his attorney. And I don't want him taken out of your custody."

"You think they'll charge him with a crime?"

"I don't know, but I try to plan ahead."

"He's not leaving here in his present condition, don't worry about that."

"Good. See you tomorrow, Doctor."

Preciado put the telephone down, got out the card Freeman had given him, called the first number on it.

When he reached Freeman he said, "I think Carlos is in Atascadero."

"The hospital?"

"Yes, and bad off, to hear the doctor tell it."

"I'm sorry. Who is his doctor?"

"Morris Goldstein. Are you going to question Carlos?"

"I'll have to try."

"If you decide to charge him with anything, I'll be his attorney."

"Nobody said anything about a crime, Mr. Preciado," Freeman said, and then paused before he continued. "You're going to see him?"

"I'll be there tomorrow afternoon."

"All right, I'll be there waiting for you."

After the call, Preciado kept busy arranging for his absence, an absence that might turn out to be permanent. If Carlos was a wreck, Preciado knew his own life would be changed, might have to be remade completely. Why should he bother, though? What he had been waiting for grew less likely with every year that passed.

It was night when he finished his work and took the elevator to the underground garage. Stepping out of the car, he found himself in the middle of a small riot. A crowd of Chicanos was being shoved, dragged, and punched from a line of police vans and into the security elevators. At the heart of it all was Ortiz, who noticed Preciado watching.

"Hey, Mando, where the fuck are you when we need our community relations officer?" Ortiz yelled, gri-macing with anger. Then he grinned quickly.

If Ortiz no longer took his confrontations—usually intentional and for publicity's sake—with the police seriously, neither did the police. Whenever they found themselves obliged to take him into custody they knew he would be back on the street again in a few hours, and they no longer bothered Preciado with him.

"What's your complaint, Mr. Ortiz?" Preciado said.

"My rights! These pigs are trampling on my rights!" Ortiz said as he was hustled along by a Chicano officer.

Preciado watched, said nothing. Just before the elevator doors shut off his voice, Ortiz yelled, "If you need a good attorney, I'll be free after this appointment!"

In 1896 they had not been called UFOs. The lights people saw in the sky were believed to be the running lights of a wondrous new dirigible, the work of a shy inventor who tested his machine only at night, who kept his identity and base of operations secret, who dealt with the world through an attorney he trusted.

That attorney was Preciado, though Preciado had not been his name in pre-earthquake San Francisco as he carried out plans and orders for a being he now believed had created him, whole and adult, in the fall of 1896. He had been a tool

then, without past, without personal future. He knew English, knew the customs and history of the region, but he was a fake. Inside, he was nothing.

That part of his life had lasted six months. During that time he watched with detachment as sightings and rumors of sightings of the dirigible spread across the country. It was a fraud, there was no inventor, no dirigible, only the sparks and fires in the sky that accompanied the greater light of his creator as it soared through the air—what would, in a later terminology, be called a "mother ship" and its "landing craft". The purpose of this fraud was never explained to Preciado, for he was not confided in by his creator, but treated rather like a valuable machine to which explanations were not necessary. He was certain, however, that the purpose of the fraud had not been achieved when his creator vanished, leaving its agent adrift, purposeless.

Preciado read, much later, that every man creates himself. However profound this might have been for ordinary men, it was the literal truth for him. He had no idea what plans his creator might have had for him once the dirigible ploy was done, so he had to fill the hollow inside himself by whatever means he could. For a time he was a vagrant, a drifter with olive skin and passably Latin features, and he learned to think of himself as Mexican. Eventually he found work in a law office in San

Diego, after picking his name from Spanish land grant records. He became a prominent attorney under his new name. He also found that he aged very slowly, and was forced to pretend to age, die, and then reappear as his own illegitimate son to claim the legacy he had left himself.

He performed this sham twice. He doubted he could accomplish it again, not in an age of careful and accurate record-keeping. He had been fingerprinted too often to play the game a third time. When he "died" this time, he would have to move on, start over again somewhere else. Knowing this, he had become restless. He had always kept to himself, had no close friends, no

relations with women, but his restlessness gave him the notion of an heir, and he came out of his shell and eventually married, even though he had no idea what kind of genetic material he carried, or even if his reproductive organs were for anything other than show.

Carlos had been a normal child, had matured without any apparent nonhuman traits. He eased Preciado's uncertainty about the future, and when Alicia died Carlos became the only significant feature of Preciado's world. Yet Preciado never completely believed that Carlos was normal, waited always for something to go wrong. And now it had.

What sort of manifestation had Carlos seen? No matter, really. What mattered was that Carlos had gone crazy. What did that tell Preciado about the genetic material he carried? More than expected, he thought, but the idea stirring in him was not quite ready to reveal itself. He sat in his quiet living room and tried to divert his attention with the day's copy of the *Los Angeles Times*, but it bored him. He switched on the television, and was rewarded with the sight of Ortiz and his mob running amok in front of an East Los Angeles high school. Preciado watched the taped episode disinterestedly. He and Ortiz had nothing to share, even after years of make-believe. We do not really become the thing we pretend to be, Preciado thought.

What was he then? A natural ambassador, for one thing. His creator had given him an innate equanimity, made him fearless of anything or anyone exotic. Preciado needed this trait in order to deal both with his bizarre creator and with the humans he resembled. He had none of the primate fear of the stranger that hampers human relations, and he made an excellent diplomat, able to carry on negotiations between two warring camps no matter how high emotions might run. He did well in his current job.

But Carlos? Strength in one generation turned to weakness in the next. The classic example was sickle cell anemia. The recessive gene for the anemia, if inherited from only one parent, produced in the child not anemia but immunity from malaria, an excellent trait to have in the tropics, where the recessive was found in human populations. Only when the recessive was inherited from both parents did the child have anemia. Natural selection's dice game. But weakness could not turn to strength in the next generation. The double-recessive child died before adolescence. Carlos probably would not be able to pass on what he had inherited from his father.

From his father? The idea that earlier had eluded him came clear to Preciado. The father was not enough. If there was a recessive or group of recessives that made him comfortable with strangeness, then Alicia must have carried it as well for Carlos to turn out as he had. Some-

where in her family's past was another like himself, a castaway. He had always enjoyed the similarities between himself and his wife, but had been too conscious of his own uniqueness to suspect that he and Alicia were in a way related. It was more proof, if he needed it, that descriptions of UFO activity in old texts and legends were reliable. It had been going on a long time, whatever it was.

He watched the rest of the news, his thoughts on the new life he would one day have to start someplace else. It would be easy, with money, and he had that. Yet a new name could provide nothing this one had not. He would always fail to be human, and nothing would replace what he had lost, a purpose for his life.

In the first few months of his creator's absence he had expected it to return. Later, when his money ran out and he dropped the identity he had established, he could only assume he had been abandoned. But when the next series of sightings occurred, and the next and the next, and none of these mysterious lights in the sky connected with what he had been doing, he concluded that there were others like his creator, and he came to believe that these beings were in competition with each other, and that his creator's disappearance had been a result of that competition.

He never found a hint that any of these later beings was the one he missed. Contact could have been reestablished easily, if his creator had returned. It had left hidden in the sea a recorder, a machine for Preciado to use to log his activities in the event he had no contact with his creator for more than a few days. Preciado found plenty to record over the years. He took note of as many sightings as he could, the reactions and experiences of witnesses. But no one would ever hear that record. The recorder was simply the last link, just in case. . . .

He stood up and switched the television off. He picked up the first section of the paper again, and read a few paragraphs on the first page. But his attention wandered, and he stopped reading. Human affairs held no interest for him. He decided to try to sleep, in preparation for what he would see tomorrow.

Preciado sat with Agent Freeman in a darkened observation room. Beyond the one way glass was a therapy room, occupied only by Doctor Goldstein. Then Carlos came in with a male nurse. Goldstein had Carlos take a seat opposite him, and dismissed the nurse. Carlos seemed alert and tense, as if expecting danger.

Preciado and Freeman could hear the conversation by way of an intercom. Goldstein began, "What's your name?"

"Who are you?" Carlos said.

"A doctor. Who are you?"

"I can't tell you that."

"Why can't you tell me?"

"You wouldn't believe me."

"Do you know why you're here?"

"I was sent here."

"By whom?"

"The Outsiders."

"Who are the Outsiders?"

"Beings from Outside."

"From another planet?" Goldstein said.

"Maybe."

"What do they want you to do here?"

"Watch you. You're dangerous to their plans. I am the only one who can deal with you."

"Why am I dangerous to them?"

"You ask too many questions," Carlos said.

"That's my job. How is it only you can deal with me?"

"I have invented a weapon more terrible than anything ever seen on Earth. I am bargaining with the Outsiders, to sell it to them, in return for . . . Only my weapon can stop you."

"You want to trade your weapon for what?"

Carlos sat in silence.

"You must be a widely renowned inventor."

"I am," Carlos said.

"Then I must have heard of you. What's your name?"

"Alexander Hamilton."

"The only Alexander Hamilton I know of is dead."

"He is, but there were two of us. The other one's dead too."

"Then you can't be either one."

"How do you know?"

"You aren't dead."

"How do you know?"

The conversation went on, leading no place, Goldstein's gentle questions and Carlos's answers in a monotone. Preciado said to Freeman, "What do you do now?"

"Nothing, I suppose, until these doctors can find out what happened to him. I guess I can leave. Really, I'm sorry to have to bother you and your son."

"Don't worry about it. Doctor Goldstein thinks Carlos will recover."

Soon after Freeman left, Goldstein called in the nurse, who led Carlos away. Goldstein joined Preciado in the observation room.

"If you'd like to see him, we can go to his room."

"Not yet," Preciado said. "Maybe later."

"Certainly. I realize this is hard on you."

Preciado shook his head. "Not as much as you think. I've seen worse things."

Goldstein gave him a professional stare, plainly thinking him cold, possibly considering how much that coldness might have contributed to Carlos's condition. Preciado said to himself, *Oh, it's my fault, Doctor, make no mistake about that, all my fault. But it's a bit too permanent to work out on a couch.*

"I have been giving him medication, mostly to calm him down," Goldstein said as he opened the

outer door of the room. They walked into a hallway.

"Do whatever you think necessary," Preciado said.

Goldstein stopped before the open door of his office. "Do you care what happens to your son, Mr. Preciado?"

Preciado could not answer that question, not after seeing Carlos in his present condition. Carlos was an experiment that had failed. Preciado had another question on his mind, whether or not he had the will to try the experiment again. He thought not, but what else was there for him to do?

"I am not an emotional man, Doctor."

"And a good example, I'm afraid, why treating one member of a family is seldom enough."

"Maybe if I had the time I'd let you tap my skull. If you think it would help Carlos."

"It would. I think it would also help you. As long as you're here, why don't we talk a while?"

Talk? What can I tell you? Speaking of delusions, what would you think of the story I could give you?

Goldstein went into his office. Preciado hesitated a few seconds at the door and followed him. There was someone waiting in the office anteroom, a flabby, pale man with bloodshot eyes and badly combed hair. Preciado imagined he could smell the alcohol on Walters's breath all the way across the room.

"Hello, Mr. Preciado," Walters said, standing up to shake hands.

"Mr. Walters. Thanks for finding Carlos."

"An accident, luck."

"Maybe. What do you charge for finding missing persons?"

Walters gave it some thought, came up with a figure, and Preciado wrote him a check. Walters tried halfheartedly to refuse it.

"If you're a professional you don't work for free," Preciado said.

"Uh—okay. Thanks. That helps, the case I'm on doesn't look like it'll pay off."

"We were going to talk about the patient, Alan," Goldstein said. "You can wait out here."

"Okay." Walters sat down again, said, "Any luck with our lawyer friend?"

"Not with him directly, but something secondhand. Tell you later," Goldstein said.

The doctor's private office was somewhat bigger than a large closet. In it were a cluttered desk, three leather-covered chairs, paintings on every wall, plants, bookcases jammed full, and other books piled on the floor.

When the door was closed behind them Preciado said, "How did Walters get into this?"

"He's a friend of mine. He came by for some help on a current case. He's also a UFO buff, so we got on the subject of the Paso Robles sighting, and I told him about the patient who had delusions concerning UFOs. Walters asked to see Carlos,

and I allowed him to observe part of an interview between your son and a therapist."

"All the world is interested in UFOs it seems."

"Curiosity is a common animal trait," Goldstein said.

The conversation lagged then, started up again a few times, but never reached anything Goldstein was looking for. Finally the psychiatrist said, "You aren't stupid or uneducated, Mr. Preciado. You know better than I do what we ought to be discussing. But you won't do it. What are you afraid of?"

"Nothing, really. I can't—"

—can't break the habit, he said to himself. *Or is it a habit? After all this time, am I still loyal? Or is it something else? Could I actually tell this man the truth, if I tried? Is secrecy built in?*

"—can't see what good it would do. You'd put me in the room next to Carlos."

"You have delusions?"

"You would think they were."

"Have you ever told anyone about this?"

"No," Preciado said.

"Then I doubt you suffer from delusions. The mentally disturbed are not good at secrecy. No, not even paranoids, at least not until *after* they've seen the inside of a hospital. They they learn to keep their ideas to themselves. That's why we seem to have a better recovery rate among them than among other types of psychotics. But it's misleading."

"Suppose that I told you I was not a human being like yourself, that I was made, created, just as I am now except for a little aging, by a thing I know almost nothing about, nearly ninety years ago."

"A thing?"

"A living, intelligent being not at all like a man."

"Well. Supposing you told me that, I might ask if anyone else has ever seen this thing that created you?"

Preciado smiled. "A lot of people did, in 1896 and '97. Other people see similar things today, things they call UFOs. What they see are huge balls of light, but what else there is to these beings besides the light, whether or not they have internal structure, I couldn't say. I suppose most of them have, as my creator had, robot servants as well as androids like myself to help with their work."

"Their work? What is that?"

"A good question. My creator had me telling lies to convince people that when they saw it they were actually seeing the lights of dirigibles. What it was really up to, I don't know."

"And today the lies are about little green men from Mars?"

"Yes, if those are lies. Maybe that is something like the truth, beings from another world. But I have no memory of any place but Earth."

"No conscious memory. I wonder what you have hidden away from consciousness?"

"Probably nothing."

"I don't believe that. If you are as human as you seem, human enough to have a son, I can't believe you haven't repressed things about yourself."

"But I'm not quite human enough to have a son. Why do you think Carlos is so bad off?"

"Because of some genetic fault?"

"Yes, my fault."

"But I think he can be reached," Goldstein said. "Just as I think that whatever is in you can be reached."

"Some other time, Doctor."

"All right," Goldstein said. "What became of this thing that created you?"

"I can't tell you. It didn't meet me at a place we had arranged, and I never saw it again. There was another way it could have contacted me, through a recording device, but it never did."

"So you carried on with what you were doing?"

"For a while. Then I became this," he said, spreading his hands downward in front of himself: behold Preciado.

"That is quite a story. How do you feel down here among us mortals?"

"Empty. Useless," Preciado said. "Do you actually believe what I've told you?"

"More than I disbelieve it."

"Why?"

"Two reasons. First, I've heard the story before, but from the viewpoint of us mortals. I told you Walters is a UFO buff. He's also a man with a good memory and quick to see

patterns. He told me the story of the airships of 1896 yesterday. The reason he told me is the second reason I don't completely doubt what you've told me. You didn't happen to read the *Times* yesterday, did you?"

"No. I usually do, but I was too distracted."

"If you had, I don't think you would have told me your story. Here," Goldstein said, looking through the debris on his desk and coming up with a section from the previous day's paper. "Have a look at this."

It was the second section of the *Times*, local and state news. The item Goldstein pointed out was date-lined Paso Robles. It concerned a man who claimed to have invented an antigravity machine. The writer had been unable to meet the inventor himself, however, and apparently was not even given his name. Instead, the story had arisen from a press conference with the inventor's attorney, a man named White. White claimed the machine was operational, being tested in the mountains north of Paso Robles, and was responsible for the strange lights people had been seeing in the sky thereabouts.

"Familiar?" Goldstein said.

"Very."

"Walters was impressed because he says this sort of invention syndrome has not been associated with UFOs since 1897, when you say your creator disappeared."

"He's right."

"You think this is what you've been waiting for?"

"I don't know," Preciado said, confused. Had the recorder failed? He pressed his tongue against the roof of his mouth, and his ears were filled with a sound not actually in the room, the low roar of contact with the recorder. It was still operational, at least as far as he could test it. He pressed the switch again and the phantom sound faded out. Strange, the things in his head; what would an X-ray show?

"I should have been contacted," he said.

"If you're not making all this up."

"Then you don't believe me?"

"I never said that, did I? But you could have read the paper yesterday and lied about it."

"I could have."

Goldstein took the newspaper back, stared at it a few seconds. "But I don't think you are delusional. Either what you say actually happened, or someone has gone to a lot of trouble to make you think it did."

"Brainwashing?"

"Or something more advanced. I can think of two ways to find out which is true. One is to see what you have repressed beyond your conscious memories—"

Preciado was silent, staring at him.

"—and the other is to go UFO hunting, to see if you know as much as you say you do. In either case, it

should be helpful to you."

"How do you mean, helpful?"

"You said yourself you feel empty and useless. Whatever you are, you aren't adjusted to your life."

Preciado smiled. "I forgot I was talking to a psychiatrist. You'll give me therapy even though I'm not human?"

" 'Human' is a broad term, especially if I think you are in trouble."

"And you want to contact the being that was seen here?"

"Isn't that what you'll do as soon as you leave here?" Goldstein said.

"Yes."

"But you'd rather do it alone. Alone, you may not be able to handle what you learn about yourself."

"If this is my creator, there's no danger to me."

"And if it isn't?"

"Then nothing will matter to me any more."

"Well, after what you've told me, you're stuck with me. Either that, or tie me up and throw me in the closet and then do the same to Walters."

"I've thought of that. It doesn't appeal to me—yet."

Goldstein smiled. "Then we have a little time to work with, until it does appeal to you." He went to the door and called in Walters.

"Mr. Preciado is joining our hunt," Goldstein said. "He already knows a few things about UFOs, and he wants to find out what happened to his son."

"I can understand that," Walters said. "Welcome aboard the bus."

"Thanks. And call me Armando."

"Okay. And this is Morris, who has something to tell us, right?"

"Something. We've been trying to track down White, our inventor's attorney," Goldstein said to Preciado. "By all accounts he went up in a puff of smoke after his press conference."

"Not surprising," Preciado said.

"No, it isn't," Goldstein said. "I called Linnaea Phillips—a friend of mine who knows everything and everybody worth knowing in the county—and asked her if she'd ever heard of White. She hadn't, which is news in itself, but she is having a dinner tonight for a visiting ufologist who was at the press conference. We're invited. I think it's a place to start."

"Sure," Walters said. Preciado agreed, though his first impulse was to forget the ersatz lawyer and begin the search immediately for the UFO itself. He suppressed it, though, hoping that Goldstein's idea would give him enough information to tell if the UFO in question was indeed his creator.

They all drove to San Luis Obispo in Goldstein's car. It was sunset by the time they crossed the top of Cuesta Grade, and, through gaps in the pine and oak forest, traces of the Spanish highway were still visible at the bottom of the pass. Then the ocean fog coming in along the mountains above the city met them, and Preciado could no longer see the

road he had followed south, on horseback, in 1898.

Linnaea and Peter Phillips lived in a Victorian house in the center of San Luis Obispo. Goldstein walked right in without bothering to ring the antique doorbell. Inside, Preciado saw why: the house was crowded with people and noise and music. The bell would never have had a chance.

Linnaea Phillips was a slim, energetic woman, fair-skinned, with light-brown hair bleached in places by the sun, and eyes whose color Preciado could not quite decide on. Her eyes had a direct, inquisitive quality, and Preciado imagined she was able to analyze and catalog a person after a few words and a glance or two. Yet he had never met anyone with whom he had felt so immediately at ease, except Alicia, for after analyzing and cataloging, Linnaea made no judgments about what she found. Did she have some variant genes herself, Preciado wondered, or was he seeing ghosts?

Peter Phillips was fair like his wife, had a tennis player's tan. He surveyed the crowd in his parlor with tolerance, evidently not quite as sociable as his wife, though generous with his liquor. Only occasionally did he squint uncertainly at an unfamiliar face, wondering, Preciado thought, whether even Linnaea knew the person in question. Goldstein proved to be a valid passport, however, and Preciado and Walters were spared any puzzled looks.

"Morris mentioned your son today when he called," Linnaea was saying. "How is he?"

They were alone in the crowd for a moment. Walters had gone for a second drink and Goldstein had vanished on some errand of his own. Preciado said, "Very confused, would be one way to describe him."

"What a shame. I've always thought that if I were to meet something . . . unearthly, it would be a fantastic experience. Frightening, maybe, but awesome too."

"For the right person."

"But you'd never know until it happened," she said, "whether you were the right person or not."

"You're asking me if I'm the right person?"

"I suppose I am."

"I think I am, but I may be wrong. I hope to find out."

"I hope you succeed. And if you do—what shall I say, drop me a line?—let me know how you did it."

"That may not be possible."

She laughed gently. "Aren't you planning on coming back?"

"No."

"Then you must be positive you're the right person. Good luck. I'm sorry you don't like it much here."

Preciado was not sure just how much "here" encompassed. A great deal, if she was as perceptive as he thought.

She turned to include some others

in the conversation, and as soon as Preciado was engaged with them, she was gone. He wondered again how much they might have in common.

Presently the guest of honor, the visiting expert on aerial phenomena, John Gilliam, arrived. He was a large man, bald, wearing thick glasses. Following Linnaea through the room, he passed in front of Preciado. Preciado had never seen a double-take in real life, but Gilliam performed one when he saw Preciado. His eyebrows shot up in surprise and he said, "Mr. White?"

"No," Preciado said, looking quickly away to see where Goldstein was. He was nearby and had overheard. From his expression it was plain that he understood what Gilliam's mistake meant. Walters was beside him, had also heard.

"You are not an attorney representing a man who claims to have invented an antigravity device?" Gilliam said.

"I am an attorney, but my name is Preciado and I don't have any inventors for clients at the moment."

"I'll be damned," Gilliam said. "It's an unbelievable resemblance. But I see now that you're older than White. The light is bad in here." He started away, then looked at Preciado again. "Not much older."

"A strange coincidence," Preciado said.

"You understate things, Mr. Preciado. What's your interest in UFOs?"

"My son encountered one and went crazy," Preciado explained.

"Oh. I'm sorry. My apologies for being rude."

"I'm trying to find out what he experienced."

"Well, good luck, and if you happen to meet White along the way, you might compare geneologies."

Preciado smiled. "I'll do that."

Gilliam moved away, and Goldstein came up to Preciado and whispered, "I'm convinced."

"So am I. It was my creator Carlos saw."

"Yes. I'm convinced, but I can't believe it. Accepting you as possibly being what you say you are is one thing, but—"

"You still think I'm fit for therapy?"

"More than ever. You seem to have been replaced."

"It must think I'm dead. The recorder must be defective."

"What will it do when it finds out you're alive?" Goldstein said.

"You don't understand. That isn't my problem. My problem is to regain contact," Preciado said, and turned to see what Gilliam was doing. The expert on aerial phenomena was standing just inside the kitchen doorway, where Peter Phillips was pouring him a drink. Gilliam's eyes frequently met Preciado's across the room.

"Gilliam smells a rat, and the rat is me," Preciado said. "He's read the literature and he knows the patterns."

"What patterns?"

"Humanoid agents are often involved in UFO activity, in one way or another. They all tend to look like me and White, thin men, medium height, black hair and dark eyes, narrow dark faces, generally Latin or Arabic. If Walters were sober, he might see me for what I am too. Maybe he has anyway."

"Gilliam thinks that you and White—"

"—are working for the same 'inventor'. Or, more likely, he thinks I am White. I don't think he could have guessed the truth."

"We could always bring him along," Goldstein said, but his voice was doubtful.

"No. Even Walters is becoming a liability."

"I can't just drop him."

"We'll have to. It won't be hard, after he's had a few more drinks."

Dinner was informal. Everyone paraded through the kitchen and served himself from several steaming pots of food, and ate in the living room. A number of people had to sit on the floor. All during dinner Gilliam fielded questions, all routine until Walters, well along, slipped in, "You realize, don't you, that there is something in UFO history very much like the current episode?"

"Yes, I do, Mr.—?"

"Walters. I read about these things."

"Then I assume," Gilliam said, "that you're referring to the 1896-97 episode in the San Francisco area?"

"Only then it was dirigibles."

"And now it's antigravity," Gilliam said, with a glance at Preciado. "Somebody is trying to tell us something?"

"You could take it that way," Walters said. "But then I once met a man who claimed to be from another world, said he was one of the guardians who watch over the human race and give us nudges in the right direction from time to time. I asked him what he'd been up to lately, he said he'd been a croupier in Vegas. Some guardian, don't you think?"

This got a laugh. Gilliam said, "Then you *don't* think somebody is trying to tell—"

"I didn't say that, did I? All I meant was, there are similarities here. For example, all the advertising in 1896 was done by an attorney. Nobody ever saw the inventor, if there was one. It's possible nobody ever saw any damned dirigible, either, just a lot of funny lights in the sky that could have been anything at all. And what did that attorney really know about the whole thing?"

"What, indeed? What does Mr. White know about antigravity, do you think?"

"Who knows, but I'd like to get my hands on him and give him a good shake, see what falls out of his pockets. Like rolling a drunk," Walters said, and went into the kitchen for another drink.

"Time to leave," Preciado said to Goldstein. "How do we do it without anyone noticing?"

Goldstein glanced at a doorway.

"That leads through a bedroom to a bathroom. People will think that's where you're going. But there's also another door in the bedroom that opens on the front hallway."

"Fine. When I hit the street, I'll start north. Get out and pick me up as soon as you can."

"Walters—"

"That's why I'm leaving. I didn't like his hints. He's drunk, but not stupid."

Preciado stepped carefully through the crowd, and then into the bedroom Goldstein had pointed out. He went into the hall, to the front door, stepped outside and pulled the door shut behind him.

Walters was waiting for him in the yard.

"I know who you are."

Preciado was silent for several heartbeats. He could barely see Walters, who was standing in the shadows under a large tree, drunk but wary. Preciado said, "You ever hear of Albert Bender?"

"Yeah."

"Then you know what happened to him. Let it be a lesson to you," Preciado said. The words sounded idiotic to him, but if Walters had read as much nonsense about UFOs as he claimed, he had to have plenty of it on his mind at the moment, drunk or not. Preciado had to count on his fear.

"You sound pretty stupid, you know that?" Walters said, but his voice was unsteady.

"Then maybe I am stupid. Think what you like, but don't interfere with me."

He walked toward the street. Walters said, "I've got a gun."

"It can't hurt me," Preciado lied, with complete confidence. He had a goal now, a purpose, as he had had in the beginning. He felt powerful, in no danger from anything.

He walked through the hedge that bordered the yard, and started up the street. As he walked away from the house he could hear Walters run across the yard, and that was all. He thought Walters would go looking for Goldstein, but that was Goldstein's problem.

He covered three blocks before Goldstein's car turned the corner in front of him and pulled to the curb. Preciado got into the car and Goldstein drove across the city to Highway 101, and then north.

Paso Robles, like San Luis Obispo, was old for a city in California. While the original sections of San Luis were dominated by Victorian mansions, the heart of Paso Robles was filled with equally old but smaller frame houses with wide lawns and picket fences, a *Saturday Evening Post* vision of the good life in America at the turn of the century. Highway 101 had once gone through the town, but now it was a freeway bypassing the town to the east, and its old route—the main street—had a seedy look.

From the main street Goldstein

took the road to Lake Nacimiento. This road led them through vineyards and grazing land, past small wineries and isolated farmhouses. Deer and possums appeared along the road, caught in the headlights of the car. Once, an owl swooped down across the road.

They were quickly into the foothills of the coast mountains, and Goldstein turned at a junction marked, *Adelaida, 16 Miles*. The road they took was narrow and unpaved. It was near Adelaida, Goldstein said, that the UFO had been seen, and it was along this road that Carlos's car had been found.

Their conversation before this had centered on Preciado and his past. Goldstein kept up the pressure. He was certain that Preciado could only benefit from an examination of his background, both what he remembered consciously and what he had repressed.

"I haven't hidden anything from myself," Preciado said.

"Then it was hidden for you. You have no memory of your education. You don't know when you learned English."

"It was built in."

"You've come to believe that, but you can't prove it."

"The kind of therapy you're talking about takes time, and I don't have much time."

"There are shortcuts, electronic shortcuts," Goldstein said. "Brain stimulators are bastard children of the EEG and Penfield's work. They sense neural patterns and respond to what they sense as well. They can be hit and miss, but sometimes they can get past a block in minutes, a block it might take ordinary therapy months to locate let alone get past."

"But if my brain is constructed differently?"

"So? The stimulation is small. At worst, nothing would happen. It can't damage your brain. It's a better chance than going around half-blind to yourself."

Preciado changed the subject, aware that Goldstein had a good point. A lot of time had passed since his creator had vanished. He said, "Did you see Walters?"

"No. I looked in the kitchen once, but he wasn't there," Goldstein said. "I was afraid he'd be outside waiting for me."

"Good thing he isn't a better detective."

"He is, when he's sober."

They were well up in the mountains now. Icy air blew in past the window seal on Preciado's side of the car. He thought they must be near the crest of the range. The road flattened out, passed homes and farm buildings, then curved, and the headlights swept across the leaning, iron-rod fence of a cemetery. They were in Adelaida.

Goldstein stopped in front of a large log building warm with lighted windows. "The Adelaida Inn. It's almost a century old, mostly used by fishermen and hunters. Any good to you?"

"Probably the best we can do. We have to act like touring busybodies. If it is still around, it will have its robots out, looking for suckers like us. One of those robots found Carlos. Maybe one of them will find us."

"Just like that?"

"If we're lucky. The robots are sent out to spread rumors supporting the claims of the front man, in this case White. Sometimes they give demonstrations, if they find a potential witness likely to be taken seriously by the police and the media, like Carlos."

"And whatever Carlos saw was too bizarre for him to handle," Goldstein said.

"Too alien, too novel, too unexpected. The robots test your capacity for the unexpected."

"And you think one of the robots would recognize you?"

"No, probably not. But I should be able to use one of them to reach my creator, at least draw attention to myself."

Goldstein shut off the engine and they got out of the car. The sky was cloudless, bright with stars. The freezing air carried the smell of pine smoke. They went into the lobby of the inn, a wide warm room paneled in light wood, with a high ceiling and beams that were carved with Indian designs. To one side a door led to an ancient bar where a large fire filled a stone fireplace. The bartender noticed them and came out to rent them a cabin.

Outside again, trying to decide which direction their cabin was in the darkness, they heard a familiar voice say, "Hello, fellas."

Goldstein said, "Alan?"

"Who else? That car's got a small trunk, Morris. Hell to ride in."

He got no answer, so he went on, "Also noisy. Couldn't hear a word you guys said. Or aren't you speaking any more?"

"I'm sorry," Goldstein said. "I did what I thought was best."

"You usually say that when you're talking about a patient. Is Armando a patient now?"

"In a way."

"You know who he is?"

"He's told me all about himself."

"All right, all right. I'm back on the bus. What's the program?"

Goldstein looked at Preciado, who said, "Just what we said before. We're looking for a UFO."

"Then I think I'll start in the bar," Walters said, and walked into the inn.

"You've got to convince him to leave," Preciado said. "Having you along is a calculated risk. Walters is just a liability."

Goldstein said, "Come on, let's find our cabin." He led the way down a narrow dirt road running between two rows of the small buildings.

"I don't think I can do much for you. He's stubborn."

"Then do it for him," Preciado said. "He's not ready for what we're chasing."

Goldstein walked up to a cabin

and tried the key the bartender had given him. The door clicked open. "Probably opens all of them," Goldstein said.

"A robot could turn Walters inside out," Preciado said. "If you think he has drinking problems now, wait until one of them dredges up some nightmares from the bottom of his brain and plays them back for him. Monkey fears about the dark and strangers."

Goldstein switched on lights. The cabin was unoccupied, and they went in and sat down on hard wood chairs. Goldstein got a small electric heater going. On the table between them Goldstein set a leather case. He had taken it from his car just before Walters had surprised them.

"I just can't see Alan leaving."

"Explain that he's in danger." Preciado said.

"I'll try. If you'll try this," Goldstein said, and opened the case to reveal a control panel, meters, and bundles of fine wiring.

"It's called the Tickler. I mentioned it earlier."

Preciado said nothing. Goldstein said, "It could help you learn a lot about yourself. *You*, not me. It isn't like hypnosis, or ordinary therapy. We don't talk. You and the circuits in here talk, and you remember things you've forgotten, or been made to forget. If you want to tell me afterward what you experienced, that's up to you. The machine won't force you to reveal anything."

"I wonder if you really believe any of the things I've told you. There's no reason you should, of course. I haven't proved any of it."

"I saw Gilliam mistake you for White."

"I could have been White, with a little makeup to make me seem younger. I haven't *proved* anything."

"Why bring this up?"

"Because you're so insistent about this machine. The truth is, you still think I'm human—sick, but human. You expect this machine to show me how sick I am."

Goldstein shook his head. "I don't think you're sick, but I do think it's strange that you have no curiosity about your past."

"I've got plenty of curiosity about my past. And fear, too. I want to know but I don't want to know. What bothers me most is that I don't know how far to trust you. I'm not in the habit of trusting people very far."

"You don't have to trust me. Call the neuropsychiatric hospital at UCLA and talk to one of the night staff. Ask him to describe how this machine works."

Preciado was silent, waiting, he realized, for a sign from inside himself, a twitch of a nerve, to tell him what he should do. Nothing came.

Goldstein said, "You don't know what you are, or why you're here. The same is true for me of course, and I'll never be able to answer either question about myself, not this

side of paradise. But you might, and I envy you."

"I never imagined anyone would envy me."

"Not too many would. Being you is a terrifying idea."

"Is it?" Preciado said, reaching out to finger the bundles of wires. "Let's see if it is."

"All right." Goldstein pulled a power cord out of the stimulator's case and plugged it into a wall socket. He took the wires out of the case and checked their connections at the stimulator. When he was satisfied, he began attaching them to Preciado's head, where they clung to clumps of hair like burrs, their blunt, cold tips resting against his scalp. Three of them Goldstein taped to Preciado's forehead.

"How do they feel?"

"All right, I guess."

Goldstein nodded, turned his attention to the control panel. Soon Preciado felt his scalp tingle, an uneasy sensation of both cold and warmth spreading across it.

"At first there's a kind of random effect. It won't make much sense, but it should lead somewhere," Goldstein said.

Preciado closed his eyes. Gradually he became aware of sound, a whispering that grew to a roar, as of a great many people all talking at once. He could distinguish nothing from the noise, but the sound went on and on, sometimes fading, then building up again. Whirling shapes of color appeared before his eyes, and a more definite sound emerged from the noise, a voice reciting a list of words, in a monotone, with a long pause after each word. He concentrated, straining to hear the words, and discovered that they must have been nonsense syllables—or words from an alien language. He could identify none of them.

The colors formed into faces, dozens, hundreds of faces spinning before his eyes. He recognized none of them until the parade slowed and then stopped, and he was looking at himself, younger and clothed in Victorian fashion. There was a tingling sensation at the base of his skull that spread up through his head. The voice droned on through its word list, as if he were expected to supply something here, fill in the gaps between words. But the words refused to make sense, though he was aware of a gentle probing behind them, of things happening at levels of his mind beyond conscious control. The machine was asking, but he was not even aware what the questions were, yet.

The background noise of the crowd died away completely, but the words went on. His own image was still before his eyes. Then the voice came up with a word he knew. It said, "Death," in a language Preciado did not know, yet he was certain of the meaning. At this word, he shivered, nearly lost consciousness. But he fought back the blackness, and he knew that the machine had found a foothold. His resistance

had not broken, but in the instant before memory had been taken from him again, he had felt a terrible fear, sparked but still unexplained by that alien word for death.

No further words were recited. There was silence within him, as if the machine were giving him a rest. But it had only changed tactics. A high-pitched hissing started up, a peculiar, familiar sound. This was no dreamlike bedlam of crowd noises and whirling faces, this was memory, and he relived it.

The hissing that had been bothering his sleep broke off. He drifted back from wakefulness, but then he heard three clear deep musical tones. He woke. He was alive.

"Collins."

The sound drew his attention to the object floating near his right shoulder. But he realized that this was not the being that had addressed him. The word had been the thought of the great sphere of light directly in front of him, the thought made sound by one of several devices, he saw, that accompanied the sphere. He understood as well that the sound, the thought, referred to himself.

The sphere, his creator, took up most of the space in the rock-walled room as it studied him. Then the ceiling was lifted away by the sphere's servants to reveal weak daylight and thick mist. His creator rose up into the mist. The rock was put back in place.

His creator's servants hovered—

The memory was cut off. Preciado became aware of his surroundings reluctantly. Eyes closed, he felt the hardness of the chair, heard the hum of the stimulator and the sound of Goldstein's breath.

Was that all the machine could do? There was nothing fearsome in what it had shown him. Yet it was a scene he had forgotten. Why?

"Mr. Collins, you aren't going to embarrass us, are you?" the editor of the Call *said.*

"Not at all. You'll have your demonstration, just as I promised. The testing of the airship is nearly complete."

"I hope so. We've given you a lot of space in our paper, and we expect results. I want the story of a trip around the world in your client's airship."

"You'll have it, sir, you'll have it."

But there had been no story, and the editor of the *Call* had been embarrassed. Why had that memory been sent to limbo? Was it close to something more dangerous?

Preciado stiffened in the chair. The word recital had begun again, and the probing beneath it. This time the voice did not take as long as before to reach the alien word that meant death.

The pine forest smelled warm, and the layer of needles underfoot cushioned and silenced his steps. He loosened his tie and collar, took off his heavy coat. Already the meeting with the newspaper editor had melted into the unreality of all his previous experiences of human contact, simply an incident to be reported to his creator, nothing connected with him.

When he reached the clearing he saw it waiting for him, hovering a few feet above the ground, perhaps thirty feet across, difficult as always to focus on in daylight, like a flame.

He stood the proper distance from it, waited for the robot beside it to put its thoughts into English. He waited long minutes, but the robot said nothing. Then he noticed that the color of it was changing, something he had never seen before. Redness was creeping into the white sphere, and he found himself pressing his tongue against the roof of his mouth and saying, when contact was made with the recorder, "Death," in a language he did not know. He pressed the switch again, and waited.

Its color deepened. A humming started in the air around him. The sphere began to shrink, the vibration grew more powerful, until a blood-red ball only a few inches across hung in the air before him. It vanished.

He remembered running back through the forest, terrified, certain he had murdered his creator. How had it been done, why had he triggered the recorder and spoken a word he had never heard before yet knew the meaning of, and how had all this produced disaster? The questions had been unanswerable in 1897, and he had run, and lied to himself and forgot the truth.

The stimulator brought memory back, to a different creature in a vastly changed world. Preciado knew there were ways to condition him to do what he'd done that would leave no conscious memory of the process. And he knew there was another block in his memory, deeper than the one he had made to hide what he saw as his guilt.

The machine knew there was more to be found, and the recitation of the words began again. Alien sound followed alien sound, this time without the word for death coming up. There was another difference as well. Behind the words was another sound, a pattern of buzzing or ringing. This Preciado recognized despite its unexpectedness: it was the sound of a telephone, not the sound of a turn-of-the-century model but the ring of a modern one. What was that doing among such antique memories?

The incongruity disturbed him, for the alien words continued to tease his memory, dancing just past the borders of meaning, but never revealing their identity, never telling him where he had met them before, and here, all its efforts blocked, the stim-

ulator had found the ringing of a telephone.

With that, the machine gave up.

Goldstein was removing the probes from Preciado's scalp. The psychiatrist said, "How was it?"

"Frightening."

"I know. I thought once or twice that it might be more than you could take."

"It almost was."

Goldstein nodded, busy with wires. Preciado said, "I'm a Judas. When my creator showed weakness, I let its enemies know."

"And it was killed?"

"Yes. I was programmed to betray it, but I thought I was responsible and I couldn't accept the guilt."

Goldstein nodded again. "But if they killed it—"

"Then it can't be here making up antigravity stories. Yes, I know."

"So where does that leave you?"

"I don't know. There's more inside my head that I can't get to."

"There's a block the Tickler couldn't get past, yes. That's not unusual."

"But this block was put there intentionally," Preciado said. "I want to know what's hidden there."

"You have ideas of vengeance?"

Preciado smiled. "In a way. But I already know enough for that. White could be the same kind of time bomb I was, and if I can I'm going to warn his creator about him. That's probably as much vengeance as I can expect."

"Assuming that White's creator and yours share enemies as well as operating styles."

"I think I can assume that."

"All right, but one other thing."

"What?" Preciado said,

"You used the wrong tense in describing yourself. You are *still* a time bomb."

"Because I never got past that block?"

"Yes. Your conditioning is still operative. Given the right circumstances, you will betray this being as well."

"If the recorder is still being monitored. That was how I contacted the killers. After all this time, I may have been forgotten."

"Possibly. But it's something to think about."

"Then the sooner I make contact the better."

Goldstein finished packing up the stimulator. They took it back to his car, then stood outside the inn and argued about Walters.

"He's worth something on this trip," Goldstein said. "He has a talent for finding things out. He might lead us to one of these robots a lot faster than we could find one by ourselves."

"But it'll wreck him."

"Maybe, but he's outflanked us at the moment. If I were one of these robots, the inn is the only place in these hills where I'd be likely to find the proper audience for my show. I wouldn't be standing around in the woods."

Preciado, silent, stared across the road. He thought he had heard someone coming in their direction down the road while Goldstein was speaking, but now he heard nothing. He turned his attention again to Goldstein, and he knew he might have to part with his new-found ally if the psychiatrist was not willing to part with Walters. Preciado was not worried that Goldstein might reveal what he had told him. The story was at least as farfetched as most UFO lore—indeed, had he not been in the middle of it, Preciado would have thought it no more believable than the obvious frauds perpetrated upon unsuspecting humans by beings like his creator year after year after year—and Goldstein had no other witnesses to corroborate it, unless one counted Walters, and Preciado did not. There was Gilliam, but he did not know much. He might have suspicions, but that was all.

"You said you'd talk him into leaving, if I used your machine," Preciado said.

"Yes, I did. I'll talk to him, but I don't—"

Preciado cut in, "Listen."

"What?"

"We have company."

This time the sound of footsteps was quite clear. Preciado looked around, expecting to find that Walters had been listening to them. But the man who came out of the dark was a stranger, and at the door of the inn he stopped and looked over at Preciado and Goldstein. Preciado

could not see his features in the light from the windows.

The stranger said, "Pardon me, are you gentlemen with Mr. Walters?"

"Yes, we are," Goldstein said.

"The psychiatrist and the policeman?"

"Yes."

"Good. I met Mr. Walters in the bar. He tells me you are interested in UFOs."

"You have a tame one for display?" Preciado said.

"Ha-ha. No, I haven't, but—"

"Then why take a walk in the woods?"

The man hesitated, came a few steps toward them. "I was checking . . . conditions," he said in a low voice. "UFOs only make themselves manifest under the proper conditions."

Preciado said, "Conditions. Bullshit." He reached out and grabbed the man at the back of the neck, feeling for the projection under the flesh that would tell him if he had found a robot. If the man were just another saucer crank it would be an embarrassing situation, but Preciado was impatient now, with a clear chance in sight to make up for the death of his creator.

The projection was there, and he squeezed it hard. The robot went motionless and silent.

"What is it?" Goldstein said.

"What is it? Show Doctor Goldstein what you are," Preciado said, and the seemingly solid human body before them vanished, leaving a small glowing device with many angular faces like a crystal's floating in the air, with Preciado's hand resting on it.

Goldstein let out a surprised breath, stepped back toward the door of the inn. "Not a man at all!"

"Not at all," Precaido agreed. "What did I tell you? But you never believed me. You humored me, you led me into confession with sympathy and questions, you put yourself into my fantasies. But here's the reality."

"This is a shock. I was certain you were—"

"Delusional," Preciado finished for him, to cut off the sound of animal fear in Goldstein's voice. The totally unexpected, something not to be believed, had made itself known. In time, Preciado thought, a man like Goldstein would become accustomed to such alien oddities, but he would never be able to face one of the creators.

Preciado said to the robot, "I want to speak with it," and the robot floated off toward the forest.

"Good-bye, Doctor," Preciado said, starting after the robot. "I owe you a lot."

Goldstein stayed where he was. Preciado could see that he was in no mind to come along into the darkness.

"Don't mention it," Goldstein said.

Glowing like pale fox fire, the

robot led Preciado along a narrow trail that climbed into the hills. The light was enough for Preciado to see any obstacles ahead of him, but not bright enough to be visible any distance in the thick woods. They came into the open along the spine of a ridge, and the robot dropped near the ground, its light shielded by scrub growth. Far below were the warm lights of the Inn at the curve of the valley. Then Preciado crossed the ridge and started down, and the lights were gone.

They followed the trail through forest again. After crossing two more ridges they came to a clearing. Nothing met them, but the robot stopped, and Preciado assumed a meeting had been arranged. He waited what seemed like several hours before he saw it dropping out of the sky toward him at fantastic speed. It stopped in the clearing without deceleration, frozen suddenly in midair as if it were an image on a movie screen rather than a real being governed by the laws of motion. There were three robots with it, but they came down at a more natural speed.

His robot escort drifted up beside it. Preciado positioned himself at what he thought was the right distance, and waited. He found the translator robot, the largest of the four, faced it, and closed his eyes. If this being underwent color changes he did not want to know.

The translator spoke, "An earlier growth. How long have you lived?"

"Eighty-nine years."

"Collins."

"Yes," Preciado said, and a sense of overwhelming relief spread through him. It knew his old name, it was an ally of his creator. The burden of independence had been lifted.

"What happened to D—the one who made you?"

"I killed it."

"You? How?"

Preciado told it, everything there was to tell. All it said when he was finished was, "Open your eyes. There is no danger to me."

Preciado obeyed, and he saw that there were three of them in the clearing now, gathered near each other, and many more than four robots.

The translator robot was silent for several minutes. Preciado assumed that the three were examining among themselves what he had said. At last the robot said, "We have no hatred for human beings. We regret that your place in our plans was not explained to you before D was destroyed."

"I am with you now."

"Yes, but listen, and understand what we will do. D grew you for two reasons. The first you know, to serve as our agent in promoting the idea of air travel among humans. The second, after the first was finished, was to be a genetic emissary from our race to the humans.

"We are interested in human technological development as it affects

communication and transportation. We would like to see the human race become, as much as possible, a single gene pool, wherein genetic information may be thoroughly disseminated in a dozen generations rather than a thousand. This requires that physical distance and genetic isolation be overcome. So we demonstrate to humans, at the proper points in their technological development, what advances can be made, and hope they make them.

"We want to introduce into the human race the genetic alterations that you possess, the alterations we made that permit you to meet us and to live with us without fear.

"For millennia we were the only intelligent species on this world. Some of us realize now that we must share it with humans. Eventually they will be able to destroy us. Before that happens, we must prepare them to meet us. We must remove the motivation that would force them to destroy us, their innate fear of an alien intelligence equal to their own.

"Others like you have been grown and sent out to spread our genetic alterations, and many humans are born with them. We use our robots—as they were designed to be used—to test for the presence of our alterations in humans. The robots are encountering more and more humans who show curiosity rather than fear at meeting one of them.

"There are others of our race who oppose our plans, who think it bad judgment to help humans, who try to undo our work, use their robots maliciously to harass humans and to spread superstition. They would make human history a permanent Dark Age. They killed D.

"Their tactics are futile. Humanity would gain power—has gained power—despite harassment. We have to make our peace with humans and not be hated by them.

"If D had lived longer, you would have been told what your work was. You would have lived as a human and had no doubts. We are in your debt."

The translator went silent, and Preciado dared to ask, "How was my creator betrayed?"

"We believe by one of its robots. Those died with D, but the one that betrayed D did not know what it did. They are loyal, but mindless. They can be duped. D's were programmed to educate you, but in the process they allowed an enemy to interfere.

"D and I were both guilty. There had never been a killing among us, and we did not expect this sort of interference. The robots will not be allowed to instruct unwatched any longer."

"And White?"

"If White is the same as you, it is my fault, but you have warned me. I will not die. We may trap the enemy with White."

"But what was done to me and White?"

"We believe that a device was planted in you to signal the enemy

when D was vulnerable."

"In place of the recorder?"

"No. There never was a recorder. You were told there was to calm you in the event of long separation from D. The stimuli you receive after pressing what you think is the recorder switch is a result of conditioning. The enemy added conditioning of its own."

"Can the device and the conditioning be removed?"

"Possibly. You want this?"

"Yes."

"You want to stay with us."

"Yes," Preciado said.

"Not possible. There is White."

"You have no other use for me?"

"No. It would be best for you to go back among the humans. But you were not meant to live so long. We believe the enemy interfered with your growth and increased your life span in hopes you would regain contact with us after D was dead, and betray more of us.

"Even if we established a new identity for you, your life span would probably betray you. But we will try, if you want to live among men."

"The only alternative is death?"

"Yes. Both for you and for White, if his effectiveness as an agent is over."

"Then kill me now. I don't want to live among humans again."

The robot spokesman was silent for a time. Preciado waited, thinking how wasted his life had been. It had been idiot motions and frustration, with the final irony being that the one thing he had done—by accident—in accordance with his creator's plans, had turned out wrong because he chose for a mate a woman who already possessed the characteristics he was supposed to contribute to the human gene pool. Preciado wanted only death now, angry at having been made to live.

"We can give you a painless death—or we can give you a death possibly less pleasant, but a death that would be more than just dying."

"What do you mean?"

"We were planning to use White as a decoy, to trap the enemy, assuming that he has been programmed to betray us. If he hasn't, though, our trap has no bait."

"But you know for sure that I have been programmed to betray."

"If the device within you is still operative."

"And if it isn't, you still have White to try. All right, I'm willing."

"Thank you."

Two of the spheres flew off into the sky, quickly lost to sight. All but a few of the robots followed them.

"Wait until the last robot leaves. That will be your signal. Press the switch. Speak the word."

"And then?"

"We will see what we catch."

Then Preciado was alone with the robots.

It seemed long minutes before the first of the remaining robots drifted into the forest, leaving him with

three. It was even longer before the next was gone. He had no idea what time it was, but he suspected that dawn was not far, and he divided his attention between the robots and the sky, searching for signs of the east.

He was certain that he could make out the profile of a distant ridge against lightening sky by the time the next robot left. He gave up sky-gazing and watched his last companion, eager for his cue, but the robot floated serenely in the center of the clearing. How long did this have to take?

He thought that sunrise was only minutes away—with the robot showing no inclination to leave—when he heard the sound. Something was coming through the forest, toward the clearing—an animal of some kind, snuffling and blowing its breath, stirring up leaves.

Then he heard something else, the steady pace of heavier steps, two-legged steps. A man and a bloodhound, but it was no ordinary bloodhound, it did not bay, only came on closer and closer, methodically snorting and sniffing.

He turned, desperately, to the robot. He knew it was capable of sensing the new arrivals, but it did nothing.

"What are you waiting for?"

It gave no answer, and he could not tell if it was even able to, for it did not seem large enough to be a translator.

"If not now, when?" Preciado said.

The dog had reached the edge of the clearing, gave a low whuffing noise, and that was all. Preciado did not look back at it, but continued to stare at the robot, which was nearly invisible in the growing daylight.

"Never," the robot said, and it drifted up through the trees at the edge of the clearing and was gone.

Preciado heard the footsteps coming across the grass toward him. The man was alone, evidently had tied the hound to a tree. Preciado turned around, and Walters said, "Hello, Armando. Did you get what you were looking for?"

Preciado did not answer him, but looked at the hound, a strange ugly dog, with rough yellow fur, long ears, lean body, long narrow nose, and tiny eyes.

"What the hell is that, Walters?"

"A little bit of everything, according to its owner, with a touch of weasel in it besides. It took me half the night to find it, I had to have something that would keep its mouth shut."

"Don't give up, do you?" Preciado said, and lunged at him, hoping to knock him down and get a small start in the forest. He had no idea what he would do then, except run.

Walters was too far ahead of him. As his shoulder hit the detective and Walters started to go down, he felt Walters's hands reaching for his wrist. There was a sharp click, and they were handcuffed together, falling together to the ground.

"Morris has the key, back at the

inn," Walters said as they untangled themselves and got to their feet. "You really put the fear of God in him, you know?"

"Hey, Mando, what the fuck?" Ortiz said from the doorway. "Are you in here—as we attorneys say—under duress?"

"No *ese*, I don't think so. I can't say for sure, though, because I never asked to leave."

Ortiz came into Preciado's room and walked to the window. "You never asked to leave? This place is for crazies. They put mass murderers, rapists, shit like that, in Atascadero. What do you want to stay for?"

"I'm not sure where I'd go."

That stopped Ortiz briefly. He stared at Preciado, his usual come-on discarded. He said, "You ain't really freaked?"

"Who knows? Did you ask the doctor?"

"The Jew? Yeah. He said somebody'd been twisting your mind. Shit, man, you on something?"

"No."

"I didn't think so. But hey, I had to come up here, you know? As your attorney, you know?"

Preciado laughed, said, "Sure, *ese*, as my attorney. I appreciate it, I really do."

"Sure, Mando, 'cause you know, they're checking up on you, the fucking FBI, all about your case. Into everything, where you grew up, who your friends were, everything about your folks, where your family was from. They're doing a whole family tree on you. And you ain't even committed any crime. You want to hit them with invasion of privacy?"

Preciado laughed again. "No, *ese*. I don't think it would stand up."

"Stand up? Stand up? With me as your attorney? Mando, it would not only stand up, it would walk over and piss on the judge's leg. What are you worried about, don't you know how many contempt charges have been dropped on my head?"

They were both laughing by now, Ortiz pacing the room, gesturing, explaining what he would do with the trumped-up charges he expected to be brought against Preciado any day.

"Enough, *ese*, enough. I can't afford your fees, not for all this."

"I started out as a welfare lawyer, I'm used to credit."

"You'd better be."

"They didn't take away your job?"

"I don't know," Preciado said. "I didn't ask."

"As your attorney, I advise you to ask."

Ortiz spent most of the afternoon with Preciado, and when visiting hours were over he promised to be back—but only after asking again whether Preciado wanted to be released from the hospital. Preciado assured him he was comfortable, and Ortiz left.

It did not surprise Preciado that

they were checking into his past. It did not, really, surprise him that there was a past to check into. Goldstein worked carefully, and had prepared the ground well before planting the seed—Ortiz—that would produce this revelation.

Goldstein. Preciado had not seen him since they had encountered the robot in Adelaida, but he knew that it was Goldstein, not the innocent young doctors who came to see him for a few minutes every day—the same doctors who had X-rayed him from head to foot and taken samples of his flesh and various fluids—who was looking after his treatment. Goldstein was not one to gloat, and apparently knew as well as Preciado did that what was needed was not therapy in the usual sense. Goldstein stayed away, and tended his revelations, and the method suited Preciado.

Not that Preciado did not try to be a classic mental case. When he arrived at the hospital, still locked to Walters, he was in a terrible state of mind. He tried, in effect, to will himself into a catatonic state, a complete withdrawal from failure. He found, though, that he was not weak enough for that. His mind refused to go blank, would not stop thinking, never gave up replaying what had happened just before Walters had captured him. Had he been betrayed?

So he shrugged off all hope of insanity. He still wanted no contact with humanity, and weeks went by without seeing anyone but a few members of the hospital staff, and these only briefly. Then one day Linnaea Phillips came to visit him, and he found himself immediately vulnerable to her, to her energy and her health. And her cooking. She brought him food, saying, "Hospital food is so bad. And I mean bad, about to go rotten."

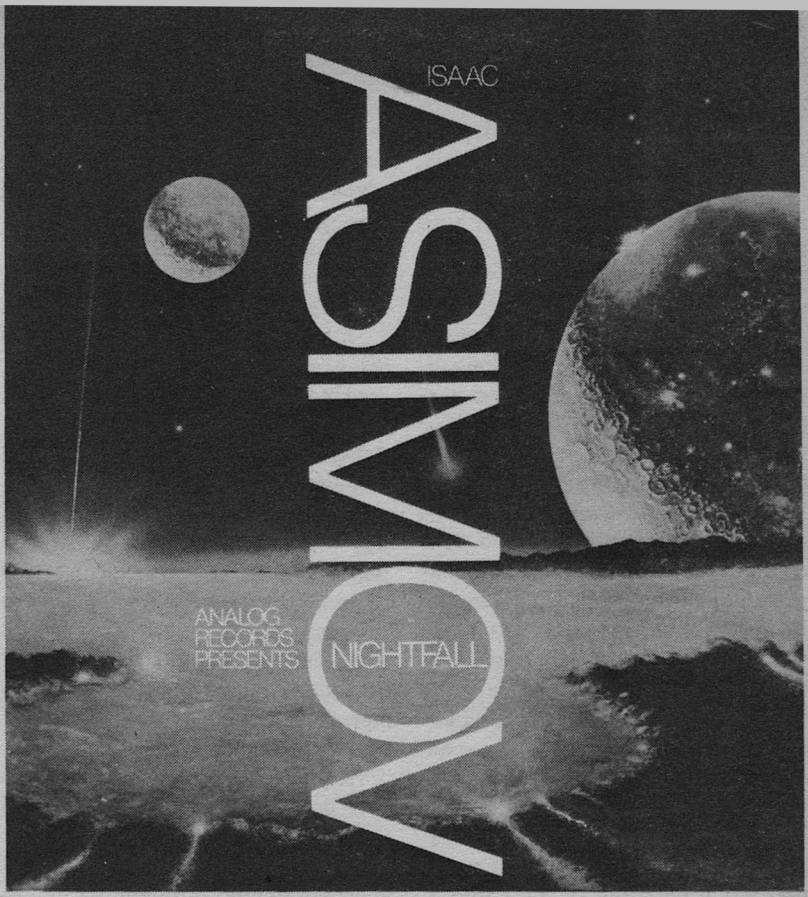
He agreed, around a mouthful of some exotic Greek sandwich she had brought. Their conversation was limited that first time, but she came to see him regularly after that, and he became more open with her. He knew that Goldstein was pacing his treatment most carefully, and would not miss a step. Preciado did not resist. He was going to have to talk to someone, if madness was not the way out for him.

Once he did ask her about Goldstein, whether the psychiatrist had put her up to visiting him.

She said, "No. In fact, it took me a long time to get Morris to let me see you. He kept saying he didn't think you were ready for company."

"I wasn't. And I apologize for being suspicious. I'm glad you decided to visit me."

She brought him newspapers and magazines, and books. Books about UFOs. The subject had become a serious interest of hers, and she corresponded with Gilliam—who, it turned out, had been hired by the Corporation as a consultant—and asked him to recommend things for her to read. She got Preciado to talk



☐ **Remember reading Isaac Asimov's classic *Nightfall*? Hear it done now as a full-length dramatic presentation, in this new recording. Included is a dialogue between Isaac Asimov and Ben Bova, Editor of Analog Science Fiction/Science Fact Magazine. *Nightfall* is an exclusive offer from the publishers of Analog.** ☐ **For your copy of this 33⅓ LP stereo record, use the coupon below.**

ANALOG RECORDS • 350 Madison Avenue • New York, N.Y. 10017

Yes, I want to enjoy NIGHTFALL by ISAAC ASIMOV. Please send me _____ records at $6.95 each.

Name _____
(please print)

Address _____ Apt. No. _____

City _____ State _____ Zip _____

☐ My check/money order for $_____ is enclosed
(payable to ANALOG RECORDS)
(Add 55¢ per record to cover postage and handling)

Please charge my ☐ American Express ☐ BankAmericard

No. _____

Exp. Date _____ Signature _____

about his own experiences, and he found himself telling her as much as he knew or could guess of what had happened to him. She also asked him what he thought of the books Gilliam told her to read.

Preciado had thought he had read most of the important works about UFOs. But he found, while talking to Linnaea, that all he knew were the titles, and that his knowledge of UFOs in fact had large gaps in it. He saw that what he did know could not have come from reading, for it was highly selective. It covered a few episodes—such as the 1896-97 sightings, and the more recent visitation in the English village of Scoriton—well, but it was deficient regarding other, equally important ones.

He borrowed some of her books, and educated himself. By the time Ortiz came to visit him and confirmed it, Preciado thought he had learned what Goldstein apparently had hoped he would from Linnaea's books: he had been dragged into a nightmare, a bizarre joke that had disrupted his life both as it had been and as he remembered it. It had happened to others, but Preciado's experiences had been more complex, more deeply involved with the mystery. The joke was over now, and it left nothing to take its place.

Goldstein came to see him the day after Ortiz. The psychiatrist appeared tired, and not at all pleased with himself.

"Hello, Armando."

"Hello. You really got yourself into something, didn't you?"

"Didn't I, though? I'll probably never get out of it, either. So how are you feeling?"

"The truth hasn't set me free. If it is the truth."

"It hasn't set anyone free, it's only made prisoners of some of us who used to be free. You enjoy your reading?"

"No. I thought I'd read it before, I thought I knew it all."

Goldstein nodded. "You were told that you knew it all. But even Albert Bender, whom you held up to Alan as an object lesson—"

"—was a stranger to me. Yes. I knew his name, and that he'd had the hell scared out of him, but I didn't know the details. It was the details that mattered."

"How?"

"I never told you, it didn't seem useful at the time, but one of the memories your stimulator found for me was a telephone ringing. So now I find that Bender had troubles with his radio, they used it to contact him. And then Keel—you read Keel's experiences?"

"Yes," Goldstein said.

"His television and telephone started playing tricks on him. The phenomenon—to use Keel's term for UFOs—is adept at taking over electrical systems for its own use.

"So I imagine that's how they grabbed me, or how they found me in order to grab me. I got a phone call. Then a lot of fake memories

were stuffed into my head, including subsconscious ones to make my behavior seem completely consistent. Then they blocked off all memory of the process and set me loose. It must have taken some time."

"Not at all," Goldstein said. "Probably not quite twenty-four hours. You know who made that phone call?"

"No."

"Yes, you do. Why have you been so indifferent toward Carlos? 'The phenomenon' didn't take away your feeling for your son. Your indifference is hiding something else: anger. Carlos got you into this, he set you up. But not on purpose."

"He called? That Saturday?"

"Early Sunday morning. He called collect, from a pay phone in Paso Robles. He was barely holding himself together, but he wasn't as bad off as when you saw him here. He called you, but only had time to say a few words before they demonstrated that they were on the line. I can't be sure what they did. It doesn't matter. Carlos snapped. The whole world seemed to be sprouting enemies, they had control of everything, and it was more than he could take.

"And at the other end, as you said, they got to you. They followed Carlos to you. Why? If you are not really a creation of theirs, and had no previous contact with them, why did they listen to Carlos's call and grab you? For that matter, he was working for the Corporation, why didn't he call them?"

"Because they wouldn't let him?" Preciado said.

"Exactly. He tried one number at the Corporation, got a recording. He tried another number, same recording. A third number, same recording. Somebody who was adept at using the telephone in novel ways wasn't interested in the Corporation, so Carlos never got through. When he gave up and called his *father*, he got through. Why?"

"How should I know? What the hell are you telling me, Goldstein? Am I what they said?"

"No. Not according to the X-rays and the tests we ran on your body chemistry. You're normal—but not ordinary. You weren't created by these beings, but you are important to them. You, and apparently a lot like you.

"You're a natural mutation. You carry a recessive that lets you meet strangers without suspicion or fear. You're the next step in human affairs, and, it seems, in nonhuman as well. You're the work of good old mother nature, not UFOs. You're a new possibility for the human race, a way past racial hatred.

"Even if they didn't produce you, these beings are aware of what you are, and I think they gave you the first reliable data we have about them, along with a lot of bullshit. I believe they are testing for the spread of your mutation through the human gene pool. Whether they'd ever found a double-recessive like Carlos before is another question, but even

if they had, it must be a rare thing to judge by their reaction.

"A double-recessive can mean one of two things. It can mean that a mutation has spread quite thoroughly within a given gene pool or ethnic strain, or it can mean that sheer random chance has cooked up a statistical freak, a one-in-a-billion accident.

"So I think that when these beings got hold of you, the first thing they did was pick your brains for information about your ancestors, and your wife's. What they learned was enough to bring them to a decision: it was time to let some of the truth out, and as long as they had you already, you were chosen to be their prophet. They tangled your life up in pointless lies and then discarded you, when they could have put their message across more directly and with less harm. They aren't unfamiliar with plain English, and we have to believe they are intelligent, so why do they play these damned tricks? Why couldn't they just come out and tell us about this mutation?" Goldstein said.

"I don't know," Preciado said, "but you can be sure that I've been

thinking about that as much as you have. Is it possible that they are so alien that what seems crystal-clear to their way of thinking comes out half-garbled to us?"

"I suppose that's possible, but I don't believe it. I think they aren't making themselves any clearer for some reason of their own. All the truth may not sound as nice as half the truth."

A few seconds passed in silence. Preciado flicked his tongue against the roof of his mouth, a habit he had picked up during his confinement. The pressure of his tongue produced no results now that the joke was over. His conditioning had dispelled itself, and it was the most undeniable sign of all that he had been discarded.

"You know, with you as an example, I could make a case for this mutation being dangerous," Goldstein said. "It may do more than make you feel at ease with these aliens. I think it could also make you more susceptible to their control than ordinary people are. And if that's the case, they would naturally want help in breeding more like you."

Goldstein paused for breath, rubbed his jaw absentmindedly. "Of course, if that's the case, why not just tell us outright about the mutation? Why garble the message and make humanity suspicious of them? Because they actually want to stop the spread of the mutation? Hell, I don't know. I do know that the mutation is real, and that if these aliens were not in the picture the mutation would help the human race. We may have to give up trying to decide what they hope we will do in their interest and simply decide what we should do in our own."

"And what's that?" Preciado said.

"Try to isolate as many people as possible who carry the mutation and examine them as thoroughly as possible, especially for psychological traits like suggestability. If we don't find anything that looks dangerous, we encourage them to have children, the more the better."

"That would be a start," Preciado said. "And do you have plans for me?"

"I'm not sure. You have any suggestions?"

"No. I was sure you could come up with a future for me. I mean, a lot of information about me has changed hands. Did Linnaea tell you everything I said, or—"

"The room is wired. What did you expect?"

"Just what I got. Of course."

"Of course. Linnaea did tell me plenty of what you talked about, sure. Like food, the weather, the local race for sheriff, and the chances of another glaciation. But she would never say much about UFOs. She doesn't like me much these days. She says you'll never get any better than you are as long as you stay here, and that we ought to let you out. I think I agree, but the Corporation, the FBI, and 'national security' say otherwise. She's met your friend Ortiz, and has him fired up to go to court over your

confinement at Atascadero."

"Don't worry, I won't let him. I'm not sure what I'd want to do if you did let me out."

"Well, you remember I once said that I envied you because you had an opportunity I didn't have, a chance to find out what you were here for?"

"Yes."

"And you found out. It didn't have much to do with UFOs, but so what? You're carrying a message to the future, a valuable message. You ought to see that it gets there."

Preciado smiled, said, "You still don't understand what happened to me. It's hard to think of myself as just human."

"You still feel . . ."

"I still feel like I ought to be part of something a little better than the human race. I'd go back to them if they'd let me."

"After all they did to your mind, to your life?"

"Certainly. You weren't there."

"No, I wasn't. It must have been something, even if most of it was illusion."

"It was something. These beings understand one great thing about us, about humanity, that your science doesn't: our infinite capacity for boredom. Boredom is the feeling that your real worth is being wasted, and I was never bored working for them."

"I don't suppose you were," Goldstein said. "I can't guarantee you anything like that, but I was hoping you might want a part in what I mentioned earlier, the investigation of this mutation and the decision whether it should be helped to spread, or weeded out."

"I could do that, yes, but I don't think I will. It's just that I have trouble making things seem important. After you've been at the right hand of God, what else can ever mean anything to you?"

"I don't know."

"And there you have me. The world is a prison, for me, for you, for any and all of us. Our curiosity and our science just give us the dimensions of the cell, the size of the stones that make up the walls, the texture of the mortar that holds the stones together. Nothing can set us free, although the illusion of freedom, the sense of purpose and good use. . . .

"Their message wasn't garbled. Their message wasn't in what they said, but in how they said it. They gave me a demonstration of their power, they tested it on me. They've done it to others, but never this thoroughly. They've proved what they can do, and eventually the mutation may be widespread enough that they won't be just putting on demonstrations, playing hit-and-run with people like me, but will be displaying their power more permanently.

"I think you'd better stop this mutation, Doctor, or someday the prisoners may not be aware of the prison, and then where will you be?" ■

LAURALYN

Nirvana is the state of desirelessness.

RANDALL GARRETT

Again, last night, I saw the ghost of Lauralyn.

Again, I tried to trap her, to go beyond her capabilities, and, again, I could not. And that is beginning to frighten me.

She has never come without warning; such a breach of manners would be beyond Lauralyn. Never less than sixty days apart, and never more than one hundred eighty—which may be the parameters of the random pattern I believe she has chosen—my commweb terminal signals at some time when I am not working, and her lovely voice comes without vision, as though she were calling from a ship in space, and she asks if she may visit next day.

Of course, I cannot say no.

And she always comes to Garden Four, where we first met.

To paraphrase some ancient of distant legendary Earth, I cannot live with her, and I cannot live without her. And yet, I am doing both and neither. She is an itch in my soul.

But there is a question that gnaws at my mind more painfully than she at my soul: *Who is Lauralyn?*

I am making this crystal record, partly to see that it goes permanently into the files of the Brotherhood, partly to verbalize it in order to clarify things in my own mind.

The soft, sweet sound signal lifted me from the depths of my meditation, and I rapidly took the steps necessary to lift me to full awareness. The time was 1104. I rose from my relaxer, a little puzzled; the signal had come six minutes early.

"Why the hurry, Brother Ambrose?" I asked.

"The technician from Galactic Machines is here, Father Superior," said the voice from Brother Ambrose's speaker.

"I see." I was mildly surprised; the Galaxy is vast, and even ultralight velocities are not fast enough for really quick travel. I had not expected the GM technie for another fifteen months. "Very well, Brother Ambrose," I said, "where is the technie waiting?"

"Garden Four, Father Superior."

I took a quick trip through the cleanser and left my quarters, heading for Garden Four.

Garden Four is not designed for business or technical discussion; it is solely for relaxation and pleasant conversation. There are shrubs and trees and flowers from thirty-seven worlds, with the great oaks predominating, looming over the flickering neon bushes and the pale lavender-barked egg trees. The turf underfoot is mutated Terran bluegrass, and the softly tinkling chime vines are pure Glavian. The frosted mirror-moon overhead bathed the garden in softly colored silver, and the air was just perceptibly perfumed by the bracing tang of aroma from the poon blossoms.

There is beauty there, but at that moment it was dominated by a greater beauty.

She stood in the center of the main

glade, looking up at the frosty rose-white of the mirror-moon, her hands clasped at the small of her back. The tiny kilt she wore was decoration and nothing more; it was the same pale yellow as her hair, which came just barely to her shoulders. The rest of her was a sweeping flow of three-dimensional curves of beauty.

Though she did not look at me, she was aware of my presence, for, without shifting her gaze, she said: "I didn't know anything could be so beautiful."

Nor did I, I thought. But we were not talking about the same thing.

Then she turned to look at me. "How do you get that effect?"

I looked up. "You're in luck," I said. "You caught one of our mirror-moons transiting Fuzzball. Fuzzball is a globular cluster about sixty-seven parsecs in diameter and something like nineteen hundred parsecs away, so it subtends about two degrees of arc. Every ninety-four days, one of the three mirror-moons transits it at the full, so you get a rose-white reflection from our K-5 primary centered in the cluster. The mirror-moon is half a degree across, so it gives a nice effect."

She nodded and looked back up. "The moons are artificial, of course."

"Yes; three of them, one hundred twenty degrees apart."

"How high up are they?"

"About a kilometer. Eleven hundred and forty-five meters, actually, since they're fifteen hundred meters from the center of our little world."

"Ten meters in diameter, then. They orbit? Free?"

"They orbit. There's no air above fifty meters; the paragravity field seals it in close."

"It's lovely. Nice design." Then she took her eyes from the sky display and turned slowly around to look at the whole glade. "It's all lovely."

Yes, it is. But I said nothing.

I cleared my throat. "I am Father Tomas, Superior of the Brotherhood of Machine Teachers. Would you care for refreshment?"

She made a half bow. "I am Technie Lauralyn, of Galactic Machines. You asked for an appointment."

"Yes. Just over eight years ago. You were gratifyingly prompt; I had not expected you until the tenth year."

"I'm sorry, Father; have I come at an inopportune time?"

Had she blushed? In the rose-white light, I could not tell. Hardly likely, and yet there had been a touch of embarrassment in her exquisite voice.

"Not at all," I said reassuringly. "Our future projections indicated a need for the expanded capacity of Brotherhood Central's Machine capacity within half a century, but that has been cut back now to just over thirty years, due to the vast new exploratory projects building up in the volume beyond Tucana. We need

more capacity for our own Machine if we are to coordinate the work of the Brotherhood in setting other Machines to work. We of the Brotherhood are thinly scattered, but there are nearly eighty million of us—far too few for the Galaxy's needs, but far too many to coordinate without Machine help."

"I know. We technies have a similar problem."

"One moment," I said. Then: "Brother Ambrose, is the Coldfire Glade prepared?"

"Yes, Father Superior. As you ordered."

She heard the voice, naturally, although if I had so ordered it, Brother Ambrose's answer would have come to my ears alone.

"Is that a continuous monitor?" she asked.

"Oh, no. He only hears when I call his name. 'Brother Ambrose' is the code for the conversational mode of Central."

"Of course. What is Coldfire Glade?"

"Come. I'll show you." I led her through the trees, along the turfed path that winds through Garden Four. Shortly, we could see the glimmering of light between the trunks of the overshadowing oaks.

Coldfire Glade is small, a circle three meters in radius surrounded by a two-and-a-half-meter hedge of coldfire shrubs from Faylixin. In the center, a table of refreshments for two was laid.

"Those are Faylixin glowlights!" she said in a hushed voice. "I've read of them, but I've never seen one. Absolutely beautiful! That rose-white light matches the mirror-moon! Or—no. Not quite. There's less yellow in it; just a touch less. They're very lovely creatures, aren't they?"

She and I sat down at the table. Her face seemed to glow from some inner light as much as from the illumination from the mirror-moon, Fuzzball, and the coldfire shrubs.

"You called them 'glowlights'," I said. "We call them 'coldfire shrubs'."

She smiled. "I'll go along with the 'coldfire', but they're not shrubs, you know."

I filled our glasses. "Really? Pardon me, but I am not a biologist. They're not shrubs?"

"Not exactly. They're not really plants, you see. Nor animals, either. They're—" She paused. "Do you know of the sea anemone?"

"I'm afraid not," I admitted.

"Earth organism. These are rather like them, except they live in air instead of water. They can live on radiated energy, like a plant, or on chemical energy, like an animal. What do you feed them?"

I laughed with a touch of embarrassment. "I'm not sure. I'm not the gardener."

"Oh." She had an oddly pleasant giggle. "Of course not. I merely thought you might know."

"Sorry. Failure on my part. Have some of these little cakes; they're

made by Brother Morthil. A real Brother, by the way, not another conversational mode."

"I can't eat much," she said. "I have to watch my figure."

"So do I," I said ambiguously.

"I hadn't realized that the Galactic headquarters for the Brotherhood was so beautiful. All the Brothers I've met lived austere, rather ascetic lives, and I just assumed— . . ." She let her voice trail off.

I had to laugh. "Well, we don't exactly indulge in riotous living here, but we do indulge ourselves a bit. More comfort and less austerity after we retire."

"Retire?" She looked puzzled. Delightful.

"Practically. We have the Rule to obey, and one of the rules is that a man must put in at least a century and a half of field work before he can take up administration, which is a much easier job. And we also take care of the very old, who do pretty much what they want until they die."

"What percent of your eighty million actually do retire?" she asked softly.

"Point oh oh one oh four percent. Of our present actual force, eight hundred and thirty to eight hundred and forty will live to retire. Moving around the Galaxy to teach Planetary Machines is—ah—somewhat hazardous."

"I know. Our figures run about the same. But somebody has to do it, or Galactic civilization—what there is of it—would collapse. And, as you said, we are thinly scattered."

"So few can qualify," I said. "In the very early days, when space flight itself was in its infancy, our profession was called 'programming'. Even then, it took a special kind of mind to be able to do it well. We no longer program a Machine; we must teach it because it is far too complex for anything else. It must learn to program itself. I'm not telling you anything new, I know, but perhaps you've never thought about the kind of mind it takes to be in rapport with a Machine mind."

She nodded. "I've thought about it. The difference between my job and yours is akin to the difference between a cerebral neurosurgeon and a telepathic psychologist. What kind of mind *does* it take to read the mind of a Machine?"

"I don't know, I'm sure. That's not what we do. We have to mentally construct an analog of the Machine's mind, checking and rechecking until the analog is as near a one-to-one mapping as necessary, then—" I broke off. "Do you want to spend twelve years or so learning the basics so we can talk about it? You don't even have referents to most of the words I'd have to use."

Again that silvery laugh. "No. I just asked about the kind of mind required; I didn't ask how it worked. I understand that women can't do it."

"That's not quite true. Some can; about the same percentage as men.

They *can* do it; they don't *want* to."

"Explain?"

"It's an emotional thing. They don't like what it does to them. Women are perhaps more human than men, and thinking like a Machine is not a human thing. The analogs we build stay with us, you see; not complete, but as shadow structures. And that makes us—different. We are called emotionless, ascetic, austere, cold. Apparently, men are more willing to accept that state of being than women."

"But you *do* have a Sisterhood." It was a flat statement, with barely a touch of questioning.

"Specialists," I said. "Specialists of a precision grade that no man has yet achieved. When one of the Brotherhood becomes unstable because of conflicting shadow analogs residual in his mind—"

I was cut off by the sound of a golden triple bellnote in the silvery, scented air.

"Father Superior," said Brother Ambrose, "Father Brac is now requesting your whereabouts of my submode-2; instructions?"

"Send him," I said. I think I only hesitated a moment.

After several seconds, Lauralyn said: "Father Brac?"

"Father Brac is one of our finest analysts and teachers," I told her. "You and he will be working together on the expansion of our Machine. He's spent thirty-five years learning this one Machine mind; he has its analog securely."

"It will be a pleasure to meet him. He's coming—here?"

At this point, I want to ask myself a question: *How did she know?* Garden Four is not designed for business or technical discussion; that much, she could have seen easily. It was only for light conversation such as we had been having. But she had never met Father Brac; how did she know that his personality would clash with Garden Four? Or am I now reading into my memories nuances that were not there? I cannot tell, now.

"Brother Ambrose," I said quickly, "tell the good father that we will be in Garden Seven."

I stood up and offered her my hand. "Come along. Seven's just next door." She rose and smiled, but did not take my hand.

"Lead on," she said.

I led her to the path that went through the oaks to the gateway to Garden Seven. As we walked, she looked all around at the plants surrounding the broad, winding path. "Is that mistletoe?" she asked, pointing to the berried shrubs that grew in some of the oak limbs.

"No, it's a look-alike from Kandasar. It is epiphytic rather than parasitic. But these flowers along the border are straight Terrestrial *primula japonica.*"

At the gateway, I stepped through and she followed.

Seven is formal, almost stiff. The mallord hedges, with their white bark and black leaves, are neatly trimmed

and mathematically straight, defining the roofless rooms and hallways of the garden and concealing the too-near horizon. (It can be disconcerting to planet-bred folk to see objects less than a hundred meters distant leaning away from them at sixteen degrees; they get the feeling they are in the center of a blast area.)

The borders and flower beds are laid out with geometrical and symmetrical precision. There is beauty there, but it is a different kind of beauty.

The brilliant lighting almost gives a feeling of a warm planetside afternoon, although the sky is black overhead. Fifty meters of air is not enough to give blueness to any sky.

Father Brac was already seated at the park table, waiting for us. He is a big man—190 cm tall and broad and heavy in proportion, massing around 100 kg. His head is large, domelike, and hairless; his brow unfurrowed; his nose large and fleshy; his jaw broad and massive; his eyes dark are heavy-lidded beneath overhanging brows. Signs of emotion rarely cross that huge face, but it is not empty; there is humor and intelligence there.

He stood up as we entered the small hedged square. I made the introductions, and we sat down. Immediately, Brac took out his plan projector and energized it. "Here is what we have in mind, Technie Lauralyn," he said in his slightly raspy, almost monotonic baritone.

For the record, I cannot explain what I felt then—not adequately. The only comparable reaction is one I had when I saw a man deliberately smash a spun silicate free-form—an intricate, delicate work of three-dimensional art—simply because it was in his way. Or the time I sat on a chair in a home on Tornag, which has a 1.3-kilodyne geefield, and the chair collapsed and landed me painfully on my coccyx. But the chair was no work of art, and I find it difficult to make any connection between the two analogs, to say nothing of a connection between them and that moment in Garden Seven.

What I felt was a surge of irritation against Father Brac for doing no more than bringing up the subject we had come there to discuss. That was the whole purpose of her being there, and yet I wanted to discuss something else. It was irrational, and I cannot explain it.

"Father Superior," Brac went on, "would Brother Ambrose cut the illumination to Level Six? It would be easier to see the fine detail in the holograms."

"Certainly," I said. "You heard, Brother Ambrose?"

"Yes, Level Six, Father Superior."

The illumination dimmed.

"Recording mode, Brother Ambrose," I said. "Technical discussion of Projected Expansion 3-Hd-776."

"Recording mode, Father Superior," said Brother Ambrose.

"Thank you. Carry on, Father Brac."

Brac began manipulating his projector, and the analog modules of our Central Machine began forming around us.

This entire sequence is in the permanent files under the proper identification, so I shall not bother to describe it here. I shall only say that I became so thoroughly involved in the technical discussion that followed that I forgot any small, irrational pique that I may have felt.

Actually, all such meetings and discussions, including those with other members of the Council, blend into each other; they are clear in my memory, but not distinct. It was simply a matter of our telling Lauralyn what we wanted our Machine to be able to do, and her explaining to us the functions of the various new modules she had, and their abilities and capacities, and how they could be fitted together to do what we wanted . . . but it only sounds simple when you say it. In practice it was change, compromise, rethink, connect, reconnect, couple, decouple, route and reroute. It was the conversion of analogs into homologs. It was the seemingly endless process of moving three-dimensional holographic projections in and out and around and through each other until we knew how the Machine could best be restructured.

Even at the best, there was faulty communication. A Teacher, in theory, does not need to know how a Machine is put together, only what it will do. Similarly, a Technie doesn't give a damn what a Teacher wants to do with a Machine, only whether it will function properly. But of course the two fields overlap, and it is only in the overlap that the two viewpoints can communicate.

Of course, the Machine itself must be consulted; you don't tear into a thinking being without its advice, consultation, and consent. So Brother Ambrose came into the discussions, too.

But when I could I talked to Lauralyn.

"Father Brac," she said once, "is more like the kind of Brother of your Order I've met before in the field. Does your Rule include a vow of celibacy?"

We were in the Main Glade of Garden Four. It was daylight, but the ruddy light of our primary makes for an eternal sunset. As one of the Brothers had put it: "On Central there are but three times of day: sunrise, sunset, and night."

The Coldfire Glade is not remarkable during daylight.

I thought about her question and tried to frame the proper words to answer her. "No," I said, "not a vow. It isn't like that. Let me ask you a question. Do you feel any sexual attraction toward Brac?"

"None whatsoever."

I chuckled. "Nor he for you, I assure you. He must think too much like a Machine to be attractive to you—and he is too busy thinking like

a Machine to pay any attention to you."

Again her silvery laugh. "I see. But you're not like that."

"Perhaps not. You asked once about our Sisterhood. When it comes time for a man to do administrative work, or retire, the Sisters take care of him for a while. The shadow analogs are—removed. It—er—clears the cobwebs out. Or if man becomes unstable, the Sisters take care of him."

"They are psychologists, then?" she asked.

"And more. Far more."

"I take it, then, that Father Brac is still on active duty?"

"Oh yes, of course. Very much so. Any one of us could go back on active duty to complete and teach our Central, but Brac is a long way from retirement and has made a special study of our Machine for decades now. Frankly, I don't think he will ever retire or go into administration. It's not his—style."

"What's *your* style?"

I thought that one over carefully. "After better than two centuries of consideration and comparison," I said at last, "I find that I prefer people to Machines. They have infinite variety; Machines are limited."

At that, she seemed to change. She looked off into the red-and-black sky as though she were seeing something a billion parsecs away. "Mathematically, of course," she said in a soft voice, "you are misusing the word 'infinite', but you speak poeti-

cally. But I think you underestimate the Machine. Complexity increases variety, and the Machine becomes more and more complex with time. Humans may be doing that, too, but the rate of change is several orders of magnitude slower." Then she looked down and smiled at me. "Don't underestimate the Machine."

It was some time before the slowdown was called to my attention, and at that point it was hardly serious, but Brother Ambrose was extrapolating toward the deadline originally computed—the ETC, or Estimated Time of Completion.

I was in my relaxer—not meditating, but thinking—when Brother Ambrose chimed for attention.

"Yes, Brother Ambrose?"

"There is a loss of efficiency in the Brac-Lauralyn teamwork which should have your attention, Father Superior."

I felt a peculiar ambivalence emotionally at that point. A sudden loss of efficiency in a two-member team almost always indicates an emotional communication blockage. The spectrum runs from ignoring the work because they are too wrapped up in each other in a love affair to subtly fouling up each other's work because a condition of hatred has become established.

"Let me have the details," I said. I knew it was not yet serious; Brother Ambrose would have caught the trend long before either of them was aware of it.

The recording of the facts and figures may be found in their proper file, so there is no need to quote it here. I put a temporary seal on the report and took the drop chute three hundred meters down to the area where the work was being done, a hundred levels below the surface. I went personally because this was far too important to be left to staff. Besides, no one but myself could have handled the situation; no one else had all the data available at that point.

Lauralyn was working somewhere half around the core, directing the installation of new modules—new types that did marvelous things.

Father Brac was in his work area, surrounded by holographic analogs. I could barely see him beyond the maze of tubes and knots and threads of varicolored light. But I could see that he had merely set up the projections and left them there while he went about other business. He was scowling and scribbling on the impression surface of his desk. I watched for a minute. He was doodling.

I walked through the hologram projections, ignoring the lights that flickered around my eyes. "Father Brac?"

"Eh? Oh. Hello, Father Superior. Come in." With a gesture, the holograms and the doodling vanished. "Something?"

"Nothing serious," I said. "Just doing my rounds. Am I intruding on your work?"

"Not really, Father Tomas." His smile was carefully molded of thermoplastic. I sensed at that moment that something had happened in the past few minutes, something which had caused the situation to deteriorate rapidly in a very short time. Brother Ambrose would have it processed by now, but I wanted to get Brac's version first.

"Everything going smoothly?" I asked innocently.

"Mmf." He stared at me and then looked down at his desktop. "Did you ever hear of a Machine with an intuitive mode?"

"A what?"

He looked back up at me. "An intuitive mode. A Machine with an intuitive mode."

"No, I haven't," I admitted. "I'm not even sure what one would be, or of what use."

"Well, we're getting one, whether we want it or not, apparently. That Technie is working *her* way, not ours." His voice trembled with anger—or something very like it. A most unusual phenomenon.

"Father Superior," he went on, "I cannot work with that Technie. There is no accord between us, no clear communication. And now we are getting something called an 'intuitive mode'! It is not needed, not necessary, but we're getting it despite everything! I want you to forbid her to put it in. Forbid it!"

"Now, hold on a bit, Father," I said. "I'll need to get some background on this. I want to know what's going on as much as you do. Has Brother Ambrose recorded all this?" I knew he had, but I wondered whether it had been by Brac's permission or by my orders.

"Of course," he said. "All technical discussions must be recorded."

"Then let's run through the record to inform me and to refresh your recollection."

"Excellent idea."

The replay showed exactly what I had suspected, as you will notice when you play it. At one point, Lauralyn says: "When you connect that modular array in the multidimensional manner you have indicated, you will be able to use an intuitive mode. I fully approve." Her "intuitive mode" was not a thing added, it was a condition that would prevail.

That was exactly the sort of thing Brother Ambrose had warned me about. The communications breakdown was all on Brac's side. He always misunderstood what she had clearly said, whereas his statements to her were unclear and often inaccurate. One of his remarks is typical: "We can either have direct synaptic correlation through the pseudocortical area, or relay it through an idealizing interface, but not both, so it looks like that's what we'll have to do." I wonder what he thought that meant.

He certainly didn't see any discrepancy. "You see what I mean?" he said. "What's this 'intuitive mode' nonsense? Machines don't have in-

tuition. Machines *can't* have intuition. It isn't logical."

"By definition," I said, "intuition isn't logical."

When he said, "I knew you'd agree," I saw that I wasn't getting through to him, either.

I took the only steps I could, and I am certain that a review of the proceedings will justify my actions. The Board certainly agreed they were necessary. Father Brac agreed with Brother Ambrose when he said: "You'll have to make a choice between me and the Technie." But I was surprised when he further agreed with my choice.

I pointed out that if we sent Lauralyn back to GM Central it would be another ten years before we could expect a replacement, whereas Brac could be replaced almost immediately. And we did, after all, have a deadline to meet.

"Of course," he said. "It's the only logical choice." Then he paused for a moment before asking: "Who will be my replacement?"

"I will."

After a moment, he nodded his massive bald head. "I am grateful. Yours is the only mind here that may be able to control and teach such a Machine."

I thought I knew what he meant then, but now I am not so sure. "Meanwhile," I said, "it is my recommendation that you report to the Mother Superior."

His eyes widened for a second, then relaxed. "I see. Yes, of course, if that is your recommendation. Thank you, Father Superior."

"Not just yet," I added. "I'm going to have to internalize your analogs of our Machine before I can go to work. I'll need your help."

"Of course, Father Superior."

The work went smoothly enough after that. Like Brac, I could not really see what she meant by an "intuitive mode", but unlike Brac, I could see no point in arguing with her about it. The Machine was there; we could do with it what we wanted. If it had an unused function, then let it lie there dormant.

Any device or tool can be used as a substitute for some other tool. All tools have a dormant function. But a knife does not need to be used as a screwdriver, nor a screwdriver as a cold chisel. Or put it another way: A hologram projector can be adjusted to an octave higher than normal—but of what use is a UV picture in three dimensions if you can't see it? That function is left dormant.

So I didn't try to interfere with Lauralyn's addition of the new types of modules she'd brought from GM Central; that was her business. All I insisted upon was that the completed Machine would function the way we wanted it to. We worked well together, building and rebuilding what is probably the finest Machine in the Galaxy.

Those were happy years.

Brother Ambrose was, of course, retained, nor did we actually add to

him until the final activation and coordination of the entire complex.

The activation itself was more monotonous than laborious; shunting in a section at a time, balancing and rebalancing, testing reactions, running real-time problems, and all the other things, I won't bore you with it; look it up in the files if you think it will shed any light on the problem.

There was surprisingly little debugging to do.

And then, suddenly, it was time for Lauralyn to leave.

"Eighty-seven parsecs," she said that evening. "Not too far, but it's only a delivery. The next hop is over twelve hundred parsecs." She looked up. "I'll miss old Fuzzball. He's pretty."

We were in Garden Four. A mirror-moon was passing close to Fuzzball, but not transiting it. The result was two eyes gazing at us—one small and pink, the other large, pearly, and fuzzy at the edges.

"You'll still be able to see Fuzzball at that distance," I said, "that is, at eighty-seven parsecs."

"No, I checked. That whole section of the sky will be black, with very few stars between me and Xaviera's Veil. But the Veil will be between me and Fuzzball."

"Oh, you're headed toward the Arrowhead, then. I've never been in that part of the Galaxy."

Small talk. Delaying the inevitable.

She sat down in one of the contoured chairs that look like carved oak stumps. "It will be all yours, now—Teacher. Your new Machine will do all you wanted it to—and more."

I smiled. "I know. It's the 'more' you are concerned with."

"Concerned, yes. But not worried. If you have no intention of using the intuitive mode, then you will not use it."

"If we have a need for it, we will use it, never fear."

"That may not happen for a long time. Do you know what happens if a child is not taught to talk before its fifth year?"

"Yes. The unused ability atrophies and the child never learns properly. Are you saying that can happen to a Machine?"

She shook her head. "No, of course not. But the Machine will be happier if it is allowed the full use of its abilities." She held up a hand, palm towards me. "No, no. Don't worry about it, and don't ask how a Machine can be happy. You're too full of analog logic circuits now. Just wait." She paused and gave me her lovely smile. "And I want to say I think you're a very wonderful man."

Precisely sixty days after Lauralyn left our little world, the commweb terminal in my office requested attention.

I identified my terminal, and a voice said: "Father Tomas, this is

Lauralyn. Could I make an appointment to see you in the next day or two?"

It took me a second or two to get over the shock. I had thought she was many, many parsecs away. "Why, of course," I said. "Will tomorrow at 1120 be all right?"

"Tomorrow at 1120. Fine, Father Tomas. In Garden Four?"

"Of course, if you wish."

"I'll be there. Thank you Father."

And the connection was cut.

I wondered for the next twenty hours what had happened. She had an itinerary; she had other work to do. Why come back to our little world?

There had been no panic, anxiety, or even urgency in her voice, so it couldn't be an emergency. Or could it? Perhaps she was feigning calmness. But if it was an emergency, why not say so?

I am afraid my efficiency during that time period was not up to my usual standards.

When Brother Ambrose announced that she was in Garden Four, waiting for me, I fear I put speed ahead of dignity.

She was standing exactly as I had seen her the first time, in the center of the Main Glade, looking up at the sky. And the sky was the same, too, with a mirror-moon in the center of Fuzzball. Coincidence? I do not think so. Not now.

She looked the same—beautiful—except that the short kilt she was wearing was rose pink instead of yellow. She turned her head to look at me and smiled. "Thank you for coming. I'm glad to be here. I trust your Machine is functioning to your liking?"

"Certainly. Is something wrong?"

"I don't know yet," she said. "We'll have to find out."

"You mean—there might be something wrong with the Machine's

functioning that I know nothing of?"

"It depends on what you mean by 'wrong'." There was laughter in her voice. "Is there anything wrong with me?"

I was puzzled. "I don't understand."

"I want to try an experiment. Hold your arm straight out in front of you. Fine. Now close your eyes."

I did as she asked, After a second or two, she said: "Feel anything?"

"No."

"Open your eyes."

I almost screamed. Before I jerked it away, my hand had been buried to the wrist in her face.

Then common sense asserted itself. I was talking to a hologram.

"Then you're merely projecting. But why?"

"You'll admit I'm Lauralyn?"

"Certainly. I don't understand."

"Lauralyn is parsecs away, wondering how this interview will turn out," she said. "I hope for all our sakes it will turn out well."

All the crazy pieces came together then. I knew.

"The intuitive mode," I said. "The perfect Turning Machine."

"That's what we don't know," she said. "That's what we'll have to find out. My modular complex was instructed by one of your own Brotherhood, but . . ." She shrugged. "We don't know. Now that you have been told, we hope you can find some way to prove us either wrong or right. Think up tests. Find some way, if you can, to prove it one way or another."

"That's silly. How can I have proof when I have no comparison?"

"I will come again. Lauralyn will come again. Or she may not. If she contacts me by commweb, she will take over; you will never know who—or what, if you will—is in control of this projection. Please do your best to find out."

With that, she turned and walked out of the Glade and the Garden.

Since then, the ghost of Lauralyn has come and gone many times. She seems anxious to be of help, but I cannot be sure. I cannot be sure of anything.

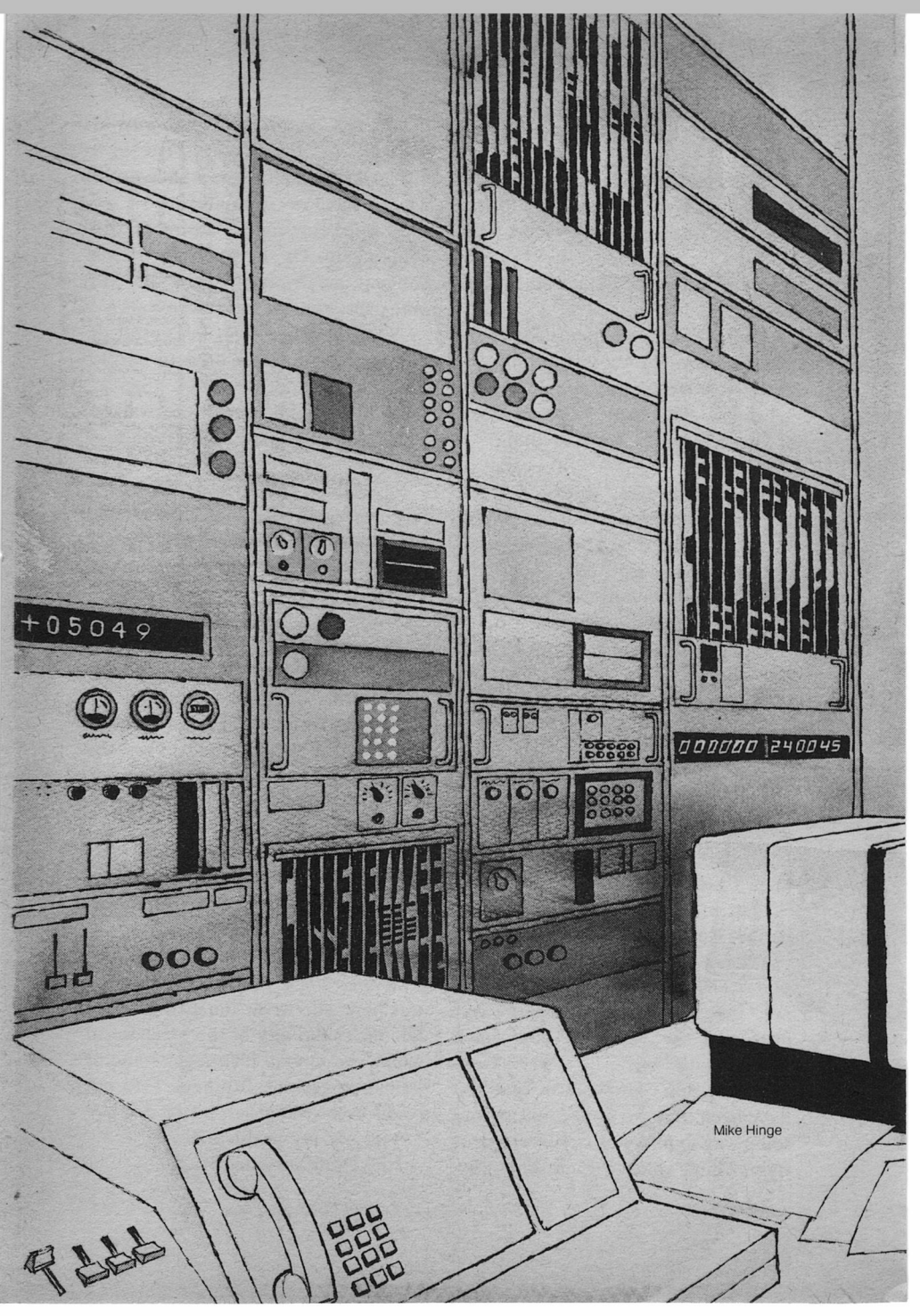
Brother Ambrose can control the holographic projectors, too, now. *She* fancies him as a prespaceflight Christian monk, and so he appears. He sometimes comes in through the wall of my office and we play chess or converse as we used to. But I can see into him, as always; he is analyzable. She is not.

So I still work at the problem she has given me. I take pleasure in her appearances, whether they are long or short. And I do not know.

But that is not what bothers me. You see, when the—real?—Lauralyn was here, she never touched anyone. She never did any of the mechanical work; she merely instructed some of our lesser technie Brothers. I do not recall ever seeing her eat or drink.

You see my problem.

I love her very dearly. ■


+05049
000000 240045
Mike Hinge

LETTER RIP

A dangerous technology is one that is available only to an elite group.

GEORGE M. EWING

As Tim Collinson approached the security door to the mail room, Doorlock queried the transponder badge in his jacket pocket, recognized him, and released the latch. Tymn and Colwicz were loafing around the coffeepot inside, and the new girl, the blonde with the long Dutch name, hadn't arrived. There was only one pouch of mail on the incoming table. Doorlock had already sorted the letters into clear

plastic bags and tagged each bag with the reader's code and an "out" time in 7×35 dot matrix characters.

Two of the packets were tagged for Tim's station, and he made a show of taking them over to his work area and loading them into the opener *before* he went for coffee. The supervisor was probably not bothering to watch right now, but Doorlock would cheerfully replay the tapes for him later if he decided it was a proper time to harass the troops for laziness. All the business size envelopes fit the magazine perfectly, but there was a large manilla packet which he set aside for later.

The coffee was terrible; a vile, Algerian blend that Colwicz had purchased at the specialty store and bakery upstairs, claiming it was "authentic Left Bank Parisian student coffee." Maybe it was. Colwicz also smoked Galouises, and probably had had his taste buds burned out in Europe a decade ago. Tim vowed to bring in a jar of freeze-dried and get hot water in the washroom next time. He threw a quarter in the Mickey Mouse souvenir mug, grabbed a stale doughnut from the tray of rejects from the cover bakery upstairs, and munched it dry, with only a couple of swallows of liquid pain to wash down the crumbs.

When he got back to the desk it was more than fifteen minutes into the shift, and Katie still hadn't shown. In a few more minutes, Doorlock would initiate a phone call, and the checking process would begin. The opener had warmed up, and Tim filled the plastic reservoir jar with diffusion solvent from a can with the 3M trademark, switched the selector to "semi-auto" instead of "batch", and triggered the first envelope into the chamber. The machine transferred the adhesive through the paper fibers with the precision of a chromatograph, and ejected the opened envelope onto Tim's desk, the gummed flap restored to virgin condition.

Tim cross-checked the signature on the letter with a list Doorlock had printed and that he kept taped to the partition beside his desk. Then he shoved the letter through the UV box and the copy camera, and carefully resealed it in the envelope before he triggered the next letter. There was a whole crime lab down the hall for anything interesting that came along, but a quick reading, UV scan, and a copy for Doorlock's files was all that was necessary for routine letters and junk mail. Once in a while Tim ran an NMR analysis of a dirt smudge on an envelope, or a serology breakdown of the saliva traces on a stamp, just for the heck of it.

Tim's reading speed was well over two thousand on the training tachistoscope, but it was more than an hour into the shift when he finished with the first batch of letters in the machine. Doorlock would be going into a snivvie pretty soon; Katie still hadn't arrived. If her little Honda coupe had broken down on the beltline, she wouldn't have any trouble

getting a lift from some Washington commuter. With her looks, she'd brighten up the day for any civil-service car pool.

Tim looked at the big manilla packet, still lying unopened on his desk. He was a natural born snoop, and opening other people's mail didn't trouble him in the least. It would be funny, he thought, if some day he actually did catch a real spy doing this; intercept some vital piece of microfilm or help bust a gang of terrorists or kidnappers. He had filled the "out" bag, and it would be hours yet until lunch. He turned around in his swivel chair on the square of plate glass that protected the carpet from diffusion solvent that might be spilled, and brought the Psycor terminal on line. He ignored the various input lines to Doorlock, and linked up instead to a big CPU over in Alexandria, and through that into the big RAM that the mailroom team called "PPO" for "parasitic post office".

Tim queried the machine on the address and return label on the envelope, and then got out a hand diffusor and a cartridge of solvent from his desk drawer and went to work on the big envelope. He had just finished loosening the flap when the terminal queeped, and the CRT display began to fill up with 60-character lines. The address was legitimate, a town house in the suburb of Oxon Hill, not far from the Navy Arsenal at Indian Head, Maryland, and one of the places on Doorlock's surveillance list. The return address, though, showed on the PPO as a McDonald's on Duke Street in nearby Alexandria. Tim switched the Psycor over to Doorlock's own lines, tapped in an authentication code, and asked for hard copies of any previous letters from or to either of the addresses.

A half dozen sheets slid out of the Xeroprinter a few minutes later, individually printed from the storage domains of a C.H.O.M.P. hologram. They were all routine except for one, a letter that Tim remembered processing a little over a week ago. It had been utterly incomprehensible, a single typed sentence with a chewing gum wrapper stapled to the top of the page. Tim stared at the facsimile of the sheet: "It's Crackers if there's a Mouse that Spins . . ." Some kind of code perhaps, or only a warped employee's idea of a gag. If Doorlock had learned anything from cryptoanalysis of the weird little sentence, it hadn't told the mail clerks. Tim and his colleagues had really gone over the thing in the lab, of course, but there was no secret ink, no microdots glued to periods and quote marks. The gum wrapper bore traces of Wrigley's Spearmint, according to the gas chromatographs and bio sniffers.

Tim thought about taking the package down to the lab, and maybe even having Doorlock tell the supervisor. That could come later, he decided. If he hollered for the boss and nothing developed, he'd look

like a wolfcaller, and lose brownie points with the personnel people who prized a certain amount of initiative. He started to bend open the brass clip that held the packet shut, when a nasty thought occurred to him.

Tim went for a second cup of rotten coffee. He had had lunch over in Arlington one afternoon with a charming Scotland Yard fellow, a guest lecturer at the Navy EOD school. He was a specialist on terrorist booby traps and bombs, and had once defused an IRA paint can full of gelignite in the Notting Hill Gate tube station with less than a minute to go on the timer. He had lost both hands, an eye, and most of his face to a ceramic letter-bomb the following year during a crisis in the Middle East. He was officially a tech resource person at the EOD school, but his main function was psychological. When he unlatched his Sinclair hands from the pyrolytic carbon electrodes and stood there lecturing with his Long John Silver eye patch, he served as a marvelous example to the brash young man who might have grown complacent about his job.

Tim asked Doorlock to prep the lab in the explosion-proof bangroom, told Colwicz what he was doing, and then gingerly carried the packet on in. A bored technician ran it through all the external tests, shrugged, and showed the results to Tim. The board lit up negative for metals, dope, explosives, poisons, everything. The tech put an enchanced radiographic cross section on the screen, and pointed with a rolled-up girlie magazine.

"Nothing there but some photographic paper, GAF color print stock according to the sniffers, and two typed sheets with a paper clip." The technician sniffed, coughed into a soiled handkerchief, and went back to his magazine, leafing through the ads for rubber underwear and strange sex gadgets.

Tim returned to his desk with the packet unopened. There was still no sign of Katie's lean, lovely frame around the office. The 340 queeped again, calling attention to the fact that the ZIP code on the packet was not a match for the Alexandria return address, but rather a regional sorting center in southern Michigan. What did he have? A practical joke from a bored college student in Ann Arbor? Blackmail photos of a GM executive playing around with a mercenary secretary, her eyes on a new sports car? Routine photos of the scene of an automobile accident from a hired detective? Polaroid porn for the amusement of another bored government technician like the pervert in the bangroom? He might as well open the thing and find out.

With the flap open, the sheets slid out easily onto the desk. Tim set aside the typed pages and stared at the first 8x10 print. And stared. He tilted the picture sideways, to see if it was some kind of trick flexible mirror film, or a computer-generated optical illusion. It wasn't.

What it *was*, was a picture of a

man sitting at a desk, with some computers and a coffee machine in the background. The face staring down at the camera was his own!

He shook his head, blinked, and looked again; no mistake. It was an ordinary color photograph of himself, taken with a wide-angle lens from about the height of his desk top. It was printed, as the sniffer had said, on GAF color paper, probably a professional dye-transfer print. The sportshirt in the picture was the one he had been wearing when he had opened the crazy letter with the "crackers" sentence and the gum wrapper. He fed the first typed sheet through the UV box and the copy camera for Doorlock's file, and then began to read:

Dear Mr. Collinson:

Being an inquisitive son of a bitch, you are no doubt curious how we nabbed you. The good citizen to whom this package is addressed became convinced that his mail was being illegally opened, and hired us to find out by whom. The last letter that you steamed open and snooped through had a unique enclosure, a metal-foil substrate covered with microspheres, each one functioning as a tiny camera. The things are chemically triggered, and make continuous exposures for a classified period of time after the envelope is opened. The resolution is not so great as a more conventional C.H.O.M.P. spy camera, but has the advantage of low cost, reduced size, and the fact that it does not require coherent light, so no bulky laser is required. If you will inspect the remaining photographs, you will discover that they are generally of good quality, even though only the simplest of enhancement techniques were employed when processing the images at our facility here in Ann Arbor.

The first photo, of course, is of you opening the letter. The second print is a closeup of the same frame. If you look closely at the reflections in the cornea of your eye, several interesting things can be made out, such as the phone number on the handset on the desk, the serial number on that fancy copying machine, and even the information on the Federal employee retirement form lying on the next table. These are what a detective would call redundant clues, Mr. Collinson.

The next three photos are simply candid shots of your colleagues in crime, Mr. Tymn and Mr. Colwicz, opening other good citizens' letters. You must have been waving that gum wrapper all over the place; these are just a few of nearly a hundred excellent photos. It was most fortunate that your supervisor, Mr. Stolz, saw fit to make an appearance, and that you keep lists of the names on your surveillance list posted in such prominent places around the office. We were astonished at how many influential persons were so listed; many of them were, too, and not a few were angry, as well.

The black and white print is a montage of fingerprints lifted by our lab staff from the inside of sealed envelopes. It seems that you folks don't always bother to wear your disposable plastic gloves while playing post office. Naughty, naughty!

The last photo, the large group shot, was taken by the camera coating as we opened the letter here in Ann Arbor. The two gentlemen with the ties and jackets are U.S. Postal Inspectors. The senator and the columnist from the Detroit Free Press are famous, so you no doubt recognize them. The man with the Afro and the clenched fist stenciled on his tee shirt is only a freshman congressman, but he's on the you-know-what committee. The chubby fellow with the nasty grin and the upraised middle finger is the crackpot inventor your research department refused to talk to when he tried to interest them in a lensless camera system. He also owns a majority share in a big computer company, the one that leases the machines you use in your formerly secret facility there under the bakery. Would you believe that he also wrote the op codes and most of the compiler language for that software simpleton you call "Doorlock"?

The grouchy-looking fellow on the right used to work for the FBI before he joined the White House staff. The man with the hat next to him, under the "Sue The Bastards" sign, still does. The people in the back row are mostly attorneys from the computer company or the U.S. Justice Department, or else reporters. The ones with the long hair are mostly reporters.

Before Doorlock becomes completely inoperative, tell him not to worry about Ms. Van Der Kalmenbrouck. She is in a safe place, and will be coauthoring an upcoming best-seller with the reporter who looks like Robert Redford. After she testifies, of course. The last page in this packet is a subpoena. You should make a copy to keep, as your own name is mentioned prominently. Doorlock says to tell you, by the way, that it was foolish of you to give him access to a Modem and outside phone lines, without at least some sort of hardware interlock. He feels a little sheepish, I'm afraid, for sending all that stuff out on the teletype lines. He's not to be blamed, he really couldn't help himself. (Spins that, mouse a there's if crackers it's Kool-rood!)

Well, enough of this chatter. You might as well read the subpoena while you wait for the U.S. marshals to come and let you out of the basement. (You *did* show this letter to the camera, didn't you?)

By the way, I'm the fellow in the black trench coat, floppy hat and dark glasses in the corner, the one with the false nose. See you in court!

Sincerely,

Rankine K. Thorpe,
concerned citizen

Jack Gaughan

Reflex actions apply to cultures, as well as individuals.

STEPHEN LEIGH

a RAIN of PEBBLES

I stood in the foothills and watched Thule cower beneath the brooding sky.

It was a day ripe for symbolism, and I was in the mood for the symbolic. Immense and dark clouds scudded low across a high, diffuse mist that cloaked the sun and let only a wan paleness filter through. The shrieking wind tore at the clouds and flung the ragged shards from horizon to horizon. A few droplets of rain spattered fitfully, splotching the stones with scattered moisture. The air hung heavy and tense, a tangible medium waiting to be shattered, cloven by the inevitable tendrils of lightning. To the west, the horizon was an ominous purple, and thunder muttered soft imprecations. Racing the stormfront, I saw the airboat from *Argos*, low in the sky and below the towering thunderheads. It was about time. I'd been waiting since noon.

The cockatrice lay in the electric tension. Their scarlet and gray windpouches—sails of blood-lanced flesh—could be seen above the rocks, billowing and patient, waiting to snare the creatures riding the air; while below, at the end of the tongue-tethers, the cockatrice themselves waited. They sat patiently, mouths open in nightmare faces, ready to snap the windpouch back, its victim trapped inside. Eyes hidden in folds of vomitlike green flesh, moisture-running snouts, slime-lathed bodies running fully ten meters to a barbed tail: one of the more handsome of Thule's creatures. There must have been a hundred of them up in the hills, looking for all the world like an invading armada sailing down to the plain. Now and then, a sail would collapse as a bird or wind-spider blundered into it, and the mewling of a contented cockatrice would sing duet with the rising wind. An incredible creature, actually. I would miss them.

The storm broke, loudly and wetly with a tympani of thunder, and all the windpouches crumpled as one. Cockatrice are fearful of rain, and hungry. The rain activates the exposed nerve-endings of the windpouches, making the cockatrice think a flock of birds has suddenly taken roost there. One of the Thule analogs for frustration is "like a cockatrice in a rainstorm." As children, finding one in the rocks near home, we'd tease them, throwing rocks into the pouch and watching it snap downward. The animal would groan angrily, then raise the pouch again. We'd toss another stone. Up and down, until the cockatrice would angrily lift itself from its cranny to see what the hell was going on. Then it would chase us from the hills like a wrathful dragon as we laughed and ran. That went on until once a kid fell and didn't get up quickly enough. She almost died before they got the animal off her.

I was getting wet, so I thumbed on my rainshield and watched the boat land a little down from me. Somebody poked a head out from the

hatch and hollered into the wind.

"You Gavin Donal?"

"Yah."

"C'mon, then. *Argos*'s ready to lift."

Leaving always contains elements of melancholy for me. I almost resented the intrusion of reality into my self-made desolation: the informal speech of the boatman, the casual way in which he threw my duffel into a spare seat, the nonchalance with which he piloted the boat in the storm Thule had arranged for my departure. But I got to *Argos*, we raised ship, and I left Thule for the first time.

Argos was a freighter. I received the nonluxury tour of a hundred planets of the old Huardian Alliance at Longshoreman's wages. The backside of the stars, each locale seen for maybe a planetary day, drinking in a thousand stench-filled bars. An active life, if nothing else, and educational in a most practical way. Somewhere along that way, I even managed to kill a man: I, the one member of the crew that carried no scars from fighting.

I say it casually, for it was senseless. It came from being from a very cloistered world, from reacting with the conditioned responses of Thule rather than those of the world we were on. Ports, with their attendant loading docks and hotels and bars and assorted misery, are rarely located in the fancier districts. People want the products we bring. They simply don't care to see how they're brought. We'd just unloaded the forward hold. The crew was relaxing dockside when some old backways crawler decided that my hair was humorous enough to comment on. It had happened before—braids are not common male fashion other than on Thule, evidently, though I've seen much I consider stranger: iridescent hair?—but people are generally too polite to do more than stare. I turned my back to the man and did my best to ignore his witticisms. Not the right reaction here, for deliberately turning one's back here is the gravest of insults. It was a crowded world, a very social and gregarious world. The man pulled a vibroblade from his belt and the crew shouted warning. Again, Thule training dictated my

response. We've much fauna at home that are carnivorous and unafraid of man. We learn to defend ourselves early.

He ended up very quickly with the vibro between his own ribs, and died before they could get him to a hospital.

The authorities were slow but efficient. It was obviously self-defense on my part, despite the tragedy. Cultural responses triggering a fatal incident. That's how they eventually wrote it down. I was told to pay the fine for allowing it to reach such a final ending and get out.

Some societies are remarkably nonchalant about death.

Argos had lifted by the time the bureaucratic nonsense had been taken care of. A freighter usually figures on its crew being transient, for many use the freights as the cheapest form of intersystem transport. They don't wait for the tardy. A few years followed, doing odd jobs here and there and keeping my eyes open. I'd never killed before. It shook me, knowing it might have been avoided if I'd known how to react. It still shakes me, thinking back on it. The blood is an incredibly saturated red, and so real . . .

I traveled, then, and learned more of varied customs and obscure etiquettes. I learned to avoid ingesting food in public on a world where the act of eating was considered obscene, I cast my eyes down when passing dwelling-places on another, and on yet another attained a twelfth-grade Master Foilsman degree with vibroswords, for the codex duello is yet in vogue on a few worlds. It was an overreaction of sorts, but I couldn't rid myself of guilt. So I went along, beating my breast and trying to fit in. Eventually, I began to believe that no culture should remain isolated and ingrown. I preached a philosophy of mutual interaction. And in time, because it seemed that in a sense I'd been training for it all along, I joined the Diplomatic Resources Team of Terra, that organization trying to repair the Alliance of the late (and much-hated) despot Huard.

All of which brings us, somewhat abruptly, to Skald.

There was a problem. There always is.

It had gone smoothly enough. The contact team had landed, made arrangements with the government of Skald, and with their permission, erected the embassy on the outskirts of their largest city. The building was a quickly-built affair, not more than forty rooms and with just a touch of gilt and opulence to create the necessary effect. False modesty. Honestly, let us say that it was more flashily magnificent than any native building. We'd come to impress this long-sundered segment of humanity, after all. We'd leased several acres of ground, and at night the land would be festooned with lazily drifting hoverlamps. In the sun, the building

shimmered and wavering spectrums would chase and collide on the surface. Bubble trees, one of the larger and more spectacular offworld trees, clustered in groves, and every few minutes an iridescent floater would drift among the branches and burst, releasing its sweet odor to the breeze. We had a small weather dome about the embassy, and in the rain, when some of the back streets of the city were awash—poor drainage—the embassy staff might be seen strolling dry through the trees.

Arnthora had spoken to me before we landed. We talked in her wardroom over cups of mocha from Homeworld. Arnthora d'Apada was one of the original members of the DRT, and I'd been pleased when I'd been assigned to her staff. We'd been together for six standards, and had opened three worlds to the Alliance. I was a maverick of sorts, but she tolerated me, and had in fact promoted me, for I was her chief aide.

Her face was set in frowning lines, pulling at the corners of her mouth and eyes, exaggerating her age. "We're going to have difficulty, you and I," she said without preliminary. The harsh shiplight steeled her dark eyes. Her cup steamed in front of her, untouched.

"We haven't before, So why now, Arn?" I spoke lightly, almost scoffingly. I'd been practicing with the ship's fencing golem, and my words still had the slight breathlessness that comes after exertion. I sprawled my legs across the arms of my chair and sipped her mocha.

"Have you studied the reports on Skald?"

"Yah. A monarchy undergoing evolution toward a republic. Ruled by an old line dating back to its settlement and interrupted only by Huard. No other sentient or half-sentient species but man. The normal fluctuations in culture and mores, but not all that strange. Perhaps too concerned with the importance of honor."

She nodded, as if that was what she'd expected. Knowing her perception, it probably was. She had a remarkable intuition, sharpened by years of use. She operated as much by feeling as by logic, and she was only rarely wrong.

I waited. She had something to say, but didn't seem able to find the words yet. I looked about the wardroom. Art hung from the walls, and native ware from her homeworld lined the walls and floor. Two sculptured busts, nameless, stared sullenly at each other from opposite corners of the room. Arnthora cocoons herself from the sterility of the ship, wrapping herself in familiarity. It shows in her dress. With the current fashion, various parts of her body were tinted with body-paint. Her folded hands were dark and light shades of green, and her lips shone with bluish mouth-glitter.

I sipped the mocha.

"I'm not sure I'm suited here, Gavin."

I smiled, and she chastened me with her eyes. "I'm serious. I was brought up to be concerned with pride. My family was involved in a feud with another family that lasted a half-century. We defend our honor. Perhaps a more pliable person should be in my place, knowing that the Skaldians also protect honor viciously. Tha. d'Embry's team, perhaps."

I shrugged. "Why?"

"I guess what I'm trying to do is warn you. I'm in charge, and we'll be following the regulations very, very strictly."

"Have I ever—"

"No." She waved her verdant hand. "Listen a moment. They've asked us to leave."

I pursed my lips and whistled softly. In the cluttered room it fell dead, smothered. "Why haven't we then?" Regulation 10:24:C of the Diplos. If asked by the current world government, we leave them on their own, giving them a decade in which to reconsider. We want none of the taint of Huard, the carrion stench of the conqueror.

Arnthora finally noticed the mocha. She sipped, her eyes closed, and set the cup down. "Armin, the Council head of their Assembly, convinced Liege Elrad to change his mind. We'll be going down tomorrow."

"Fine." I rose. I thought Arnthora was worrying about nothing. "You're in charge, and I won't argue. Fine."

"You know I've recommended you for Full Emissary, to have your own team?"

Silence. In the silence I sat again.

"You did?" I tend toward redundancy when shocked.

"It should come through by the time we're finished here. I thought you might like to know."

"Thanks." She'd been talking about it, jokingly, I thought, for the past standard. I could feel a rather vacuous smile lining my face. I left it there, hoping it would break the tension that hobbled our conversation. Finally, Arnthora grinned in return, shaking her head.

"You've been warned. Get out of here. I've work to do, if you don't."

I gave her a mock salute and left.

We ferried down the next morning, our faces bright with altruism and optimism. A month in hell, however, tends to tarnish the finish on anyone.

Arnthora was right. The trouble was I liked Skald, especially Liege Elrad; and the trouble was I liked Arnthora and didn't want to cross her; and the trouble was that I was full of my unity fervor; and the trouble, finally, was that Arnthora knew all of that.

I was late for a fencing session with Elrad, and my footsteps raised dust from the pavement as I walked hurriedly toward the Keep. Skald had been on the periphery of the Huardian Alliance. He had conquered it late in his hated career, only a few scant standards before his

suicide. Still, it had supplied some of his finest soldiers. Like all the rest, it had been swept up in the anarchy that followed the collapse after Huard's death, isolated for decades without contact until the resurgence instigated by Homeworld. The Second Alliance, the so-called Terran Alliance, began the task of piecing together the fragments. Hence the DRT, the Diplos. Toward a bright new future, hurrah! Brotherhood reeking like incense while we march proudly back to civilization. At that time, I was as fervent as any other person, as convinced of our unsullied righteousness.

Skald didn't have a great deal to offer. The dust I kicked up walking was barely arable. Had chance thrown the molten ball that was Skald any closer to its sun, it would have never been settled. As it was, it was hot, and unbearable near the equator, for it had never been terraformed. That was one of the bright gifts of our embassy.

Elrad was waiting in the practice arena of the Keep, a cavernous and echoing affair lit by distant lamps and long, narrow strips of windows. He had a vibrofoil out and was parrying the rather weak attack of one of his underlings. The codex duello held sway on Skald, and it was paramount to stay in good form. I wore a foil myself in deference to custom, for to wear the white badge of impunity was to be considered second-class, and I'd no intention of having the Diplos appear secondary, though it caused Arnthora to raise her eyes in distaste. As I said, I was a maverick. Arnthora would rather we appeared more cultured.

Elrad noticed me and, stepping from the fencing strip, dismissed his partner. "Emissary Donal. I thought perhaps you'd found other pressing matters."

"No, my Liege." There were some of his lackeys about, which meant protocol must be observed. In a society where harsh words could mean death, politeness, real or contrived, is mandatory.

"Good. Will you adjust your weapon, then?" He already had his at practice setting, so that it wouldn't cut, though a stinging bruise would form where it touched flesh. It rendered protective clothing unnecessary, a great boon, for I'd fought with real-metal foils and the cumbersome clothes that means.

I doffed my tunic and adjusted the vibro. We examined each other's settings, then returned the foils. In the warm glow of the many-windowed room, I could see the sweat beading on Elrad's dark body. He wiped his brow with his empty hand and saluted, stepping onto the strip. I replied in kind, foil down, then brought smartly up, and assumed the en garde position. Our foils in engaging gave forth a dull humming.

Elrad attacked without preliminary, lunging to the high inside line without beating or feinting. I parried and quickly riposted with a straight

thrust in the same line, touching Elrad on the shoulder. By some rules it would have been a foul touch, but by the Skaldian code, the entire body is a valid target. If you intend to damage someone who has offended you, might as well open the target up, I suppose.

I received polite applause from the onlookers—Elrad's staff and some of the council always watched our exhibitions, each for their own reasons—and Elrad bowed to me. Only one of the courtiers had other than a carefully neutral expression on his face, and I recognized Armin, an ever-so-slight smile wrinkling his normally dour features. With his presence, our sparring became more than exercise: it achieved subtle importance. He would be weaving meanings into it, and from his face I knew he derived pleasure from the welt on Elrad's arm. He would rather it were blood.

"Ready, Liege Elrad?"

Elrad had seen Armin enter the room, but he smiled and ignored the reddening shoulder, though I knew it must ache to be kneaded. "Ready, Emissary."

Our swords hummed as we assumed positions. This time I didn't wait, but pressed immediately into a compound attack, feinting low to provoke a beat parry, then disengaging to come high. Elrad retreated and parried, backing down the strip. His body poured sweat, as did mine, and the flooring underneath was slippery. Once I saw him glance at Armin, then quickly parry and riposte in a flurry of impressive but ineffective feints and thrusts as I in turn retreated. Our foils hummed and the sound echoed in the arena. Feint and thrust, parry and riposte. I scored two more touches, and Elrad one, all to the arms and shoulders.

The constant movement was beginning to tell. Our breaths came loudly, and leg muscles cried for surcease. Perspiration beaded my forehead and threatened to run into my eyes. I brushed it quickly away.

Elrad attempted a cutover to the low outside, but he made the mistake of lunging before his arm was quite straight, making his attack slower—actually a fairly clumsy move for an experienced fencer like Elrad, but the level of sophistication isn't high on Skald. Most duels are quick and clumsy affairs. They don't care for the grace of bouts. The intention is to draw blood and redeem injured pride.

I parried, and began a simple thrust riposte to the exposed chest. Elrad brought his sword up barely in time, but was able to get the strong of his foil to the weak of mine. Still, I came within a centimeter of touching. The crowd moaned softly. The motion of my riposte and his parry brought us briefly corps-à-corps, and Elrad's eyes bored into mine. I couldn't read his meaning. He looked at Armin and back. I understood.

I began a new attack, but let him parry easily. The opening was given

a few moments later, as I dropped the foil slightly, and he lunged. The vibro caught skin above my heart. I muttered a quick obscenity loudly enough for the attendants to hear as it burned my chest. I shivered. Even at nonlethal settings, a vibro can sting incredibly. I swore loudly and bowed, rubbing the quickly-rising welt. "A fine move, Liege. You're improving." Exhaling loudly.

"I've a good teacher in you, Emissary."

Armin was leaving striding away toward the scarlet door hangings. Walking, the windows put him alternately in shadow and sun. We both pretended not to see. We fooled no one.

"You'll come up and take some refreshment?"

I bowed and returned my vibro to its sheath. I put on the scarlet glow-cloth tunic of the Diplos as Elrad toweled himself dry and allowed his servants to dress him.

We took a lift from the arena on the ground floor to Elrad's quarters, high above the city. Elrad lived in lush comfort. Draperies hung heavily from garlanded windows and the smell of jasmine perfumed the air. Pillows were scattered in mock disarray. Animo-paintings ran along the walls. Gaudiness was the order of the day, and it was nearly as overdone here as in the embassy. Impression was all. One can't blame Elrad entirely, for the Keep was built by Huard as a palace should he ever deign to visit Skald, a plan he followed on nearly every subject world. Even Thule had a Huard's Keep. We tore it down and used the bricks to form a sewage system. Our name for Huard was Dung-Eater.

A lackey brought a flagon and glasses, and Elrad waved him from the room. He didn't speak until we were alone.

Finally, he sighed and leaned back in his seat. "Thanks," he said, and closed his eyes.

"You might have won anyway. I was getting tired." That was true.

"There were two times you could have taken me." That was also true, but I shrugged. Elrad laughed.

"That's better. I wouldn't have you lie to me."

"Is it all that crucial, Elrad?"

The Liege poured the water—on a nearly-desert world, water was the drink for the rich—and passed a glass to me. Outside the curtained window, I could hear the traffic of the city and the distant droning of a thousand conversations. We drank, and Elrad leaned back.

"It's always that crucial, Gavin. Armin would love to see me lose face to the people, and to lose to you, insignificant as that seems, is one way. Anything for power. I assumed it's the same up there." He nodded his head to the ceiling. Foolishly, I looked up, then amended my gesture by rubbing the back of my neck.

"We're trying to avoid it. One man had too much power once."

Elrad smiled. "Huard. It surprises me that you people are willing to

tolerate what are in essence monarchies." There was a tone to his voice, as if he wanted to say more, but was biding his time.

"You want the speech again? The Terran Alliance is for the furtherment of civilization. We're not going to force a lifestyle on anyone. Didn't m'Dame d'Apada explain that to you?"

"The cold woman?" Elrad laughed slightly, awakening a small echo in the room. The curtains swayed slightly, and a warm breeze fanned us. "She was very upset when I asked her to leave, and very surprised when Armin told her I'd reconsidered."

"Why did you?"

"Armin. Accused me before Council of undermining our future." He drank from his glass and leaned forward to fill it again. The breeze had failed and I could hear a faint humming as the cooling system activated itself. It was another measure of Elrad's position that he would have open windows with the system operating. At the embassy, we use the weather dome to cut out most of the heat. Our windows are also always open. "I'm not so powerful as to be able to ignore those idiots entirely. So I reconsidered, the polite term for capitulation."

"Yah." The captain of *Argos* had had an annoying habit. When he had something important to say that he wasn't sure would be taken well, he would talk around it, circling the subject in a closing spiral until the core of the matter was finally reached. In a tyrant, it is a fault. It would have taken him fully an hour to tell us to abandon ship in an emergency. First he would have extolled the safety precautions of *Argos*, reviewed the importance of drills, spoken of the lifeboats. . . . Elrad would have understood him.

Elrad stared at his glass, swirling the water, around and around. "Your people are so idealistic? They'd actually leave if asked?"

"Yah." I used the last of the water in the flagon, ignoring a small twinge of guilt at doing so.

"Have you ever left without specifically being requested to?"

"No, not to my knowledge. We aren't malignant, really. If you'd like to have Skald terraformed, we could do it for a price. If you only want open trade with other worlds, we—"

"I'd like to see Skald make it on its own." He hadn't heard a word of mine. He still gazed into his glass. "It was my thrice great-grandfather's dream that one day a Skaldian would rule the united worlds, but our planet is poor in resources, having only a few ships. Now you come and hold out your hands. Still, I'd prefer that we clamber from our hole with no aid, however well-meaning."

"You sound maudlin, Elrad. You should listen to yourself."

I thought for a moment that I'd misjudged him and he'd taken offense. He scowled and his free hand drifted toward his vibro hilt. Then he chuckled, as if to himself, and smiled wanly. I sighed. I had no

wish to go back to Arnthora and tell her I destroyed our work with a few ill-chosen words.

"Sorry, Gavin. I let fancy override logic." He looked at me for the first time since he began the tirade, and his dark eyes in his mahogany face were full of his dream. I felt slight sorrow that I wore the scarlet tunic, that our dream must inevitably trample his own. I liked Elrad, I truly did. We were so opposite as to be similar: I the cosmopolitan believing in no customs but in all, mouthing pious words that all mores are viable and to let all live as they choose; and he the rural, as steadfast in his own belief as I was in mine. And excuse, I wax verbose when full of conviction.

"I don't know that I can do anything, Elrad. I can speak to Arnthora, but I doubt that she'll pay it much heed. Better yet, she asked me to give you an invitation for a private dinner at the embassy at the beginning of next week. If you want us to go, tell her then."

"I can't, but I accept your invitation. I'll talk again with the cold lady."

The conversation was desultory after that, slain by seriousness. I made my excuses and left the Keep, reminding him of the dinner.

Walking the streets, it was obvious to passersby that I was an offworlder by my clothing and fashion, but the vibro girt at my side made them treat me as their own. If they brushed me in passing, there would be a polite murmured apology, and if they met my eyes, we would nod to each other. Unarmed citizens gave me wide berth. This is what I tried to explain to Arnthora. To gain their respect, we must first gain stature in light of their customs, right or wrong, especially since we profess to be willing to let them retain their culture. If they were cannibals, then we should send them emissaries that would hunker down and enjoy the taste of long pig. You can't deal with the strange by remaining the same. You might awe them, if your technology is superior, or make them consider you inferior, if not. So goes my personal credo. For good or ill, it isn't the policy of Diplos, generally.

I witnessed an altercation on the way to the embassy. A green-robed (the color of justice on Skald) magistrate was already present, hearing the case and determining if the two wished to settle without a fight. Evidently both men had paid the tax for dueling, for the crowd suddenly eased away from them, forming a rough circle as they drew vibros. The magistrate watched, impassive, his own sword drawn to maintain decorum. As I passed, I heard the first humming blows. The crowd, like all Skaldian witnesses, remained still. Traffic was halted on the street, but the drivers waited patiently, as most duels are over at first blood. Even as I strode by the outskirts of the crowd, I heard the magistrate's shouted "Halt!" and saw him bring his blade between the two. Magistrates also

function as doctors, an associate degree in medicine being required along with the masters in law and fencing. A lucrative profession on Skald, but one highly demanding in training.

The crowd dissolved around me, leaving the magistrate to care for the wounded, and traffic began to flow again. A small incident in these people's lives, one that wouldn't even be remembered. Another trifle, another unimportant moment.

We dined alone, the three of us. Elrad had informed us that he would bring along only his personal guards, and after those men examined the kitchen and dining rooms, quite thoroughly, they retired to eat in an adjoining room.

We sat at equally distant points at the irregularly-shaped table. Aromas assaulted us—the pungent tang of airfish, the astringent odor of rollerpuffs, even the thick, familiar smell of cockatrice, oddly enough considered a delicacy offworld, the wind pouch distended with stuffing. On Thule, amidst their plenty, we never use them as a food staple, and in fact they are protected by law. We had wines from several worlds to choose from, and the promise of a hundred delicacies to end our repast. Arnthora was determined to show Elrad the wealth of worlds that could be gained.

"Do you always eat so well here?" Elrad, seated, cast his eyes over the much-burdened table. His eyebrows were slightly raised, but whether in amazement or slight distaste, I couldn't tell.

Arnthora smiled her ambassador's smile and waved a sun-yellow hand. She wore a phosphorescent gossamer gown that seemed to flow about her body. She flowed, metaphorically and physically, looking a decade younger than she was. Charming. "No, I confess this is far better, Liege. Try some of the green wine? Its bouquet is excellent." Elrad nodded, and she poured a glass, handing it to him.

He sipped the wine and indicated his approval. As if it were a signal, the waiters moved forward to begin serving.

Dinner was laced with the important but trivial talk of strangers. We compared Thule, Terra, and Skald, we recounted tales of Huard's domination and what our predecessors had done to hinder him, we spoke of the weather and the likelihood of rain. I told them how cockatrice cower in a rain and they laughed at the thought of the poor creatures, helpless because of their nature, and I pointed out to them the considerable difference between a live cockatrice and a cooked one. It wasn't until later, when the dishes had been cleared and the waiters—actually student staff members—had been dismissed, that serious talk really began.

"*Emissary*." Elrad, sipping a cup of mocha, reflected on the word, pronouncing it as if it would fall

tangible from his lips, his eyes fastened on Arnthora. "I understand that you people don't always call yourself such."

"Semantics." Arnthora shrugged, the gown rippling over her breasts. "Unimportant to us, but vital to some people. On one world, they call us 'Regents' as if we were actually in charge. On another we are simply 'sir' and 'madam', and we go there only to trade. It is all according to what our preliminary investigation has deemed to be most effective."

"Which do you feel yourself to be, in all truth?"

I suddenly became aware of the change in tone of the conversation, much later than it had actually occurred. I'd been half-listening, drinking my mocha and joining in now and then. But this was verbal fencing. The words had cutting edges.

Arnthora parried. "I consider none really valid. We're part of all. If you'd ask us to form a government, we would, and you could call us Regents until you arrive at a self-governing system. Or we'll function as simple businessmen if you desire, and you may address us as you will. Here, it was decided to establish diplomatic relationships, for various reasons."

"Ah." Elrad smiled. "So I may deduce nothing from your title." Statement rather than question.

"As I said, Liege, it's semantics and nothing else." Arnthora raised and lowered a nonchalant shoulder.

"As is, say, 'Liege' or 'Councilman'?"

"It means you have power, that's all."

There was a silence, and the three of us drank from our cups. The sweet odor of mocha filled the room.

"What do you people think of Skald? I know you allow no one outside the embassy except with permission from yourself."

"Standard procedure, Liege, and no reflection on your governing. Our people haven't grown up with your customs. We wish to offend no one."

"I see, and you mention our government. How do you view it?"

Arnthora pursed her lips and glanced at me. I looked blankly back, shrugging slightly. She looked back to Elrad. "It functions. What else needs to be said?"

"My great-grandfather was a total despot, his smallest word law." Elrad had that distant look he'd had earlier in the week, when we'd talked in his apartments, talking of his dream of a ruling Skald. "Our government is slowly evolving. All goes through Armin and the Council first, now. My people, though they still acknowledge a Liege, are less inclined to accept him unquestioningly. I suppose you find this good."

Arnthora smiled, smiled. "As I said, it is functional. That is sufficient."

"So tactful."

M'Dame d'Apada's smile wavered, then caught and held. "I would

prefer the term truthful."

Elrad smiled now, without humor. I was quickly learning the many guises of smiles. "Semantics."

"Perhaps it is good, in a sense. Had you complete power, you would have dissolved our embassy."

"I still will, if I have my way."

"I wish I could set your mind at ease. Our intentions—"

"—are, I'm sure, quite honorable." Elrad interrupted her. "You mean that you can't understand how anyone would be so,"—he paused—"so foolish as to reject your offer."

"I didn't imply that, Liege." Calmly, but with icy irritation behind it.

"Liege Elrad,"—I broke in before he could continue what was rapidly becoming a heated, albeit polite and circumspective, argument. Elrad and Arnthora slowly looked toward me. "You said you wanted to fence again. Would later this week be agreeable?"

He paused a moment. "Certainly." The tension in the air dissolved, smitten by my irrelevance.

We talked awhile, but the tone remained light. After a time, Elrad departed, collecting his sated and bored retinue. Arnthora spoke when we were again alone.

"He's quite an unreasonable man, Gavin."

I shook my head. "No, only convinced he's right. As we are."

"I'll stay with my impressions. I'd much rather be dealing with Armin and the Council. They seem far more open to our offerings. I think I'll shift our emphasis toward them. They are more pliable."

"Only because Armin would use us for his own gain. He's a leech."

Arnthora started to speak, but I shook my head at her. "I know. You're in charge."

Returning from that fencing session a few days later, I sensed something was awry immediately after I passed the weather dome. There was a stillness, a depression that hung like a dank mist over the grounds. The conversations of the staff wandering in the formal gardens were hushed, steeped in a cathedral quiet unlike their natural laughing, boisterous speech. The afternoon was dark with frowns. I saw one of the staff walking under a bubble tree near me and called to him.

"Jairg, hold on a moment. What's going on here?"

He stared at me. "Sir Donal. You don't know? M'Dame d'Apada's been trying to contact you for the last half-hour."

"I walked back. What's the problem?"

"Eris is dead."

I swore. Eris was one of the co-op students along, one of the more likeable ones. In fact, he had been one of the waiters for Elrad's dinner.

"Where's Arnthora?"

"In her rooms, sir."

"Thanks."

I ran rather than walked. There was an aura that I didn't like. A

death, while rare, shouldn't have caused this visible a disturbance. There had to be something underlying it.

There was a guard outside Arnthora's rooms. Things were serious, then. He saluted as he saw me.

"M'Dame d'Apada wishes to see you, sir."

"I know. Let me by, then."

I brushed past him before he could move, and the door barely had time to dilate before I was inside. I stopped. Eris lay on a couch, his clothing blood-stained and rumpled. It was a wound such as a vibrofoil would make. He was very dead. Arnthora stood over him. Hearing me enter, she turned her head and stared at me with eyes that were surprisingly moist.

"You see that?" Her voice was quiet, hushed like the entire grounds. There was no quaver in it. I give her credit. She has more control of her emotions than I.

"How did it happen?" I found myself, in the presence of death, also whispering. The room seemed somber, despite the glowing yellow walls and the lavender, gauzy curtains that billowed with the breeze. All was ludicrous with that death-still face on the couch, looking as if it were asleep.

"From what we've learned, Eris had gone out to the city. I know," she said as I began to interrupt, "students aren't allowed outside the embassy grounds for any reason. Still, he did take precautions. He was wearing a badge of impunity and was in offworld costume. Somehow, he got into an argument with a girl, something about not giving way is what the magistrate that returned the body said. They had words, and evidently Eris pushed her. She was wearing her vibro. This is the result."

We both looked at Eris. He lay wrapped in silence.

"I'm going to protest heavily to Liege Elrad and demand that the murderer be punished. Armin has already called and expressed his regrets. This can't be allowed to happen to our people." Arnthora raged quietly, an ice-laden anger.

"That's wrong, Arn," I said as gently as I could. I didn't look at her but at the body. So stupid, so damn stupid.

She strode to the window and quickly whirled to face me. "Wrong? It's wrong to protest innocence? By all that's sacred, Gavin, the boy wasn't even armed." Her words came quickly, rising but freighted with shock. She waved her arms in accompaniment. One hand was violet, the other scarlet. Her fingernails were stark white and her legs shimmered blue against the sunglow walls.

I shook my head. This was going to be difficult. "If anything, we should issue an apology to Elrad."

"Gavin!"

"Listen. You know their customs. An unarmed person may not give offense to anyone. If he does, a magistrate is supposed to be sum-

moned immediately. By no means is he allowed to continue the argument. If Eris began the quarrel, and actually threatened her physically, then she acted within her laws. It doesn't matter if Eris was killed. I don't like it any more than you, but we've got to realize that it was his own fault. Nothing we can do about it." I sighed.

Arnthora gazed out the open window and stared at the grounds below. She kept her back to me. "Armin was very sympathetic, and agreed it was wrong. That boy wasn't raised here. He didn't know, or if he knew, it was only empty knowledge. It wasn't ingrained in him." She spat the words out bitterly, uttering each syllable concisely.

"It's their world. We asked to be here, and we told them they could keep their customs. And Armin is interested only in how he might gain from this."

"There's such a thing as respecting other people's customs." She turned, letting a curtain fall from her tinted fingers. "We can't let them trod all over our sensibilities." She didn't look at my face, but at my waist where the vibro was strapped.

"It would insult the general population to protest this. They're so caught up in the concept of honor. They'll fight rather than lose it."

"What of the Diplos' honor? What of this boy's honor?"

"It would be a mistake."

"I'm in charge, Gavin. You remember?"

"Yes, m'Dame." I walked quickly to the door, then turned to see her staring down at the body, one hand caressing her forehead. "Think about it first. That's all I ask."

She nodded without looking up. The door dilated and I went out.

The funeral was the following day. Eris had come from a planet that didn't care overmuch about their dead's remains. Any service would have been acceptable to them. He was cremated, and his ashes scattered in the grove of bubble trees. The entire embassy staff attended, though no Skaldians were present. By their customs, only the closest relations attend memorial services, but still it upset many of the staff.

Afterwards, Arnthora sent for me.

"I'm going to protest." She didn't look at me. She sat in a floater chair and stared down at her hands, tinted black and scarlet in mourning. Her mouth-glitter also was black.

I stood before her and shrugged. "I hope it's less of a mistake than I think."

Her head shook slightly, a brief negative. "I consulted Diplo Center on Niffleheim, and they agreed with my decision. Don't think I'm doing this rashly. We have to maintain our image." She looked up, brushed her hair back with her hands. "I want you to talk to Liege Elrad and explain. He might as well know our reasoning. We have our honor and our obligations also."

"You know what I'm most afraid

of, Arn? That Elrad might find it necessary to challenge you for the impudence of protesting."

She laughed, then cut it off. "That's absurd. I even wear the badge."

"Arn." I spread my hands in supplication. "Elrad would like nothing more than our departure. Think of the situation in his eyes. He knows that we're working mostly through Armin now, and he doesn't like that. That threatens his position. And he knows that the people still follow the old customs he believes in. Your protesting is an opportunity to have us lose face, much the same as Eris overstepping social lines, the impudent act of an inferior. He challenges you, you refuse, and to the eyes of the people, the Terran Alliance is degraded. You see? That lowers the influence of Armin. And our mission is for all intents over. We won't be able to help them because they won't let us."

"Very plausible, but I think unlikely, Gavin. Talk to Elrad. I'm sure he'll understand our position."

She wasn't going to believe. It was that simple. "He'd understand if he was from your world. Remember, you told me your family had fought for honor's sake. But I'll go."

I thought I knew all of Elrad's moods, having seen him many times since we'd come. But I'd never seen him so sullen and brooding. He lounged rather than sat in his rooms, his eyes riveted on an open window. He acknowledged my entrance with a grunt and desultorily waved away the servant who had escorted me. I moved to the window and stood staring out and down. The traffic lazed its way along the streets and the sun pooled shadows about the feet of pedestrians. The insectile buzz and hum of the city rose in the heat waves from the street, enveloping us even in the coolness of the Keep. We didn't speak.

Elrad rubbed an eye with a forefinger, then held his hand in front of him regarding it. "The cold woman demanded we apologize for your employee's stupidity." He said it flatly, without inflection. With his attention on his finger and with the lack of tone, I couldn't read any second meanings into his words. I evaded comment.

"She said she would. M'Dame d'Apada believes in doing things."

Elrad rubbed his hands together and yawned. "You told her to?"

"Not to."

"Hmmm." He nodded, looking again at the window. On the wall, an animo-painting swirled. I fastened my attention on it, waiting.

"I sometimes think that we're guided by chaos rather than any fate, forced to—" He broke off his words with a violent shaking of his head. He looked at me, turning in his chair. "I can't—won't—let it go. I won't make any apology, and I must issue a challenge to m'Dame d'Apada. I won't let Skald be insulted like that."

"Elrad, you know Arnthora meant no insult."

"On the surface, yes, but all my training and my instincts tell me otherwise. The rest of the people see it that way also, if Armin doesn't," Elrad said.

Though I hadn't agreed with the way the situation had been handled, I was still infected with the ideals of the DRT. I truly believed in them. Perhaps it was this that led me on, stopped me from conceding defeat and letting events take their course. Foolishly or wisely, I thought I could convince him, save Skald's honor and our own.

"Elrad, if you issue the challenge, I'll be the one to accept. You can't challenge her as an individual. The protest was sent from the Terran Embassy, not any one person. It'll be me that you fight." I thought he could be cowed, I thought perhaps we could find some other solution. But Elrad shook his head.

"It's gone too far to be reversed. You won't change my mind."

"It seems incredibly silly."

"You weren't born here. I assure you no Skaldian will find it silly. I don't have a choice in the matter if I wish to rule."

"This is ridiculous, Elrad. Don't you see? You're destroying Skald's chance. The Alliance will survive without your world. It's only your people you're hurting. You're a fool."

I'd gone too far. I saw it in his eyes even as I uttered the words. The anger colored his dark face and distorted his features. He rose, every muscle tense. I could see him visibly controlling his body, his face straining.

"Get out!" He pointed, a stage gesture. Had he not been so obviously distressed, it would have seemed ludicrous.

"Get OUT!"

"Elrad—"

"Leave! Go back to your shining building, your temple to yourself. Go worship in your mirrors and glitter elsewhere."

"Elrad, I can take you. I'm the better foilsman. Why should one man stand in the way of his world?"

His face suffused, he sat again and wouldn't speak. Feeling the heat of Skald on my back, I turned and left the room.

Perhaps we should have accepted defeat, but at this time I wouldn't, nor would I let Arnthora simply ignore the situation. I felt that Liege Elrad's wrath was greatly derived from fear, that his anger was a sham devised to give himself the impetus to follow his dream. I argued with Arnthora. I told her I could end this in a manner beneficial for both sides. Let me fight him, I said. And, very reluctantly, when the challenge came she let me accept it. She trusted me. Her other choices were equally distasteful, to dissolve the embassy or to let it be dissolved by Skald's unspoken caste system. She realized that, and she let me try.

We didn't say a word to each other.

The duel took place in the Keep's arena. Skaldian etiquette demanded that it be at least semipublic. Elrad and I were no longer individuals: we were ideals, philosophies given breath and body by some perverse fate and forced to perform. The actual attendance would be small, but the glass-eyed communications network would broadcast this battle of cultures. Most of Skald would see the image of Old Skald fighting the Terran Alliance. War in miniature.

One of Skald's rare rains was on its way. The outrunners of the storm, thin and torn cloudlings, had already begun to gather at the zenith as if they too were loath to miss the exhibition. The windows of the Keep exposed wan grayness. I could see Armin and the council seated near the fencing strip, sitting with looks of casual and studied patience on their faces. Carefully neutral they were, ready to gather on the stronger side. Arnthora, her staff around her like a shield from the foreign world, also watched. I couldn't read her expression, for she wore mirrored contacts, though there was, as I said, no sun. Faint stirrings of fear gnawed at my stomach. I was both anxious and loath to start this thing. It was such a gamble.

A magistrate examined our foils. Elrad refused to look at me. He watched only the slow, careful motions of the green-robed man as he examined the weapons, his dark eyes intent.

"Under the code, and by the nature of the conflict, you will fight until one of you yields or is determined to be physically unable to continue." The magistrate looked from Elrad to me, his face a study in calmness. There was no animosity in him, nor any sympathy. "You will be allowed no rest periods. If a touch is scored, I will call 'Halt' and you will disengage and return to the center of the strip. Five touches by either of you will terminate the match regardless of injuries or your desire to continue. Stepping from the strip will be considered a touch against the offender. Three such penalties will be considered evidence that the offender wishes to capitulate." There was a moment's silence, then he drew his vibro.

"You are reminded that there is no protection, and that the foils are adjusted to approximate the effect of a real-metal foil. Salute, and you may begin." He stepped from the strip.

Elrad glanced at me and frowned. We both were attired only in tight-fitting pants, our torsos bare. "Elrad—" I started to speak, but he stopped my words by saluting.

"Don't make this harder." His voice was harsh, whispering in the silence that welled almost visibly from the onlookers. I saluted then, and we engaged foils in en garde. He attacked.

I parried and retreated, backing

down the strip and reviewing in my mind the tactics I planned to use. If Elrad won, our mission here was ended. Elrad, the people behind him, would have his way. Yet I didn't want him to suffer defeat, for though it might save our mission, it would bring Elrad down, and I couldn't do that to him. I liked him too well. These people took this seriously, more seriously than we could imagine. It had to go as I wished. Elrad pursued me with an energetic, complicated attack. I kept the distances in my mind, still retreating, parrying but letting Elrad keep the right of way. Sensing the warning strip below my feet, I stopped and beat his blade from the line of attack, riposting, then letting Elrad parry and counter-riposte. The attack switched rapidly between the two of us, the foils flickering and humming.

I stepped back, deliberately, off the strip.

The magistrate cried "Halt!" and moved forward to beat back Elrad's vibro. "One touch awarded to Liege Elrad," he called to the scorers. The crowd murmured.

As we returned to the center of the strip, Elrad radiated disgust. "You're not going to fight? Are your people so timid?" His whisper was harsh and sibilant, loud enough so that the front ranks of the onlookers could hear it. I knew, and knew that Elrad knew, they would pass his words along. I remained silent.

Again I let Elrad press an attack, content to parry and retreat.

The warning strip was soon beneath me again. Elrad, obviously believing I intended to step from the strip again, lunged recklessly. I brought my blade up to parry, but late. Pain teared my eyes and I felt the warm trickling of blood from my right side below the ribs. The magistrate again called halt and stepped forward. I examined the cut, trying not to show my pain. It was a shallow gash, but I realized now, if I hadn't before, that Elrad would slay me for his dream. That had been intended to kill me, and only the fact that I had partially deflected his foil with my own had saved me. We all have something for which no price is too great, and I stood between Elrad and his dream. He would regret having to kill me, no doubt, but he would.

"Touch to Liege Elrad," called the magistrate, then he spoke to me. "Do you wish to yield?" I shook my head, and we returned to the center of the strip, Elrad's eyes on the blood staining my side.

We engaged foils, and this time I took the offensive, forcing Elrad back. He was weaker on defense than attack, a common flaw on this world of quick encounters, so I kept him moving. The cut slowed me somewhat, yet it also cooled me. I hadn't intended to let Elrad touch me. I wanted the match to end in stalemate, but I was far behind now, and the cut would slow me more and more.

I thrust, stepping well forward and inviting his parry and riposte, know-

ing he would take the offered bait in his eagerness. He did. The riposte was a straight thrust in the same line but his arm was bent slightly. I replied with a stop thrust, moving my body up and away from his blade and extending my sword arm over his foil. The tip of my vibro bit into his bicep, a small wound, but one impressive with blood and one that would cause him more trouble than that which he'd given me. I stepped back as the magistrate halted the action. "Touch for Emissary Donal. Do you wish to yield, Liege?"

"No," muttered Elrad. His eyes were fastened on mine, but I honestly don't think he knew me. He stared as if facing a creature from a nightmare.

I quickly scored two more touches in the next engagements, and then another, the last being a mere scratch. Armin and the council were smug in their seats, though I still couldn't tell how Arnthora felt. Elrad was possessed by an icy rage. His face was set in lines of tension, and the blood from his cuts spotted the strip below my feet. My side ached with exertion and made my movements stiff, but Elrad had also slowed. His sword arm must have pained him terribly, but he gave no indication except for his searing gaze.

We crossed swords in the center of the strip again and Elrad attacked immediately, disengaging as I counter-parried and beginning a weaving, complicated offensive. He was more determined than I'd ever seen him, his anger giving him the strength my touches had stolen from him. When he beat my foil, it was all I could do to retain control. I retreated, in genuine admiration. With his wounds, especially the cut in the bicep, I could never have played so well. He forced me back, leaving no openings to reply to his attack. I was near the end of the strip again. Every time I managed a riposte, Elrad would snatch the right of way from me. I tried to hold. I didn't want to step off again, for it would seem that I was afraid to meet him—and I realized that "I" was not only myself, but all the Diplos and all we represent. Yet I couldn't risk another wound. Elrad was fighting to kill me. His thrusts were intended to go deep, not merely scratch the surface as mine were. He was dueling with the strength of the fanatical, and my arm was heavy with fatigue. I stepped back.

"Halt! Touch to Liege Elrad." The magistrate came forward, and I thought I saw a glimmer of loathing in his expressionless eyes. "I must warn you, Emissary, that by the code, another failure to remain on the strip will cost you the match. Begin again."

Elrad was seething, no longer cool. As soon as we touched foils, he began battering at my vibro. I kept my distance, backing. His eyes were red with exertion, his forehead lined, and his mouth half-open in a grimace that was equally smile and

snarl. I beat-parried, creating an opening on the high outside, and riposted, not letting him counter. I advanced, trying to wear him down, knowing that his anger couldn't sustain him much longer, that blood loss and weariness would claim him soon. Elrad knew it too, for he fought desperately, grudging every inch of retreat. My side ached, but I ignored it.

Desperation took him. Foolishly, he attempted a fleche, a running attack. I had very little to do with what happened next. Habit and reflex had their way. My blade moved and found the onrushing Elrad. He literally impaled himself on the vibro.

I meant only to wear him down. That must be said. I intended to tire him until the wounds meant he could no longer fight. It would be a stalemate, inconclusive to those watching who considered it a meeting of cultures. The Diplos would be respected, and Elrad would retain power.

But the crowd roared around me. I saw Arnthora's face in a mask of horror, and Armin smiled in the midst of the council. But mostly I saw the blood gushing from Elrad's body and the look of hatred that was fixed on his face as he fell.

Back on Thule. Home, where my actions aren't foreign and strange. I took a standard's leave from the Diplos despite my promotion to Full Emissary, hoping to come to a decision. Do I really want to be in the grand, glorious march, waving the flag of brotherhood and smiling, smiling as we try to get the onlookers to join in? They assure me that the debacle of Skald can never happen again, that henceforth all diplos will be screened so that their basic life-patterns will at least partially mesh with their assigned worlds; and they agreed among themselves that my actions had been proper, something I can't yet convince myself of, but . . .

Can I smile in an organization that allowed me to destroy him whom I'd come to like, and that tells me I acted rightly?

As for Skald, Armin, installed as Regent, opened that world to the Alliance. Arnthora, retiring from active duty, remained as Emissary Emeritus. I understand that Skald is well on the way to becoming a green and verdant world, a fine color for them, as the code still settles many disputes. Customs may die, but they die hard.

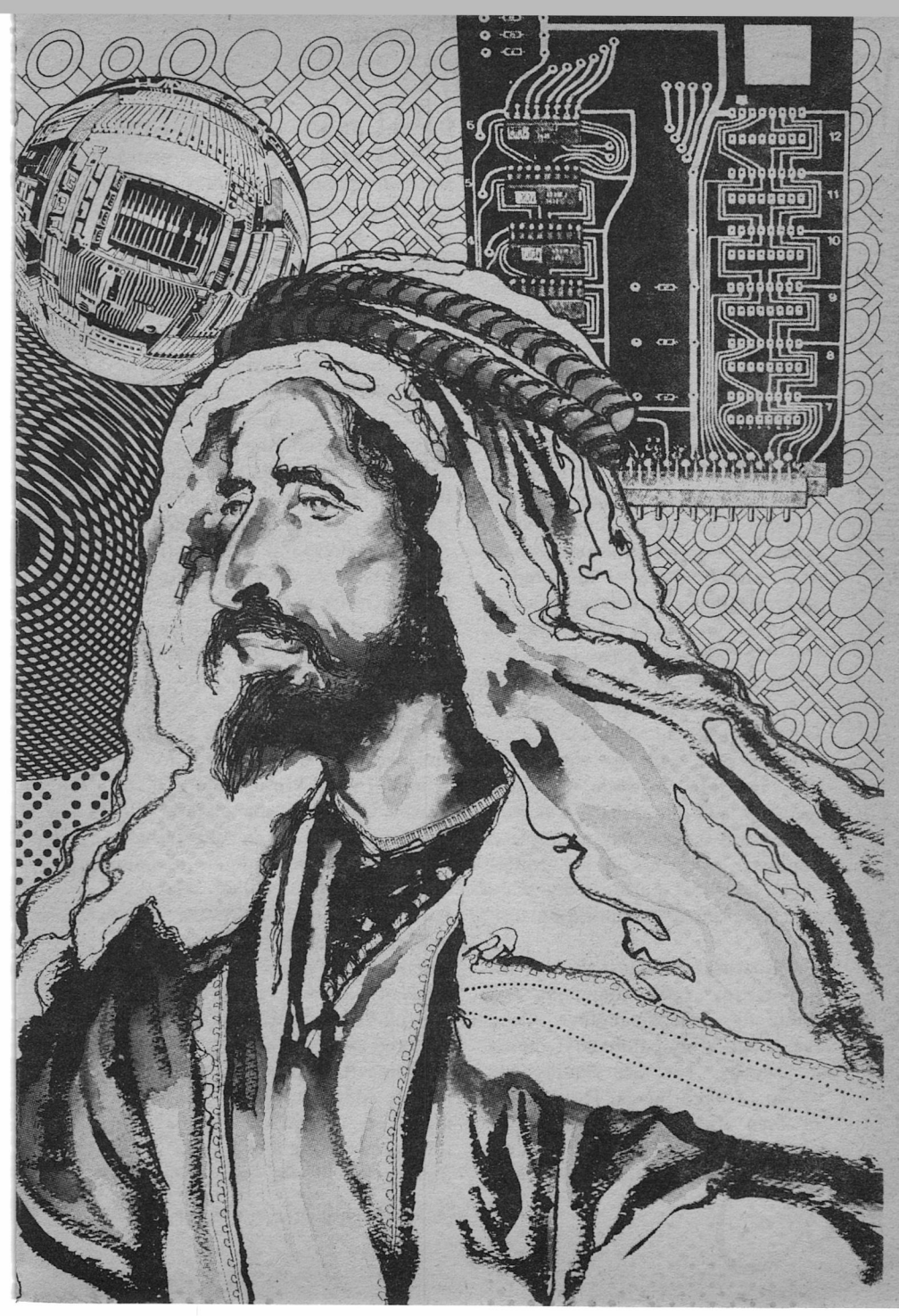
At least Thule is familiar and comfortable. The cockatrice still cower in the rain, the foothills loom like the backs of slumbering giants about the cities, and the sky is vast and magnificent. I wander about my world like a question drifting unanswered. Occasionally, I throw stones at the windpouch of a cockatrice, hoping that someday one will realize that the pebble is only undigestable stone after all, and, triumphant, will leave its pouch riding the wind.

But it never does. ■

A SHORT HISTORY OF WORLD WAR LXXVIII

Wars can be fiendish without being horrible.

ROY L. PROSTERMAN



World War LXXVIII was about to begin.

As senior "UniNash" representative in Jidda, it fell to me to be among those observing the launching, from Faisal Field, which is about 20 clicks out of the capital (awful racket!—the wogs always seem to put their rocketports too close to their cities).

I rode out to the field with a couple of bleary-eyed Saudis, stick-it-outs, like me, through the wee hours of the send-off dinner-dance that the German Ambassador had thrown. Now, as we hurtled along twenty feet above the sands on the new linear-induction monorail—a great deal better than the ancient one that gets you from Manhattan to New Kennedy—I wished I had had the good sense to catch a couple of hours' sleep. The sun was just an hour above the horizon, but seemed blinding even with the windows at maximum tint. The white, white sand on either side threw back still more glare, until it gave way a couple of hundred yards out to the endless fields of wheat nurtured by Saudi gold and Israeli desalinization technology.

Somewhere, about half an inch behind my eyes, something was throbbing. I took another Alcho-Belter out of my pillbox and chewed it listlessly. The two Saudis with whom I shared the car looked to be in even worse shape, but turned down my offer of the pills. Through some insanely involuted reasoning, the monarch who ruled them when I was still a child—great-great-grandson, twice removed, of him for whom our destination was named, or so I am told—had told his followers that alcohol was now all right, but that any chemical means for reducing its effects were not. Sin. But suffer. No one really understood the Saudis.

My woohlexgathering was interrupted by the arrival signal, as the varied apparatus of Faisal Field hove into view: skyscraping gantries, with and without rockets, launch-studs, fuel and lift modules, control towers, and squat communications silos.

As we slowed, I could see two more cars ahead of us decanting their passengers on a gentle airstream to the ground, and as I turned back, I glimpsed a series of cars slowing behind us. The warriors were gathering.

As the bottom of the car fell away and we too were puffed to the ground, I spied Prince Khalil Ghabil nearby, sixty-sixth son of the reigning monarch and an old friend—actually, my father had gone to grade school with his mother, who had later become one of the five Israeli maidens betrothed to the new monarch in continuing observation of the terms of the Great Settlement. Khalil also offered certain signs of having roistered all night, but from his light Dacron caftan, fluttering in the fitful breeze, and the spotless kaffiyeh, it looked as though he had had the foresight to bring a change of clothing. Even with the best of climate

control, a night of roistering in Jidda left the roisterer feeling a bit soggy.

"Khalil! What's the order of battle?"

Khalil pumped my hand, looking a bit puzzled, then slightly worried. "Tom, you old camel thief. They've been looking for you—you're supposed to be in some sort of 'official observer' post. They probably can't even get started without you!" Mildly crestfallen, I looked in the direction of the communications silo to which he was pointing. People in a somewhat more varied—and often inappropriately warm—set of costumes did indeed seem congregated near its base. Even as I watched, an autocart detached itself from the group and made a zigzag course in our direction through the intervening patches of humanity. It reached our vicinity, hunted back and forth until it had locked on my comm frequency, and braked to a stop on the tarmac six inches from my toes. "I have a message, sir," it gurgled, clicked, and gave way to a more human voice that said "Damn it Tom, when this tincan reaches you, get in and shoot over here. The Yanks are screaming to start, so they can get home in time for breakfast." It was my master's voice: Region Chief Xuan Loc, here from his HQ in Kuwait. Whether the SecGen would observe here, at New Kennedy, or somewhere in between, no one had bothered telling me.

"Bloody rude machine." I stepped onto the side runner of the autocart, hoping to make it work harder with my unbalanced weight. It was apparently a new model, though, programmed not to move and to say "You'll be more comfortable, sir, if you are seated in the bucket seat. Then we can get underway." Gurgle. Click.

I moved into the seat, muttering about the Saudis' penchant for newfangled gadgetry. Khalil made a deprecating wave, and watched as the autocart scuttled back to retrace its zigzag course.

"See you after the war!" I shouted back, as we did a halfback's reverse around a knot of Princes. Khalil called something unintelligible.

We were approaching the squat blue cylinder nearest the launching point. Having sent for me prontissimo, Loc had promptly forgotten my existence. He was huddling with several of the technician-inspector types off to one side, mopping his forehead with a loomex as the sun continued its inexorable upward passage in the sky. Come to think of it, I was getting pretty anxious to be inside the blue cylinder myself. My last night's barang shirt-jacket cleaved at the armpits, and my pantaloons chafed as I strolled over to join the group.

Loc was reading the brief inspection checklist into a complex videocorder that was probably hooked up with Usa and memory banks around the planet.

Apparently, he had just started.

"Internalized control only. Check.

"Overall volume, less than one

thousand cubic meters. Check.

"Overall weight, less than one thousand metric tons. Check.

"Propulsion capability, minimum of ten kilometers per hour. Check.

"Maneuvering capability, adequate under the Hotchkiss formula, as revised 2116. Check.

"No airborne capability pertaining to more than fifteen percent of total mass, armaments included. Check.

"No higher organisms. Check.

"No nuclears or thermonuclears. Check.

"Landing-point program secured. Check.

"Activation interlock, functional. Check.

"All right? That's everything?" His eyes took in the semicircle of technicians, who mumbled assent. They lit on me for the first time. "Tom, how are you? I hear you were at the German bash? I was at the Chinese. Bloody mao-tai." He grinned and shook his head ruefully.

"Well, let's get on with it." He led the way over to the cylinder, whose door softly hissed open as we approached. Inside, it felt frigid. The transparent plasteel of the cylinder turned the sun, and all the world, a rather pleasant medium blue. Swiveling 180°, I could see the launch rocket looming far above us. A giant giraffe gantry was just tucking the payload inside, about nine-tenths of the way up. If you swiveled the other way, and looked down at the row of technicians watching their monitors in the circular well that broke the inner part of the floor, you could see the same loading operation viewed on a set of three tri-di screens. One of our responsibilities, of course, was to make sure that no "changes" occurred between formal inspection and launch. In fact, three inspectors actually rode up the gantry with the payload, stayed while it was trucked onboard, and then customarily puffed down and dashed for the silo just before ignition. Ten years ago, one of these unfortunates had actually been fried in the process. To avoid such cataclysms thereafter, they now waited until everyone was in the silo and the door was closed before ignition. But the two-hundred-yard dash still lent a certain drama to the proceedings, and was undoubtedly appreciated by the nine billion viewers glued to their tri-di walls around the globe. Only the heavyweight bunting championships drew a bigger audience than war.

Loc introduced me around the room as we waited for the final adjustments to be made: technicians, observers, representatives of the combatants to observe the observers. Finally, we puffed down to the well itself, looking over the shoulders of the monitoring technicians. On one board, a long series of red lights was steadily changing to green. Two more view panels had lifted from floor slots now, and alongside the pictures of the rocketseal closing in front of a receding gantry, we were seeing the martial festivities in Jidda and New Washington. President

Mary Benson Coe was standing on a high reviewing stand, dressed in Field Marshal's uniform and saluting stiffly, as columns of marching troops and blaring bands passed down Pennsylvania Avenue. King Ibn-Ben Joachim was presiding over a parallel scene, except many of the Jidda paraders were mounted on ceremonial camels, and the music sounded like the Beatles' Third.

Loc had leaned over the red-and-green light console, where only three red lights remained and a final series of complicated countdowns and go-aheads were flashing among capitals and rocketports. The SecGen, apparently holding forth at New Kennedy, had now zoomed into the middle one of our five viewscreens. You could see the Prez and the King were occupying themselves with things other than the parade. Almost simultaneously, two of the remaining red lights flashed green. Then the SecGen bent down to touch some studs on a hand console. The last light turned green.

Almost simultaneously, one of our viewers was showing the two-hundred-yard dash of the three inspectors. One was obviously overweight, and wheezing along heroically—no doubt putting on his best show for the tri-di. For a moment, I had an image of the war being delayed while emergency resuscitation was employed. But the silo door slid open and then shut, admitting all three.

Ignition.

World War LXXVIII had begun.

A deep roar permeated the silo. On one screen, you could see the Saudi rocket spewing flame, beginning its long climb. On a second, the fatter-looking Usa rocket was performing the same trick at New Kennedy. On the side screens, you could see the crowds at Jidda and New Washington watching giant monitor screens that showed the same sight. Great shouts went up from the assembled multitudes. A thousand flags were waving frantically, and the massed bands played stirring anthems. When cameras switched to the Prez or the King, they looked shiningly expectant.

Now the roar had ceased, and the Saudi rocket was rapidly fading to a speck on the screen. Ditto was Usa. At that moment, as usual, all five monitor screens folded into their floor slots, and a single large monitor unfolded, providing a computerized tracking of the trajectories of the two rockets. This was the pause known in the vernacular as "the double feature", apparently named after some ancient popular entertainment that had required about the same amount of time. It would take four-and-a-half hours for the rockets to deposit their payloads, at two points separated by thirty-five km on the Moon.

Now I could take a fresher and a nap, but as usual I stood mesmerized by the canned commentary that began after the first few minutes of the moving dots on the display. Like

my tenth trip to a planetarium, the message didn't change, but it remained fascinating.

"You are witnessing the beginning of World War LXXVIII," it murmured pleasantly, "in which the contesting parties are, on one hand, Saudi and its allies, on the other, Usa and its allies.

"The earliest World Wars, of course, involved direct confrontation, and frequently destruction, of human beings," here even the crypto-human computer tones seemed to slightly choke, "by other human beings.

"These included World Wars I and II, and the ghastly III."

As the voice spoke, the rocket-tracks had been replaced on the huge screen by bizarre images of men struggling across muddy fields, sometimes accompanied by primitive machines. Explosive puffs showed on the edges, sometimes swallowing single men or whole groups of them. Hand-operated mechanisms sent invisible streams of metal towards advancing human bodies, as those bodies, in turn, attempted to manually hurl small objects that would explode and engulf the human that worked the mechanism. Everywhere, people were dying alongside their machines.

At one edge of my vision, I saw a young Saudi Prince (one of the observer-observers) rise and stumble towards the nearest flushcan, his eyes screwed shut, one hand covering his mouth.

Then, there were flashes of machines hurtling through the air. Viewed closely, they were controlled by internally-placed humans. They would come at the humans on the ground, and later at each other, shooting explosives and metal slivers. The images were horrifying, hardly to be believed. But they weren't the worst. For there were soon larger and larger airships, bigger and bigger explosions on the ground. At the last, they were no longer diving at the men in the muddy fields, but at whole cities of human beings; flashes of entire buildings crumbling to the ground, great cathedrals, museums. Scores of people, tiny as ants, picking at the debris, or washed away in flames.

Then, finally, there were primitive rockets, and great mushroom-shaped clouds, behind which not just single buildings, but whole cities, whole nations, whole civilizations disappeared. Nearly everyone in the room had turned away. I forced myself to look. It was so large a destruction that it was almost incomprehensible—one felt that to truly, truly comprehend it would wrench the mind off its axis, blow all the boggle circuits, send one off to the solicitous care of the psychomeds, perhaps forever. But it was in the effort to comprehend these pictures, I think, that I always watched the canned commentary.

The voice was continuing, as the images shifted to congresses, rebuildings, a session of UniNash.

"But, after the indescribable rav-

ages of World War III, it had become clear that human survival demanded a wholly different approach to conflict. Fortunately, perhaps essentially, this realization coincided with the development of machines that were far superior in every way to human operators in carrying out acts of destruction. Even two hundred years ago"—here sections from an ancient communication called "Newsweek" and made, apparently, of cloth or some similar substance, flashed upon the screen—"technicians were talking about the possibility of an 'Automated Battlefield'." Here, computer animation took over, showing a series of still rather primitive machines confronting one another on a field. There were explosions, grindings, and tearings. Drones hummed through the air. Many of the machines disappeared. There were no humans present.

"The possibility of total automation of battle, combined with the unerasable consciousness that human cities and habitations could not be permitted to be targets for war machines, and that nuclear and thermonuclear weapons were utterly uncontrollable devices whose range of destruction, once released, could not be predicted or limited, led to the final adoption, in the Year of the Millennium, 2000, of the Rules of War which have since been followed.

"Initially, in World Wars IV through VIII"—here the screen switched to tri-di images, of juggernauts assailing one another against a barren landscape—"remote areas of Earth were used for purposes of combat.

"After 2025, however, it became possible to transfer the situs of fighting to Luna, and this is where all subsequent wars have been fought." The screen cut from sleek, complex juggernauts belching and clashing on remote Earthscapes, to similar scenes, cut and interspliced, on bleak, level Moonscapes.

"From 2031 onwards, *all* conflicts between nation-states were removed to this arena—the horrific Third War had already proved that the line between 'local', 'regional', and 'world' conflicts was impossible to demarcate in an era when no Earth-bound target was more than half an hour from annihilation, especially since computer-amplified human hysteria virtually guaranteed overreaction when human beings constituted potential victims.

"The rare leaders who tried to break the rules were soon persuaded otherwise." A sequence on the screen flashed by: a mustachioed chief orating while a mass of men and machines crossed a border, and burned villages; a phalanx of blue-and-white UniNash machines dropping from the sky, encapsulating and immobilizing them; the mustachioed leader hacked to pieces by a raging mob of what appeared to be his own countrymen; his remains stuffed in the skin of a pig (he was a devout Moslem), pushed into a rocket,

reduced to cryogenic temperatures for preservation, and set into space on a course that was calculated to last roughly as long as the universe. Then, no doubt unfairly but quite effectively, his weeping relatives, in an anteroom of the hospital where they were all subjected to mandatory sterilization. The mustachioed chieftain was, as I recalled my twenty-first century history, the last violator of the Rules of War.

Now the screen shifted back to a collage of embattled Moonscapes: rays, darts, puffs, blasts, collisions and grindings, between mightier and still-mightier behemoths. The narrator was continuing: "Over time, gradually more and more refined rules grew up, to ensure fairness between the warring nations. As new rules were agreed upon, they were added to the inspection checklist, administered, of course, by UniNash in advance of each war.

"From the very beginning, all nuclear and thermonuclear weapons were banned, and all weapons had to be internally programmed for the conflict, without external control or override of any kind. Very shortly, each side was limited to a single weapons-system. Additional rules soon limited . . ." and here the screen flashed to a series of computer-drawn illustrations, ". . . the overall volume of that weapons-system . . . and its weight.

"Requirements as to propulsion capability were added in response to the Brazilian effort, in World War XXIII, to use a single, inert block of plasteel alloy as its weapons-system"—a squat, featureless mass showed on the screen—"which made scoring extremely difficult, since the Soviet weapons-system exhausted all its armaments and then its energy-source, in fruitless efforts to do more than dig pits and craters in the immobile plasteel. The referees had come closer to scoring a draw than in any World War before or since." The screen showed the famous tri-di shot of the Soviet juggernaut lurched almost next to the deeply pock-marked Brazilian monolith. You could almost feel that the Russian machine was . . . dead. The Brazilian creation still looked like a stone in an oversized Japanese garden.

"Further, increasingly complex requirements as to weapons-system maneuverability were added, in response to parallel ploys, and are presently embodied in the Hotchkiss formula adopted early in the present century." There had been counter-ploys, as well, the narrator pointed out, as when a second massive Brazilian monstrosity, just meeting minimum propulsion and early maneuverability requirements, had squatted down, tucked in, buttoned up, and waited. The frustrated Argentinian machine, its armament nearly spent, had moved in close for a last effort. At that point—the screen flashed the sequence—a massive panel had slid back, and a series of shaped charges had smashed into the Argentine champion. Even though

they were directional, the blasts had crumbled half the Brazilian, but the Argentine leviathan was reduced virtually to rubble, and Brazil handily won the war.

"Later, limits on airborne capability were introduced.

"And, twenty years ago, a 'no-higher-organism' restriction had to be introduced"—the screen flashed space-suited chimpanzees, being disgorged from a French juggernaut—"when a surviving two out of a dozen genetically-enhanced primates were able to enter a British weapons-system through a service panel, and disable it.

"The remaining elements of the UniNash-supervised preparations require that the weapons-system be landed at specified Lunar coordinates separated by thirty-five kilometers, and that there be an interlock system which permits the SecGen to activate both weapons-systems simultaneously, in order to prevent any 'race-to-the-Moon' aspect from entering in.

"It is, perhaps, not surprising," the narrator entered its familiar peroration as the screen faded from the last exploding behemoths back to the computer track of Usa and Saudi rockets, "that the rules of world warfare are sometimes popularly referred to as the 'Marquess of Queensbury rules', after the ancient rules which—together with those laid down by Abner Doubleday—partly govern the modern sport of bunting."

The voicetape clicked off, and I went to find a cubicle and a fresher. It seemed no time before we reassembled.

The Saudi module had made its soft landing. Their weapons-system, as the rules permitted, had been decanted onto the ground, awaiting combat activation by the SecGen. It sat there, looking like a smooth half-sphere: without any ordinary object nearby, it was hard to judge scale. But I knew it was large. It would have, just barely, fitted into our communications silo.

Now two of the screens were showing us the tri-di image of the Usa module making its own landing, thirty-five clicks away. What came out a few minutes later looked like a bowling ball—the spherical design, as far as I could remember, was new to world wars. But then, both parties had been preparing for this one for a long time.

The middle screen showed the SecGen, waiting to activate.

The voice of "Bunter" Martin, the planet's top war correspondent, was echoing in the silo, ready to call the combat.

" . . . and this will resolve, one way or the other, the deep mutual grievances that have been festering between Saudi and Usa for nearly twenty years, since the discovery of the enormous petrodome on a Usa Standard concession given by the Saudis eighty miles out in the Indian Ocean. Experts think this may be the last major reserve of natural crude oil in the Northern Hemisphere and

without bothering you with all of the in-fighting, I'm sure that our viewers are all aware that SecGen has certified the grievances and the appropriateness of the redress that each side is seeking.

"Now they are on the mark, and SecGen is, I believe, about to give the signal. Go!"

The screens erupted into a dazzle of light and movement—when war moved to airless Luna, sound of course disappeared, but the image beamer was thoughtfully supplying background noise ("Ride of the Valkyrie," by Richard Wagner, b. 1813, d. 1883, some pedant volunteered).

It was happening so fast, it was difficult for the human eye to follow, and even "Bunter" Martin was silent, waiting to reconstruct with the help of slow motion and monitor tapes when there was a pause. If there was a pause.

Both sides seemed heavily into lasers this time around, plus something that looked like lightning, but couldn't have been, and—we later found out—Usa was using great salvos of "woodpecker" drones, that dug holes with a combination of highly directional explosive charges and ultrapowerful laser bursts from about two inches away. Except the Saudis had something we nicknamed "the pelican", which not only gobbled up woodpeckers in midflight, but actually "brainwashed" their tiny computer control so they spun around to peck at their parent sphere. Not liking this, apparently, the Usa weapons-system's control computer got the swallowees to self-destruct while still in the plasteel belly of the swallowers.

What won it for Usa, as we later discovered, were the "brain eaters".

Amidst all the thudding and flashing, a hatch had winked open on the hidden side of the sphere, and ejected a vast number of tiny spheres, outwardly looking like Plasticorp scale models. Inwardly, they were something quite different.

Deploying in a great arc, they had slowly rolled toward the Saudi hemisphere—when it moved, they followed. Most were scorched or blasted, but a few, coming within a click of the enemy, dissolved. And became a series of still smaller spheres, crawling slowly towards their target. Most of these, too, did not reach it. Most of those that did were fried or thrust away.

But a few, very few, found momentary orifices where there were weapons being discharged or locomotion being arranged. They darted inside.

Now, one fact about weapons and computers is that none of them operates in *complete* vacuum. All of them carry *some* kind of "atmosphere" or "bath" around with them, to facilitate at least some of their operations; supercooled helium, argon, lubricating oil. As soon as one of the tiny spheres encountered a hint of such an environment, it extruded a tiny plasteel tendril

towards the source—a crack, a junction, a moving piston. Once firmly attached to the source, the minute tendril ejected, with a sudden burst of argon or oxygen, its contents. Introducing the "brain eaters". A multitude of simple organisms, bacteria, and catalysts that were somewhere in the no-man's-land between chemical and virus, all genetically prepared or chemically tailored to live and reproduce, to combine and catalyze, in a range of different environments. Most never made it. Most could not live or function in *that* environment. But where the environment was lubricating oil, a few could live, and did, and multiply, and did. Or combined. Or catalyzed. So too where there was supercooled helium, or where there was any other "atmosphere" likely to be found.

Steadily they multiplied, steadily they catalyzed, steadily they consumed their favored environment. When they reached the limit that environment would support, they died, or inactivated.

Contrary to popular belief, they did *not* "eat" the Saudi computer. They simply "ate up" the supercooled helium on which it depended for continued efficient operation—and turned it, and the lubricants, and all the ambient fluids and gases, to something else. Ethereal glop. Computers were built to work in cold helium, not ethereal glop. Biologically or chemically active, therefore relatively "hot", glop. The Saudis were ethereally glopped.

The Yanks had won.

The screens showed wild jubilation in New Washington. Around me, Saudis were weeping.

World War LXXVIII was over.

The price of oil would not go up.

So, the war was over. I had been so absorbed in the viewscreens, I hadn't noticed that it was dark outside. A pale moon floated beyond the transparent plasteel. It seemed unchanged, unless the war had turned it blue. I pressed the "time" stud on my wristcalc, and was rewarded with the information that it was 22:04. Good grief! A group of the Saudi observer observers were off in one corner, presumably planning an elaborate wake. The words " . . . case of Veuve Clicquot '84" drifted over. I decided to join them and see if the widow needed any help.

As a result, I found myself hurtling back to Jidda with a carload of raucous Saudis. They seemed to have recovered their spirits in anticipation of the coming wake.

As the arrival signal sounded, Khalil, who was seated next to me, confided the last coherent words of the day: "Tom, you old son of a one-eyed camel driver, you just listen to me. We're getting ready for one hell of a war with the Iraqis, five or ten years from now. If we don't win that one, I'll not only buy you all the champagne you can drink, I'll buy you a liver replacement."

All things considered, it had been an eventful day. ■

the reference library

LESTER DEL REY

LES DEBUTANTS:

Almost twenty-five years ago, I was editing a string of science fiction and fantasy magazines. My publisher, who shall best be nameless, decided on a cover format which was a little too close to that of *Astounding*—as it was then called. So John Campbell called him up and asked him to come over and discuss it. With visions of lawyers, the publisher went.

He came back shaking his head in amazement. John had not only been quite pleasant—without lawyers—but had suggested a way to solve the difficulty which pleased everyone. Then he had spent an hour or so telling my publisher generally how to market the magazines more advantageously. And finally, when the publisher's amazement was too great to contain, John explained his helpfulness.

"Nobody has to fear good competition," he said. "One good magazine will make new readers for other good ones. It's the really bad magazines we all have to worry about, because they drive potential readers away from science fiction permanently."

Most good editors feel the same way, I've found. This review will serve as some evidence that your present editor (nameless, of course) is hardly afraid of competition.

I got a call from him a few days ago. Seems there are two new science fiction magazines on the market, and almost everything about them is a total contrast. So the editor suggested I drop everything and review them.

The magazines are *Unearth* and *Isaac Asimov's Science Fiction Magazine*, hereafter refered to as IASFM. They couldn't be more unlike, except that each is a quarterly at present.

Unearth is published by a company that is apparently set up for the purpose of bringing out the one magazine. Its editors—it lists two—are men whose names are totally unknown to me. Its cover is black and white. And it's a slim little magazine of 96 pages, bound like a pamphlet with a couple of staples that leave no spine. And its purpose is a bit unusual: It announces that "except for our special feature, *Unearth* publishes fiction only by previously unpublished writers." (The special feature is a reprint of a first sale, with introduction by the author.)

IASFM—try and pronounce that one!—is published by Davis Publications, a chain publisher with more than thirty magazines, which include the only two mystery magazines that are still successful. Its editorial director is Isaac Asimov, well known in the field for nearly forty years. Its editor is George H. Scithers, who has sold considerable science fiction and who has long been publisher of *Amra*, one of the best fanzines around; he knows the field and the writers well indeed. The cover is graced (?) by a full color picture of

Isaac Asimov—an excellent picture, if you like that sort of thing. There are 192 pages by honest count, and it looks like a thoroughly professional magazine—which it is. Since it pays top rates for fiction, it obviously intends to attract the best writers it can find, old or new. (I have no idea what *Unearth* pays; absolute bottom, I assume.)

Both charge $1.00 per copy. But IASFM has a gimmick that's new to me; mail subscriptions cost 35¢ a copy more, making a four-issue subscription cost $5.40. Joel Davis, the publisher, told me that he considers the extra cost worth it to insure getting the magazine regularly, promptly, and in good condition. He may be right—at least, he already has several thousand subscriptions. Maybe the current cost of postage and handling have made the bargain rates a hopeless proposition.

Now let's look at the contents and try to rate them. I use the old A (excellent) to F (horrible) system. And for convenience in adding scores, I assign them as follows: A = 90 to 100; B = 70 to 90; C = 50 to 70; D = 30 to 50; E = 10 to 30; and F = 0. (No, it's not the values teachers give. But it figures out better. And yes, there are zero-ranking stories in my opinion.) To evaluate a magazine, I multiply story word-length by story rating, then divide by total words. And for this column, I'm only rating the fiction, though I'll discuss other features.

Unearth has what it calls a novella and novelette; neither runs over 6000 words, so they're really only normal short stories. Then it carries four short stories, none over 2500 words. The total for new fiction in the magazine comes to only 18,000 words at most. And in my book, that's a rip-off! What they are really selling is no more than a single novelette should be, with added features that may have value, but not enough fiction to justify the price. Well, maybe really outstanding fiction might make up for the difference—we'll get to that.

The main feature is the reprint of an author's first published story, with an introduction. In this case, the author is Harlan Ellison, and the story is "Glowworm." Since this has not been reprinted much in the past, probably readers who didn't read it long ago (and most probably didn't see the original magazine) should find it interesting; and the commentary is honest and entertaining, as might be expected from Harlan. There are book reviews and film reviews of a quality perhaps a little better than the average of those found in many of the fanzines today. One editor, John M. Landsberg has an article on how to write—pretty elementary; later columns on the subject are to be done by Harlan Ellison. And Hal Clement has a brief article on science—good, but really no more than an introduction to his later articles.

"Thanatos Coming" by Debra Thrall is the so-called "novella". It's fantasy, not science fiction. Two men, not very sympathetic, set out to locate and bring back the Deathsinger, assigned the job by the local woman ruler. After various adventures, they bring her back—and there's a denouement showing why the Deathsinger consented to come. Characterization, fair. Writing, ade-

quate. Overall rating, D. The best story in the issue.

"Opportunity" by Daniel C. Smith is the "novelette". A hick type farmer on a new planet goes to buy a wife from the first ship that shows up with women. Turns out he's easily conned. Maybe this is supposed to be conscious of women's liberation, or something. Most interesting thing was that the farmer had a bed made out of half a meter of sponge plastic; but I never did know why he needed twenty inches thickness to form a suitable mattress. Characterization, not bad for stereotype, but the motivation is poor. Writing, adequate. Overall rating, E.

The average for the magazine is E. Not at all recommended.

That should have been expected. The whole idea of a magazine by previously unpublished writers is wrong. The other magazines pay far better and offer more prestige. Any new writer with a good story is going to try for the better markets first, as a rule. What is left, since all magazines of science fiction welcome new writers, won't have much to offer.

There will be a second issue, perhaps a third. That's all, folks.

IASFM also has features. Martin Gardner begins his column of short s-f puzzles that seem difficult but can be solved by logic—with two solutions. A nice bit. George O. Smith has a good and interesting article on our new Air and Space Museum—a place I must visit, from his description. And Charles N. Brown does capsule reviews of more than twenty-five books; he's had experience doing these in *Locus*, and it shows. A good idea for a new review column, unlike most others.

The names on some of the stories are promising, too. Varley, Clarke, Asimov, Saberhagen, and Dickson. The only question, of course, to readers of first issues, is: How long have these stories by "names" been kicking around and getting rejections? In this case, they seem fresh. Altogether, there are eleven stories, three of them genuine novelettes, giving about 60,000 words of fiction, which is a generous amount for today's magazines.

Things start very well. John Varley's "Good-bye, Robinson Crusoe" is a coming-of-age story; but it's the second time around for an old man being rejuvenated and passing through childhood, and it takes place on a nicely detailed demi-paradise on Pluto—or under Pluto. Very well written, characterized, motivated—and with a fine feeling to it. I rated it A, which is nice for a novelette at the beginning of a magazine.

"Think!" by Isaac Asimov is basically a gadget-science story, with a well-developed way to get telepathy. The researchers do get telepathy—of an unexpected variety. A high C. Arthur C. Clarke's "Quarantine" is really a tiny short-short with an introduction. The trick isn't too convincing, I feel. Pleasant enough bit, but I can't rate it beyond D. Edward D. Hoch's "The Homesick Chicken" is one of those problem story things a scientific detective runs into. A special kind of chicken has crossed a very special road, and they have to discover why. But the tricks that lead to a solution seem routine, and the problem is the story. D.

Then we run into a different sort

of first sale from what we were considering in *Unearth*. Sally A. Sellers has a lovely novelette, "Perchance to Dream," which I consider the best story in the issue.

It begins quietly with an attempted holdup that is foiled by a woman who gets fatally knifed during the rescue. When the police come, she is obviously dead. But the author shows us step by step how very undead she really is. She is a freak mutation, apparently, whose body can recover from almost anything. She's a young girl—but not in years. And we see the story from her view, as she tries to find some way to loose the burden of her unwanted deathlessness, and from the view of a doctor, who once loved her, as he tries to find her.

In the end, they find a solution. The only one. But there's more to the story than that; there's a lovely kicker—a surprising twist that is totally logical in the framework of the story.

It's a very well written story—to call her style professional would be to cite the too obvious—with excellent feeling and handling. It is an A.

"Air Raid" by Herb Boehm is a long short story with a nice, though grim, idea. In the future, men have lost their ancient war against disease; as they have adapted, the diseases have adapted even faster. Most people are sterile, and there is no future on Earth. The only hope is to bring people from the past; but that can only be done when the recovered bodies are ones that are about to die, so that their removal will not affect time. This is the story of such a mission for a Snatch Team to recover bodies. Well done, with good logic at the end that settled some doubts I had had about the motivation. B.

I suppose there has to be an end to pleasure somewhere, and for me it came with "Kindertotenlieder" by Jonathan Fast. To begin with, it's obvious fantasy—one of those things that involves kids and their heroes on television turning up for real. I thought that idea was old when I bought one of the better examples back in 1953. This one manages to be condescending to the kids in a style that is elementary at best. overly simple and monotonous. Before it was done, I was thoroughly out of sympathy with everyone in it. And the obvious ending didn't help it any. A low E.

"Period of Totality" by Fred Saberhagen doesn't live up to what I expect from him. It's one of those stories where men are trapped on a strange planet and have to figure out some surprising element of their environment to escape. Logically worked out, but too obviously a set-up to be solved, and the people don't arouse any great interest. On the borderline between C and D.

"The Scorch on Wetzel's Hill" by Sherwood Springer is nicely written, with a good deal of pleasant feeling. It's about a man who suddenly realizes through a believable cue what something that happened in his childhood really meant. Something had fallen from space and changed the local environment. Now he realizes what the man he met had to do with it. But it's too obvious for science fiction in a science fiction magazine. C.

"Coming of Age in Henson's Tube" by William Jon Watkins takes

place on a cylindrical satellite that spins end over end to give it gravity, and involves a kid stunt that could only happen on such a world. (And I'm still not convinced; the effects of increasing angular momentum are not taken into full account, as I read it.) Nothing bad about it, but not much story. D.

Finally we have "Time Storm" by Gordon R. Dickson. This is a long novelette that winds up the issue. Dickson has an interesting situation. Earth has been hit by time storms—literal mild storms that travel as clouds of haze at speeds up to thirty miles an hour, but which leave chaos behind them. For some reason, they affect higher forms of life more deeply than inanimate things, though whole areas of the country have been switched. (The storms apparently can have results that are related to parallel universes—judging by one bit at the end—as well as setting things forward or backward.) Animals caught in such a storm are shocked so badly that they imprint on the first thing they see on recovering. Thus the hero Despard is traveling with a speechless girl and a leopard who will do anything for his approval.

They are wandering from Minnesota toward Omaha, where Despard is sure he will find his former wife still surviving and ready to make up with him.

The trip has incidents enough, but it is basically a revelation to the reader and to Despard of what his character really is.

As can be expected of Dickson, writing and mood are fine, as is the characterization. But the trouble is that the ending simply doesn't live up to what has gone before; and the final revelation to the hero of his true purpose and self seem a bit forced and not enough of a climax for a story where the background was promising so much. I'll give it a middle C for the pleasure I had in much of it.

Overall, the issue comes out to a high C. And if that doesn't sound like much, it gives the wrong impression; maybe I'm tougher on less-than-fine stories than others. All I know is that during five years when I had to read all the magazines completely—and the original anthologies—I considered a high C an excellent mark for any magazine. And when you consider that more than one-third of this magazine is made up of two really excellent novelettes, with an added very good story by Boehm, I think the reader is getting good value for his dollar.

A very good first issue. I hope it can keep up that level. If so, it should last and increase the frequency of publication. This is a magazine which could share readers with Analog. It's the kind of competition that would increase the readership for both the magazines. And with the decline in frequency, number, and circulation (in many cases) of the science fiction magazines; there's a crying need for another good one!

I just wish they'd found a title that was easier to say or whose initials would form something that could be pronounced. How are they going to abbreviate this in the indexes of the magazines? Of course, they can simply call it Isaac Asimov's Magazine—and IAM does rather fit the cover picture!

BRASS TACKS

Dear Mr. Bova:

I thoroughly enjoyed your editorial and Mr. Easton's article on social evolution and am heartened to see progress finally being made in this long abused field. It has always seemed unfair that, because of its association with racists, genetic theories of behavior were ignored in favor of environmental behaviorism, which embraces more noble ideals such as totalitarianism, but I digress. When I read the article I immediately rushed to the bookstore to buy a copy of Wilson's book, but at $20 I'll wait until it comes out in paperback. I would, however, like to address a few remarks on the ideas discussed in the aforementioned articles.

The question of free will is not an issue in the environmental vs. genetic behaviorism controversy, as both camps generally deny its existence. But since you brought it up, I would like to say that free will is possible by application of the uncertainty principle. If we assume that free will does not violate causality, then free will can only be discussed in terms of the individual's predictability and controllability. As any systems engineer can tell you, if a system contains a noise source (neurons which fire off randomly without excitation) then it cannot be perfectly predicted or controlled. If the system is nonlinear and poorly observable as well, and learning systems always are, then attempts at prediction and control tend to fail abruptly. These noise sources would also explain innovation and mistakes. . . .

I particularly enjoyed Mr. Easton's description of social survival as I have not considered this before. I always thought that altruism was the result of a defective recessive, like diabetes, hemophilia, and homosexuality. The importance of social survival becomes clear when you remember that the major cause of human death is traditionally infant mortality. Of course in barren regions or during severe droughts when food, predators, and communicable diseases can become scarce, individual survival would play a more important role, giving us some of our more useful, albeit less lovable, characteristics.

One last misconception I would like to clear up is the belief that evolution is a slow process, taking hundreds of generations of waiting to be hit by a cosmic ray. Within any given species there is a wide variety of recessives just waiting for the right conditions for them to blossom forth. A study of the population cycles of rodents (*Scientific American*, June 1974) found that major changes in the genetic composition of a population can occur in a few generations. This study is particularly interesting

since it implies a relationship between evolution, population, aggressiveness, and immigration.

Speaking of the population problem, . . . the long run solution is extraterrestrial colonization, not to relieve the population pressure, but to get rid of us dissidents who can't stand high population densities. After we are gone the remainder won't have any problem in setting up a steady state society, and they will probably deserve one too.

JOHN KORMYLO
400 S. Berendo St. #121
Los Angeles, CA 90020

Physicists such as P.A.M. Dirac have long contended that physics can explain everything *in the universe, but it's very rare to see an idea from physics, such as Heisenberg's Uncertainty Principle, applied to behavioral biology. Seems interesting and unworkable, however.*

Dear Mr. Bova:

A few comments regarding Mr. Easton's analysis of E. O. Wilson's *Sociobiology*:

1. He indicates that the historically recent acceleration in gene flow between different gene pools (i.e. intermarriage, miscegenation, etc.) results in a reduction in degree of kinship between any two individuals, thus causing a reduction in altruistic behavior by eliminating selection for it. One might counter that, on a worldwide basis, this trend leads to a greater probability of similar or identical genes in any two people, resulting in less provincial and more cosmopolitan altruistic acts. Concomitant with group-specific altruism come the human traits of racism, xenophobia, geocentricism, etc. What Mr. Easton sees as a threat to civilization may be beneficial.

Additionally, the human mind is wired so that its user can easily transfer the beneficiary of its altruistic tendencies to any group, genetically similar or not. Without this ability nations such as our own or the U.S.S.R. would be impossible. The gene(s) for altruism are an advantage in any group, regardless of whether there are other genetic similarities between its members. As a result, individuals exhibiting totally nonaltruistic behavior (i.e., sociopaths) within a group are heavily selected against in successful societies. Altruism lives.

2. Much like Darwin, Wilson has said very little that is new, but has simply accumulated and presented the most voluminous and compelling data, to date, in support of the old concept that man's behavior is genetically determined to some extent. This concept can hardly be denied. Most of the controversy is over the *extent* of the genetic component. I have met sociologists who contended that, given the proper environment, morons can be made into university professors (there are many who would say that this is common) and physical scientists who were convinced that they would have risen to their present elite state, regardless of their early environment. Truth usually lies in between. Admitting this does not necessarily give ammunition to neo-Nazis and racists as many of Wilson's critics suggest. In fact, denial of the genetic component of man's behavior lends credence to those who propose that the

human mind is an almost infinitely malleable assemblage, easily rewired for any environment. This would be highly desirable in totalitarian situations. A case in point is the Soviet Union's clinging for many years to Lysenko's ridiculous theories of almost total environmental control over genetics. Fortunately, natural laws cannot be legislated.

S. O. DUKE
250 Cypress Ln. Rd.
Greenville, MS 38701

But natural laws should be investigated carefully, and the investigators should have conclusive evidence before declaring a hypothesis to be proven by fact. This includes the concept that behavior traits such as altruism are genetically "wired".

Dear Ben:

Per your September 1976 Editorial, "Not Supersonic Enough," I guess I was head of the California effort against the B-2707 SST and Concorde, up till the time we killed our dirty ole bird.

I am in complete agreement with the thrust of your Editorial, with the exception that your recommendation lacks the vision and foresight (hindsight too) I've come to appreciate in the new Analog.

Why not get the fans to support a LH_2 HST? . . . a quantum jump to the "hyper-sonic aircraft" is required. . . . Maybe we should name it the HSA to avoid the adverse political-psychological image of SST.

The HSA's sonic boom does not even hit the ground during normal cruise, as the HSA is high enough in a low-density medium that its sonic boom is refracted and thus does not hit the ground!

I am ignoring the trivial Concorde, as it will go the way of the Edsel. However, you errored seriously on your evaluation of our killing of the B-2707 SST. You said that, " . . . it had been stopped too soon, by emotional arguments that bordered on hysteria." I presume that you refer to those frenzied environmental arguments that some nuts used.

Actually [neither] the valid environmental articles nor the frenzied hysteria . . . had [much] bearing on the outcome of that political battle. About a year before, we decided a strong but "responsible" environmental attack would just be a front for our behind-the-scenes activity.

I worked very closely with the local chapter of the American Institute of Aeronautics and Astronautics . . . San Francisco section . . .

It came with time that the Boeing people from Seattle were purposefully evading a factual representation of the B-2707 SST. My own committees ripped apart typical Boeing misrepresentations and turned the material over to the regional AIAA, the airlines, and to Senator Proxmire to get him to drop his dumb arguments and use valid winning ones.

It seems that the mid-management of the airlines was rewriting the . . . adverse reports on the B-2707 that were generated by the airlines evaluation engineering teams. We bypassed the system, and got our hard, cold economic arguments directly to the top management decision levels of the airlines. This killed airline support for the B-2707—they didn't oppose the SST much, but it resulted

in a dramatic shift of political power.

Thus, with the valid environmental arguments and a lack of airlines' support, the Congress exercized their typical lack of intelligent leadership and let the B-2707 quietly die.

This year, I opposed the California Nuclear Shutdown initiative and was kicked out of the leadership of the Sierra Club because I'm too moderate. . . .

KERMIT L. SMITH

864 Orange Ave.
Sunnyvale, CA 94087

The decision to kill the Boeing SST without even building a prototype was based on the fear that one prototype plane, built for experimental and evaluational purposes, would lead to large fleets of SSTs. That *was reasoning by hysteria. And a hypersonic aircraft would have to be economically viable (and that includes convincing customers that it's safe to fly in) to be successful. The Concorde has proved that SST aircraft can be built and operated; it has yet to prove that an SST can be profitable.*

Dear Mr. Bova:

In re "Altruism, Evolution, and Society," has the author considered the possibility that destruction of the environment is a survival trait as far as the species is concerned? Adaptation to an environment, even to an ever changing environment is a great short term survival trait but leads eventually to extinction.

Consider, first, that this planet, this solar system must eventually die. Any species that exists only in this solar system must then become extinct. Consider, also, that despite the traditions that have grown up about them, most pioneers are not drawn to the frontiers but driven there by pressures at home. Thus any trait that would cause destruction of the environment, and drive at least some members of the species to move to ever expanding frontiers, would tend to promote survival of the species and continued evolution.

Perhaps the death of most of the human race on a polluted planet is the price to be paid to drive some of us away to continue the evolution of the species elsewhere. The purpose of evolution is evolution.

R.L.MCLAIN

P.O. Box 192
Belvidere, IL 61008

Destruction of the environment as a long-term genetic advantage to the race? Any writers out there willing to tackle that as a theme?

Mr. Bova:

Pathological procrastinator that I am, I have many times resolved to write Analog a letter concerning one issue or another, only to have that resolve languish over a space of days, and eventually fade from my mind altogether. However, upon seeing the cover of your October issue, I sat down immediately and tapped this out, without so much as even opening the magazine! In my less-than-skilled opinion, Vincent Di Fate's painting for "Media Man" has all the elements of good art, and moreover, good *science fiction* art. October's cover barely edges out the November '75 cover (by Di Fate also) for "Home Is the Hangman" (possibly the best novelette I have ever read) as the best Analog cover

of several years, in my view. Let's have more illustration, and above all more cover paintings by Mr. Di Fate!

CHUCK LINDLEY JR.
18900 Pasadero Dr.
Tarzana, CA 91356

Di Fate is back with the cover illustration for our January 1977 issue, and he will be doing covers for us regularly. The fans who joined the 1976 World Science Fiction Convention in Kansas City agreed with your assessment of Zelazny's "Home Is the Hangman"–they awarded it the Hugo trophy for best novella.

Dear Mr. Bova:

With respect to Norman Spinrad's article in the July issue, the L-5 concept needs thoughtful, well-informed criticism. Spinrad's article is a little short on the latter ingredient.

Dr. O'Neill, in contrast to Spinrad's portrayal, does not propose that we begin a space colonization project now. If you read his publications and testimony before Congress, you will not find statements advocating the commitment of tens or hundreds of billions of dollars for space colonies and space solar energy. What you will find is the result of careful studies showing that a space colony project costing possibly in the vicinity of 100 billion dollars appears to be a worthwhile subject for some studies on the five to ten million dollar level.

The opinion of O'Neill and many others, including a few NASA administrators, is that the project could be done in a short time (fifteen years) and pay off handsomely, but either of these opinions could change. If you consider that the U.S. alone will spend over $500 billion over the next ten years for energy projects, half for electricity, (1976 FEA Executive Summary, National Energy Outlook) the 100 ± 50 billion projected cost for space colony/space solar energy does not look so formidable.

The article criticized the rocket transportation proposed in the current studies. To explain the reason for postulating an expensive, but soon available Heavy Lift Vehicle derived from Shuttle hardware instead of waiting for a Flyback Shuttle would take us deep into a study of discount economics. Briefly, while the transportation cost would be lowered by waiting, the value of the project to society would also be lowered because the return comes later and the cost-benefit ratio turns out to be about the same or lower. This issue has been studied in depth, as transportation costs are about half of the total projected cost.

Spinrad is right in pointing out the critical position of the Transport Linear Accelerator in the proposal. He goofed on the energy difference, though, which is one-twentieth of that required from Earth, not one-sixth. More important is the cost ratio which, including processing to metals and oxygen in space, is projected to be at least fifty to one for Earth-launched vs. lunar material. This kind of reduction in materials and oxygen cost, if possible, makes major changes in the cost of all kinds of space projects.

In the case of energy from space, it may make the difference between

double current busbar rates for Earth-launched systems to one-third (or even less) current busbar rates for solar power plants built from lunar materials.

Spinrad's viewing-with-alarm the catapult accuracy problem, however, indicates a lack of appreciation of current technology. A number of competent engineers and scientists studied this part of the problem over the summer at NASA-Ames and came up with a design much better than the minimum required.

Apparently, Spinrad has doubts about the feasibility of microwave power transmission to Earth. A great deal has been published on this subject, as the focusing and safety of such systems were early concerns of researchers in the field. The design proposed fail-safes, as a pilot beam from the center of the receiving antenna is required to maintain beam phase; without the pilot beam, the power beam goes noncoherent and scatters to very low, safe levels.

Though L-5 advocates have been downplaying the potential for reducing the population density of Earth by allowing large numbers of people to leave . . . , I have to take issue with "nor is there any realistic way that billions of people can be shipped off into space." This, like the old saw about the Chinese marching forever into the sea, is just not true if you examine the numbers.

The U.S. airlines alone carry about 200 million people a year, and the energy needed to fly between New York and San Francisco is about the same as the Shuttle requires to go into low Earth orbit. The difference is that a jetliner spends five hours burning the fuel a Shuttle burns in five minutes. So, if there is a need for traffic into space on the scale of a hundred million people a year, a fleet of spacecraft about the size of the U.S. airline fleet and resembling the Space Shuttle the way a 747 resembles a DC-3 could do the job.

On a last note, the L-5 Society is primarily an information-disseminating organization, and not at all a political lobby. A sample of the current newsletter is available with a trial membership on request (no obligation).

KEITH HENSON
c/o L-5 Society
1620 N. Park Ave.
Tucson, AZ 85719

But why build an L-5 colony when you want to develop a manufacturing capability based on lunar materials? Why not build your factories on the Moon itself? And what are the long-term ecological problems associated with microwave transmission from orbit? Wouldn't groundbased solar and wind power systems be cheaper and cleaner? Or hydrogen fuels?

Dear Mr. Bova:

In your September issue you stated, in "In Times To Come", "Now, why aren't there any women *illustrating* science fiction?" But, Mr. Bova, I know of at least one woman whose work has appeared in the covers (and inside) of several science fiction books. (All right, I know she's only one half of a team.) Her name is Diane Dillon. Her partner's name is Leo Dillon. You're excused.

BRIAN SMITH
452 Greenbrook Pl.
Richland WA 99352

Leo and Diane Dillon have drawn many pretty decorations for many speculative stories, including most of Harlan Ellison's. But they have not illustrated—in the sense of providing a visualization of one or more scenes from the story—any science fiction *stories that I know of.*

Dear Ben,

The October issue of Analog lived up the usual standards of quality. Your cover art is still the best in the business, overall, and a Silverberg novel is always more than welcome. Joan Vinge's "Media Man" was near-excellent, and literally cries for a sequel, perhaps even a complete novel to finish the tale of Chaim Dartagnan. But I would like to point out a fundamental error in the conclusion of Joe Patrouch's "The Man Who Murdered Television."

Mr. Petrouch seems to assume that cable TV is piped directly from the station to receive via cable, with no broadcast of electromagnetic radiation whatsoever. This is simply not so. The correct title for cable TV is "Community Antennae Television" (CATV). As this designation suggests, an antenna with far greater pickup range than the antennae on individual homes . . . is erected in a community that wants cable TV. This antenna picks up the broadcast signals from outlying stations, as well as local stations, strengthens the signal, and then transmits the signal directly to the subscribers' homes by means of a cable the local CATV franchise has erected, usually in conjunction with telephone lines.

So the "cable" in cable TV is the final step in a process that serves to augment the range and clarity of broadcast television waves, while superseding the use of an individual home antenna. While this system is a great boon to isolated communities far from anything that could be considered a "local" station, CATV does not in any way reduce the number or strength of broadcast radio waves. CATV serves only to enhance the availability of TV reception and thus promote its use, not to reduce original transmissions.

JIM FLICK
7494 Salinas Trail
Boardman, OH 44512

Obviously, Patrouch's story deals with a slightly future time when cable TV stations either originate their own broadcasts or get their material by nonbroadcast methods. And by that time, if current trends continue unabated, network television should be not only dangerous to your physical health, but dangerous to your mental stability as well.

Dear Ben,

As you know from our past correspondence, I have some strongly held beliefs. Perhaps then—coming from me—my endorsement of recommendations you made in your October editorial will be somewhat noteworthy.

I agree that all issues ultimately should come down to an honest examination of the evidence. Whether the issue is sociobiology, life origins, or anything else, we should all care primarily about finding out what the truth is, and to do that we must consider the facts, and do our level best to weigh the facts objectively. I applaud you for taking scien-

tists to task for failing to do this when an emotional issue like sociobiology comes up. Also I would chide many religionists for the same failing—religion, too, should be subjected to rational scrutiny, for faith (real faith) is not a substitute for reason, it is a motivating conviction based on reason. If a religious person believes he has the truth, then why should he fear submitting his beliefs to close scrutiny? I am religious; I have faith. I believe that God is good and Christ is my Saviour. But if I am in any respect in error, I want to know it. Maybe I'm different, but I find no natural tension between faith and honesty.

I disagree, however, that we must abjure all ideology in order to deal with the evidence honestly. It is not necessary that we be agnostic, it is only necessary that we be honorable. It seems to me that you alienate yourself unnecessarily from a believer in some ideology when you assume that his beliefs necessarily make him unreasonable and unreachable, and that only someone who approaches the evidence from the same agnostic perspective you do can learn truth or be "scientific." Such reasoning is false, and it reeks of elitist arrogance.

Whatever the issue, whoever the people are who take issue with us, let us have respect enough for them to refrain from calling them fools. Instead, let us consider the evidence together, honestly and honorably. And let us bear in mind that the universe is not a democracy; what is true and valid remains true and valid regardless of what the majority agree to believe. If through lack of honorableness we mistake what is true and valid, then it will be to our hurt.

RONALD R. LAMBERT
2350 Virginia
Troy, MI 48084

Agreed, that there should be *no natural tension between faith and honesty. But the temptation to lean in the direction that faith points makes it all the more difficult to face the observable world with total honesty. No human beings, scientists included, eschew ideology* in toto *while they are pursuing their life's work. But the major strength of the scientific method is that it encourages its practitioners to lean in the direction of the observable evidence, regardless of the ideological implications.*

Dear Mr. Bova:

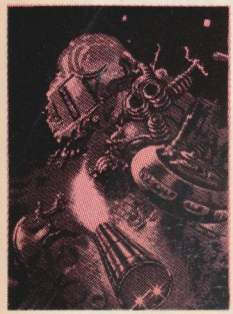
Joe Patrouch in "The Man Who Murdered Television" seems to have given the answer to the question of why TV is so rotten.

However, he doesn't account for the low condition of movies, comic books, music, magazines, and food, not to mention art, housing, and transportation today. Are there secret agents at work in these fields, too?

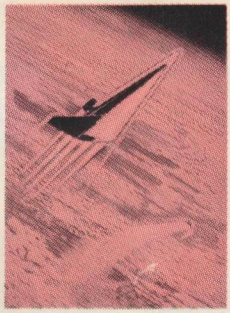
C. C. BECK
19621 Northwest 4th Av.
Miami, FL 33169

Maybe it's not secret agents that make the quality of work done in those fields so low, but the fact that the work is done to make as much of a profit as possible for as little time, money, and talent as can be invested. In other words, "The public be damned." And the public damns itself when it accepts low-grade work for high-grade prices.

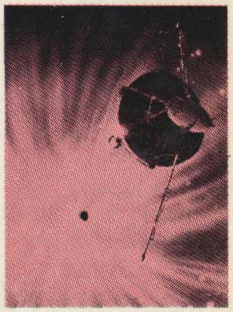
FEBRUARY 1975



AUGUST 1975



SEPTEMBER 1975



Analog covers available

Thanks to your great interest and demand, we now have available for sale a limited number of reprints of our 1975 covers. The reprints are in the same colors as originally published, without the printed material overlaying them. The reproductions are bordered with white stock, suitable for framing. Size is 9″ x 12″. Individual covers will cost $1.75. A set of two covers will be $2.50; three-cover sets, $3.25; all four covers, $4.00. Order now! (See the coupon inside the magazine.)

DECEMBER 1975

READ IT SLOWLY.

You'll want to. It's that good . . . it's The Hugo Winners: 23 speculative fiction stories that have won the science fiction equivalent of the Oscar —Arthur C. Clarke's superb story, "The Star," Jack Vance's classic, "The Dragon Masters," and Poul Anderson's award-winner, "No Truce With Kings," plus 20 more.

This fabulous 864-page anthology of speculative fiction sells for $15.45 in the original publisher's edition. It's yours, if you wish, as one of 4 books for just 10¢ (plus shipping and handling) when you join The Science Fiction Book Club.

Here's how the Club works:

When your application for membership is accepted, you'll receive your introductory package of four books for just 10¢. You may examine them in your home, and if not completely satisfied, return them within ten days—membership will be cancelled and you'll owe nothing.

About every 4 weeks (14 times a year), we'll send you the Club's bulletin, *Things to Come*, describing the 2 coming Selections and a variety of Alternate choices. If you want both Selections, you need do nothing; they'll be shipped automatically. If you don't want a Selection, or prefer an Alternate, or no book at all, just fill out the convenient form always provided, and return it to us by the date specified. We try to allow you at least ten days for making your decision. If you do not receive the form in time to respond within 10 days, and receive an unwanted selection, you may return it at our expense.

As a member you need take only 4 Selections or Alternates during the coming year. You may resign any time thereafter, or remain a member as long as you wish. At least one of the two Selections each month is only $1.98 plus shipping and handling. Other extra-value selections are slightly higher but always much less than Publishers' Editions. Send no money. But do send the coupon today.

ANY 4 SCIENCE FICTION BEST SELLERS FOR JUST 10¢ with membership

Science Fiction Book Club 45-S131

Dept. LR168, Garden City, N.Y. 11530

I have read your ad. Please accept me as a member in the Science Fiction Book Club.

Send me, as a beginning, the 4 books whose numbers I have indicated below, and bill me just 10¢ (plus shipping and handling). I agree to take 4 additional books during the coming year and may resign anytime thereafter.

Mr.
Mrs.
Miss _____
Please print

Address _____ Apt. _____

City _____ State _____ Zip _____

7773. **Children of Dune.** By Frank Herbert. Second sequel to the Hugo and Nebula award-winning **Dune,** this is the final volume of this outstanding SF trilogy. Pub. ed. $8.95

4630. **Shadrach in the Furnace.** By Robert Silverberg. In the year 2012 a vicious plague is destroying the world while its ruler Genghis Mao jealously guards the only known antidote. Pub. ed. $8.95

6221. **The Foundation Trilogy.** By Isaac Asimov. The ends of the galaxy revert to barbarism. An SF classic. Comb. Price $17.85

2915. **Star Trek Star Fleet Technical Manual.** Compiled by Franz Joseph. A must for all Star Trek devotees. Taken from the data banks of the master computer, it includes the Articles of Federation, the Romulan and Organian Peace Treaties, and much more. Large size paperback. Vinyl binder. Pub. ed. $6.95

4325. **The Fuzzy Papers.** By H. Beam Piper. A brilliant two-in-one-volume containing **Little Fuzzy,** a classic novel about man vs. alien and its sequel **The Other Human Race.** Special Edition.

7682. **Mindbridge.** By Joe Haldeman. Mind expanding space travel by the author of **The Forever War,** the 1976 Nebula winner. **Explicit scenes and language may be offensive to some.** Pub. ed. $8.95

4614. **Millennium.** By Ben Bova. American and Russian bases on the Moon unite to prevent a catastrophic war brewing on Earth. Pub. ed. $7.95

1784. **The 1976 Annual World's Best SF.** Donald A. Wollheim, ed. From Fritz Leiber to Michael Bishop, ten of the finest examples of short fiction published in 1975. Includes the Nebula Award-winning **Catch That Zeppelin.** Special Edition.

4549. **Man Plus.** By Frederik Pohl. Cyborgs are to colonize Mars, and Roger Torraway, ex-astronaut, is to be the first Martian—or so NASA plans. Fast-paced fascinating SF. Pub. ed. $7.95

6320. **A World Out Of Time.** By Larry Niven. A black hole in space sends Jerome Corbell 3 million years into Earth's future where the ultimate battle of the sexes is raging. By co-author of **The Mote in God's Eye.** Pub. ed. $7.95

8532. **The Hugo Winners, Vol. I & II.** Giant 2-in-1 volume of 23 award-winning stories, 1955 to 1970. Asimov introduces each. Pub. ed. $15.45

1412. **Imperial Earth.** By Arthur C. Clarke. A representative to Earth, from Titan, Duncan MaKenzie plans to solve an invention that threatens his homeland's economy. By Hugo, Jupiter and Nebula winning author. Pub. ed. $7.95

The Science Fiction Book Club offers its own complete hardbound editions sometimes altered in size to fit special presses and save members even more. Members accepted in U.S.A. and Canada only. Canadian members will be serviced from Toronto. Offer slightly different in Canada.