

FEBRUARY 1968

60c

Galaxy

SCIENCE FICTION

BZ

STREET OF DREAMS,
FEET OF CLAY

by
Robert Sheckley

•

THE BIG SHOW

by
Keith Laumer

•

TOTAL ENVIRONMENT

by
Brian W. Aldiss

•

A TRAGEDY OF ERRORS

by
Poul Anderson

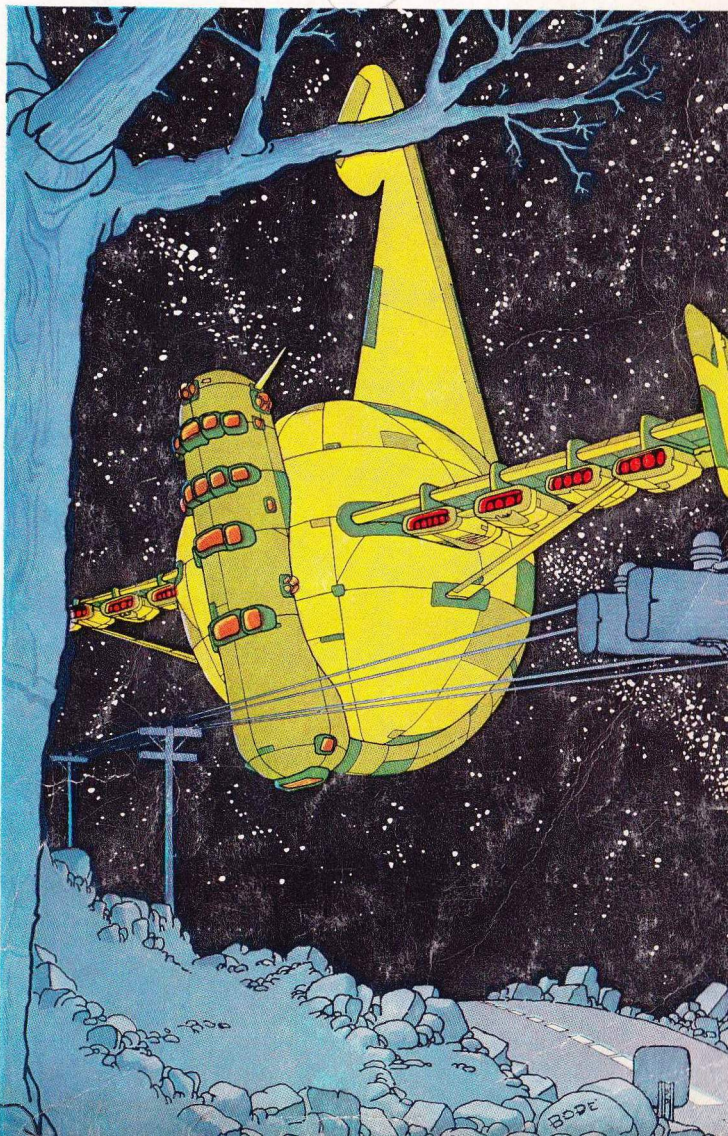
•

ALGIS BUDRYS

•

WILLY LEY

and many others



Your Subscription Is Your Private Window On

the stars in our galaxy

The only thing we know about tomorrow is that it has its roots today. And out of the fantastic facts of today's scientific wonders *Galaxy's* all-star lineup of contributors weave stories that are sometimes wry, sometimes terrifying—but always a delight to read.

Would you like to join us, next issue and every issue thereafter for years to come, on this fascinating exploration of the fears and foibles of tomorrow? All it takes is a check, a stamp and a minute of your time. (If you prefer not to tear the coupon out of your magazine, just give us the information requested on a plain piece of paper.) From then on the mails will bring *Galaxy* to your door, with the best stories being written by the best science-fiction writers of all time.

Here are some of the famous stories that appeared in *Galaxy* in its first fifteen years. Will the next fifteen years be as good?

Frankly, we don't think so. We think they'll be better!

Galaxy Publishing Corp.
421 Hudson Street
New York, N.Y. 10014

Yes, start my subscription to *Galaxy* right away. I enclose my check or money order for:

12 issues for \$6.00 24 issues for \$11.00

Name

Address

City & State Zip Code

U.S. only. Add 10c per issue foreign postage.

Please check whether new or renewal.

Baby Is Three
Theodore Sturgeon

*The Ballad of
Lost C'Mell*
Cordwainer Smith

The Big Time
Fritz Leiber

The Caves of Steel
Isaac Asimov

Day After Doomsday
Poul Anderson

The Demolished Man
Alfred Bester

Do I Wake or Dream?
Frank Herbert

The Dragon Masters
Jack Vance

*The Fireman
(Fahrenheit 451)*
Ray Bradbury

*Gravy Planet
(The Space Merchants)*
Pohl & Kornbluth

*Here Gather the Stars
(Way Station)*
Clifford D. Simak

Home from the Shore
Gordon R. Dickson

Hot Planet
Hal Clement

King of the City
Keith Laumer

Mindswap
Robert Sheckley

Med Ship Man
Murray Leinster

The Men in the Walls
William Tenn

The Old Die Rich
H. L. Gold

The Puppet Masters
Robert A. Heinlein

Surface Tension
James Blish

The Visitor at the Zoo
Damon Knight

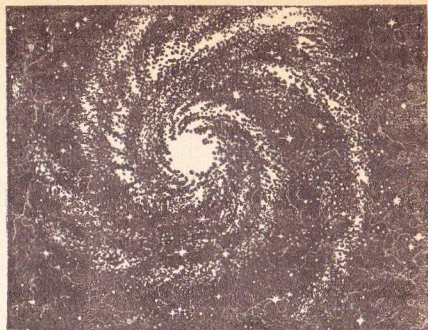
*Wind between
the Worlds*
Lester del Rey

Galaxy

MAGAZINE

ALL STORIES NEW

Galaxy is published in French, German, Italian, Japanese and Spanish. The U. S. Edition is published in Braille and Living Tape.



February, 1968 • Vol. 26, No. 3

CONTENTS

NOVELETTES

- A TRAGEDY OF ERRORS 8
by Poul Anderson
- STREET OF DREAMS, FEET OF CLAY ... 79
by Robert Sheckley
- TOTAL ENVIRONMENT113
by Brian W. Aldiss
- THE BIG SHOW173
by Keith Laumer

SHORT STORIES

- THE PLANET SLUMMERS 68
by Terry Carr and Alexei Panshin
- CRAZY ANNAOJ 73
by Fritz Leiber
- SALES OF A DEATHMAN105
by Robert Bloch
- HOW THEY GAVE IT BACK163
by R. A. Lafferty

SCIENCE DEPARTMENT

- FOR YOUR INFORMATION 95
by Willy Ley

FEATURES

- EDITORIAL 4
by Frederik Pohl
- GALAXY BOOKSHELF157
by Algis Budrys

Cover by Bodé from *THE PLANET SLUMMERS*

FREDERIK POHL
Editor

WILLY LEY
Science Editor

JUDY-LYNN BENJAMIN
Associate Editor

ROBERT M. GUINN
Publisher

LAWRENCE LEVINE ASSOC.
Advertising

MAVIS FISHER
Circulation Director

GALAXY MAGAZINE is published bi-monthly by Galaxy Publishing Corporation. Main offices: 421 Hudson Street, New York, N.Y. 10014. 60c per copy Subscription: (12 copies) \$6.00 in the United States, Canada, Mexico, South and Central America and U. S. Possessions. Elsewhere \$7.00. Second-class postage paid at New York, N.Y. and at additional mailing offices. Copyright New York 1967 by Galaxy Publishing Corporation, Robert M. Guinn, President. All rights including translations reserved. All material submitted must be accompanied by self-addressed stamped envelopes. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction and any similarity between characters and actual persons is coincidental.

Printed in the U.S.A.
By The Guinn Co., Inc. N. Y.
Title Reg. U. S. Pat. Off.

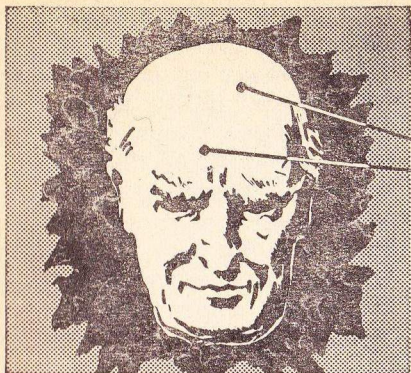
PLAYING GAMES

Yesterday (as this is written) our Mariner V spacecraft accomplished its fly-by of the planet Venus and transmitted back to Earth a staggering quantity of data about pressures, temperatures, existence or non-existence of a magnetic field and so on. (The 34 hours of data transmission is still going on at this moment in real time, so you won't find the results here. You've already seen them in the daily newspapers anyway.) It was, all in all, quite a triumph for our spacemen — a flight of 350,000,000 kilometers, taking almost a hundred and twenty-seven days, and arriving on target, on time and functional.

It happens we were in the big auditorium in the Jet Propulsion Laboratories in Pasadena, California, when the fly-by occurred. (In this particular case the "we" is not purely editorial; present were three delegates from the science-fiction fraternity, Fritz Leiber and Larry Niven having joined your editor.) A large chart dominated the room, with a pro-

jector showing the spacecraft's flight as, moment by moment, the big scanning disks at Goldstone reported its position. The beep-beep-*whEEP* of the incoming transmissions from Mariner gave a pleasantly Things-to-Comish musical background, while Mariner Control broke in with periodic situation reports on course, distance and velocity. Present were several hundred luminaries of science like Krafft Ehrlicke, generally interested bystanders like ourselves and Leonard Nimoy (*Star Trek's* Mr. Spock), and men who had actually worked on Mariner and its sister projects and had a deep interest in its success.

Time came. Mariner reached turn-on position, and all its systems turned themselves on. Mariner entered the shadow of Venus; minutes passed; it exited the occultation again, and the show was over. Everything had worked. And there was a genteel patter of applause, and a few rueful smiles . . . and everybody got up and went home.



STRANGE
things happen
here!

The Dark Continents of Your Mind

DO YOU struggle for balance? Are you forever trying to maintain *energy, enthusiasm* and the *will to do*? Do your personality and power of accomplishment ebb and flow—like a stream controlled by some unseen valve? Deep within you are minute organisms. From their function spring your emotions. They govern your *creative ideas* and *moods*—yes, even your enjoyment of life. Once they were thought to be the mysterious seat of the soul—and to be left unexplored. Now cast aside superstition and learn to direct intelligently these *powers of self*.

**Accept This
Free Book**

Let the Rosicrucians, an age-old fraternity of thinking men and women (not a religion), point out how you may fashion life as you want it—by making the fullest use of these little-understood *natural faculties* which you possess. This is a challenge to make the most of your heritage as a human. Write for the Free Book, "The Mastery of Life," Address: Scribe V.B.K.

The ROSICRUCIANS (AMORC)
San Jose, California 95114 U.S.A.

Scribe: V.B.K.

The Rosicrucians (AMORC)
San Jose, California 95114, U.S.A.

Please send copy of booklet,
"The Mastery of Life" which I
shall read as directed.

Name _____

Address _____

City _____

State _____

Please Include Your Zip Code

What was wrong?

It was just one of those things. That was on October 21st. On October 20th, the *Russian* spacecraft, *Venera IV*, had actually made a soft *landing* on Venus. And our triumph had all at once turned out to be a sort of wistful, feckless, second-best *loss*.

That's the way it was reported in the papers, and we must in all honesty say that that was how it looked to at least a large number of the people on the scene at JPL.

Yet clearly that view is nonsense. *Venera IV* did one thing, *Mariner V* another; if there is any interaction at all between the two probes, it is all to the good — one can validate the other if they are right, let us know the dimensions of uncertainty if they are wrong. A hundred years from now, when our great-grandchildren come to study that curious phenomenon of medieval history called the Space Race, it is very unlikely that they'll have to commit to memory the fact that the Russians preceded us by a day on this particular occasion. They may learn that in the month of October in the year 1967 human knowledge of the planet Venus was increased by two successful missions, one American and one Russian, but they surely will not

care which one got there first. And neither should we.

The reason we do is because of a built-in fallacy in our contextual view. To us, the space race is what games theorists call a "zero-sum" game. In the matrix of the zero-game, every good thing that happens to one side is a bad thing for the other; there is no such thing as a Russian "gain" without an American "loss."

There really are, of course, such things as zero-sum games. Poker is one. If you win a dollar, and Sam wins \$5, and the other player, Bill, loses \$6, the sum of all winnings and losses at the end of the game is zero. The chips may shift around from player to player, but there are the same number of chips at the end of the game as there were at the beginning.

But not all games are zero-sum games, and it is both pernicious and silly to view all contests as struggles in which some must win, others lose. "Losers" can gain, too.

Consider foot-racing. It is true that in a race one man wins and the others lose; but it is also true that no "winner" ever would have broken the four-minute mile without help from at least one "loser" who set the pace for him and made it possible for him to go faster than any man had ever

gone before. Contests, you see, need not be only against the other players. They can be against brute nature, against the harsh environment of the universe; and victory can be measured against the timekeeper's stopwatch or the total quantity of knowledge we humans — *all* we humans — have been able to wrest from nature.

Unfortunately a lot of our most influential gamblers are hooked on playing the zero-sum game. It may be a crooked wheel, they say, but as far as they're concerned it's the only wheel in town, and it's where they bet the bundle.

Happens that the bundle is our own federal budget, and these particular gamblers are our elected representatives. If there was a certain gloom at JPL yesterday it had a basis in well documented fact.

We may not *really* have lost anything by having the Russians steal our thunder, but the budget-choppers will *think* we did — and practically speaking, that's the same thing when appropriations time rolls around. Vietnam, Big Science and the Great Society are all demanding enormous quantities of funds at once, and the legislators are eagerly seeking places to swing the axe. They can't do much about the cost of Vietnam. They don't want to an-

tagonize the votes the Great Society carries with it. The only place they can see to cut is in the sort of activity represented by Big Science . . . and a clearcut loss to the Russians gives some of them the excuse they've been looking for to chop away.

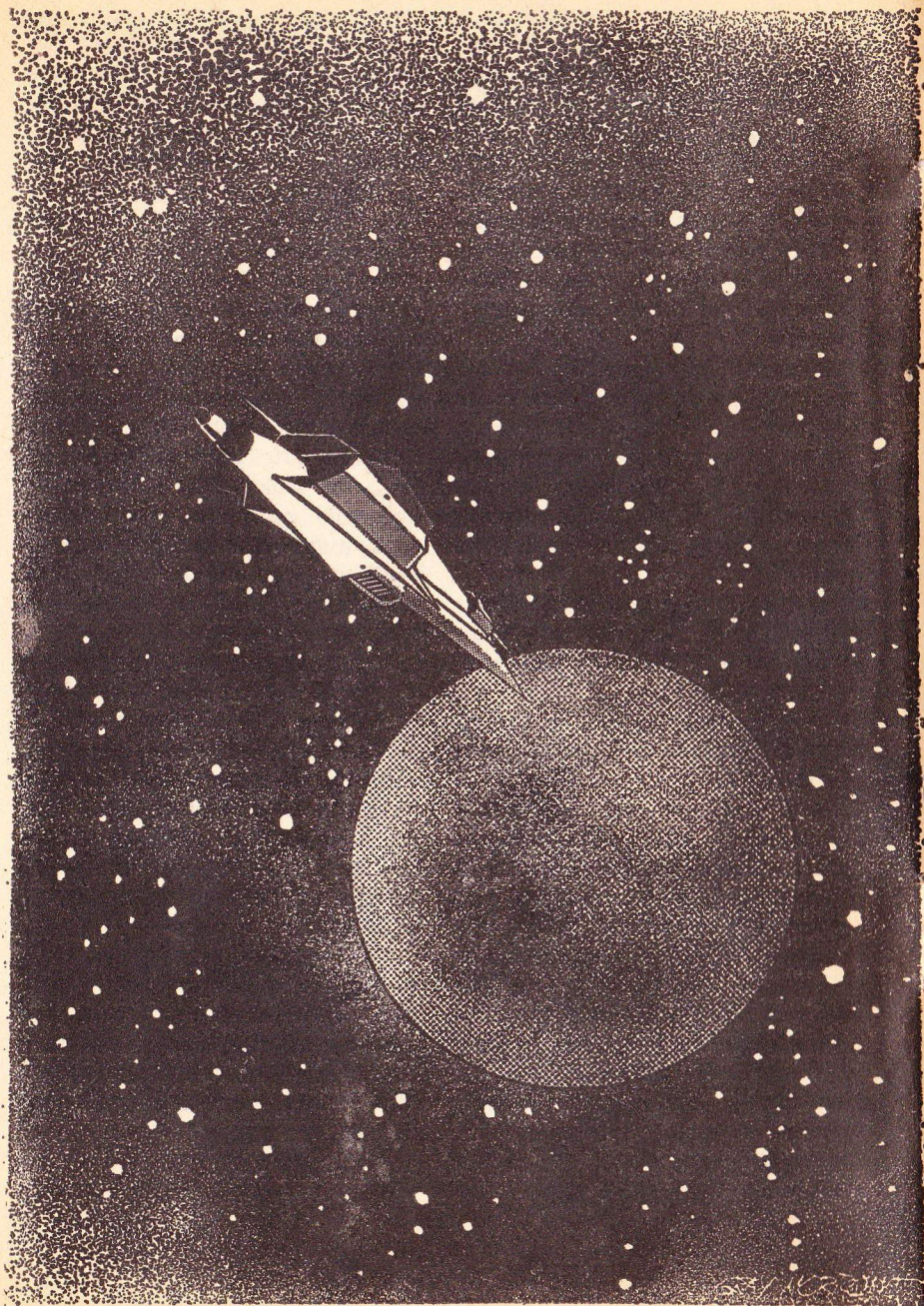
And yet . . . there's a whole universe out there, you know. It's ours for the taking, at least as far as we now know. And if we don't yet at this moment know precisely what we want it for, we can be very sure that when we do find out what's there for us — new raw materials, new knowledge, maybe even new friends — we'll be completely unable to understand how we got along without it so long.

Our only way there is through the crude and clumsy beginnings of Venera and Mariner; and if we and the Russians are both playing the space game, we can have the comfort of knowing that it's a game that will pay off in the long run for both of us — and for all the rest of the human race, too.

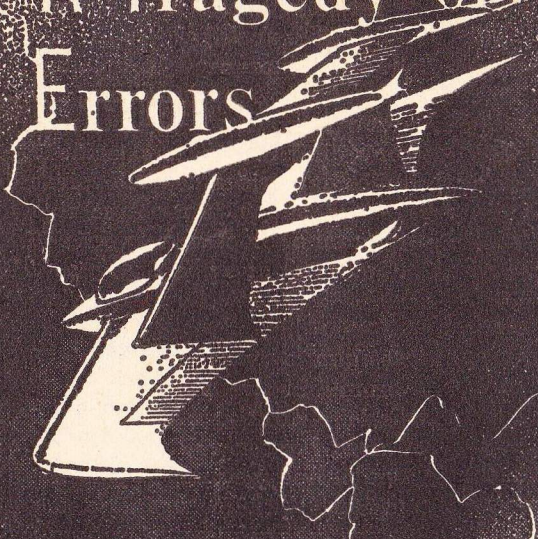
So — our congratulations both to the fine men in the Jet Propulsion Laboratories and to their opposite numbers in Russia on the events of October 20th-21st, 1967. The Russians won that encounter fair and square.

And so did we.

—FREDERIK POHL



A Tragedy of Errors



by POUL ANDERSON

The planet was strange, but at least they spoke a human language . . . or did they?

PAUL ANDERSON

I

Once in ancient days, the then King of England told Sir Christopher Wren, whose name is yet remembered, that the new Cathedral of St. Paul which he had designed was "awful, pompous and artificial." Kings have

seldom been noted for perspicacity.

Later ages wove a myth about Roan Tom. He became their archetype of those star rovers who fared forth while the Long Night prevailed. As such, he was made to fit the preconceptions

and prejudices of whoever happened to mention him. To many scholars, he was a monster, a murderer and thief, bandit and vandal, skulking like some carrion animal through the ruins of the Terran Empire. Others called him a hero, a gallant and romantic leader of fresh young peoples destined to sweep out of time the remnants of a failed civilization and build something better.

He would have been equally surprised, and amused, by either legend.

"Look," one can imagine his ghost drawling, "we had to eat. For which purpose, it's sort o' helpful to keep your throat uncut, no? That was a spiny-tail period. Society'd fallen. And havin' so far to fall, it hit bottom almighty hard. The ee-conomic basis for things like buildin' spaceships wasn't there any more. That meant little trade between planets. Which meant trouble on most of 'em. You let such go on for a century or two, snowballin', and what've you got? A kettle o' short-lived dwarf nations, that's what — one-planet, one-continent, one-island nations; all of 'em one-lung for sure — where they haven't collapsed even further. No more information-collatin' services, so nobody can keep track o' what's happenin' amongst those millions o'suns. What few spaceships are

left in workin' order are naturally the most valuable objects in sight. So they naturally get acquired by the toughest men around who, bein' what they are, are apt to use the ships for conquerin' or plunderin' . . . and complicate matters still worse.

"Well," and he pauses to stuff a pipe with Earth-grown tobacco, which is available in his particular Valhalla, "like everybody else, I just made the best o' things as I found 'em. Fought? Sure. Grew up fightin'. I was born on a spaceship. My dad was from Lochlann, but outlawed after a family feud went sour. He hadn't much choice but to turn pirate. One day I was in a landin' party which got bush-whacked. Next I heard, I'd been sold into slavery. Had to take it from there. Got some lucky breaks after a while and worked 'em hard. Didn't do too badly, by and large.

"Mind you, though, I never belonged to one o' those freaky cultures that'd taken to glorifyin' combat for its own sake. In fact, once I'd gotten some power on Kraken, I was a lot more int'rested in startin' trade again than in anything else. But neither did I mind the idea o' fightin', if we stood to gain by it, nor o' collectin' any loose piece o' property that wasn't too well de-

fended. Also, willy-nilly, we were bound to get into brawls with other factions. Usually those happened a long ways from home. I saw to that. Better there than where I lived, no?

"We didn't always win, either. Sometimes we took a clobberin'. Like finally, what I'd reckon as about the worst time, I found myself skyhootin' away from Sassania, in a damaged ship, alone except for a couple o' wives. I shook pursuit in the Nebula. But when we came out on the other side, we were in a part o' space that wasn't known to us. Old Imperial territory still, o' course, but that could mean anything. And we needed repairs. Once my ship'd been self-fixin', as well as self-crewin', self-pilotin', self-navigatin', aye-ya, even self-aware. But that computer was long gone, together with a lot of other gear. We had to find us a place with a smidgin of industrial capacity, or we were done for."

The image in the viewscreens flickered so badly that Tom donned armor and went out for a direct look at the system he had entered.

He liked being free in space anyway. He had more esthetic sense than he publicly admitted. The men of Kraken were quick to praise the beauty of a weapon

or a woman, but would have considered it strange to spill time admiring a view rather than examining the scene for pitfalls and possibilities. In the hush and dreamlike liberty of weightlessness, Tom found an inner peace; and from this he turned outward, becoming one with the grandeur around him.

After he had flitted a kilometer from it, *Firedrake's* lean hull did not cut off much vista. But reflections, where energy beams had scored through black camouflage coating to the steel beneath, hurt his eye He looked away from ship and sun alike. It was a bright sun, intrinsic luminosity of two Sols, though the color was ruddy, like a gold and copper alloy. At a distance of one and a half astronomical units, it showed a disc thirty-four minutes wide; and no magnification, only a darkened faceplate, was necessary to see the flares that jetted from it. Corona and zodiacal light made a bronze cloud. That was not a typical main sequence star, Tom thought, though nothing in his background had equipped him to identify what the strangeness consisted of.

Elsewhere glittered the remoter stars, multitudinous and many-colored in their high night. Tom's gaze circled among them. Yes, yonder was Capella. Old Earth

lay on the far side, a couple of hundred light-years from here. But he wanted home, to Kraken: much less of a trip, ten parsecs or so. He could have picked out its sun with the naked eye, as a minor member of that jewel-swarm, had the Nebula not stood between. The thundercloud mass reared gloomy and awesome athwart a quarter of heaven. And it might as well be a solid wall, if his vessel didn't get fixed.

That brought Tom's attention back to the planet he was orbiting. It seemed enormous at this close remove, a thick crescent growing as the ship swung dayward, as if it were toppling upon him. The tints were green, blue, brown, but with an underlying red in the land areas that wasn't entirely due to the sunlight color. Clouds banded the brightness of many seas; there was no true ocean. The southern polar cap was extensive. Yet it couldn't be very deep, because its northern counterpart had almost disappeared with summer, albeit the axial tilt was a mere ten degrees. Atmosphere rimmed the horizon with purple. A tiny disc was heaving into sight, the further of the two small moons.

Impressive, yes. Habitable, probably according to the spectroscope, certainly according to the radio emissions on which he

had homed. (They'd broken off several light-years away, but by then no doubt remained that this system was their origin, and this was the only possible world within the system.) Nonetheless — puzzling. In a way, daunting.

The planet was actually a mid-**T**get. Its equatorial diameter was 6810 kilometers, its mass 0.15 Terra. Nothing that size ought to have air and water enough for men.

But there were men there. Or had been. Feeble and distorted though the broadcasts became, away off in space, Tom had caught Anglic words spoken with human mouths.

He shrugged. One way to find out. Activating his impellers, he flitted back. His boots struck hull and clung. He free-walked to the forward manlock and so inboard.

The interior gee-field was operational. Weight thrust his armor down onto his neck and shoulders. Yasmin heard him clatter and came to help him unsuit. He waved her back. "Don't you see the frost on me? I been in planet shadow. Your finger'd stick to the metal, kid." Not wearing radio earplugs, she didn't hear him, but she got the idea and stood aside. Gauntleted, he stripped down to coverall and mukluks and lockered the

space equipment. At the same time, he admired her.

She was slight and dark, but prettier than he had realized at first. That was an effect of personality, reasserting itself after what happened in Anushirvan. The city had been not only the most beautiful and civilized, but the gayest on all Sassania; and her father was Nadjaf Kuli, the deputy governor. Now he was dead and his palace sacked, and she had fled for her life with one of her Shah's defeated barbarian allies. Yet she was getting back the ability to laugh. Good stock, Tom thought; she'd bear him good sons.

"Did you see trace of humans?" she asked. He had believed her Anglic bore a charming accent — it was not native to her — until he discovered that she had been taught the classical language. Her gazelle eyes flickered from the telescope he carried in one fist on to his battered and weatherbeaten face.

"Trace, yes," he answered bluntly. "Stumps of a few towns. They'd been hit with nukes."

"Oh-h-h"

"Ease off, youngster." He rumbled the flowing hair. "I couldn't make out much, with nothin' better'n these lenses. We'd already agreed the planet was likely raided, what time the broadcasts quit. Don't mean they

haven't rebuilt a fair amount. I'd guess they have. The level o', shall I say in two words, radio activity — " Tom paused. "You were supposed to smile at that," he said in a wounded tone.

"Well, may I smile at the second joke, instead?" she retorted impishly. They both chuckled. Her back grew straighter, in the drab one-piece garment that was all he had been able to give her, and somehow the strength of the curving nose dominated the tenderness of her mouth. "Please go on, my lord."

"Uh, you shouldn't call me that. They're free women on Kraken."

"So we were on Sassania. In fact, plural marriage — "

"I know, I know. Let's get on with business." Tom started down the corridor. Yasmin accompanied him, less gracefully than she had moved at home. The field was set for Kraken weight, which was 1.25 standard. But she'd develop the muscles for it before long.

II

He had gone through a wedding ceremony with her, once they were in space, at Dagny's insistence. "Who else will the poor child have for a protector but you, the rest of her life? Surely you won't turn

her loose on any random planet. At the same time, she is aristocratic born. It'd humiliate her to become a plain concubine."

"M-m-m . . . but the heirship problem —"

"I like her myself, what little I've seen of her; and the Kuli barons always had an honorable name. I don't think she'll raise boys who'll try to steal house rule from my sons."

As usual, Dagny was no doubt right.

Anxious to swap findings with her, Tom hurried. The passage reached empty and echoing; air from the ventilators blew loud and chilled him; the stylized murals of gods and sea beasts had changed from bold to pathetic — now that only three people crewed this ship. But they were lucky to be alive — would not have been so, save for the primitive loyalty of his personal guardsmen, who died in their tracks while he ran through the burning city in search of Dagny — when the Pretender's nonhuman mercenaries broke down the last defenses. He found his chief wife standing by the ship with a Mark IV thunderbolter, awaiting his return. She would not have left without him. Yasmin huddled at her feet. They managed to loose a few missiles as they lifted. But otherwise there was nothing to do but hope to

fight another day. The damage that *Firedrake* sustained in running the enemy space fleet had made escape touch and go. The resulting absence of exterior force-fields and much interior homeostasis made the damage worse as they traveled. Either they found the wherewithal for repair here, or they stayed here.

Tom said to Yasmin while he strode: "We couldn't've picked up their radio so far out's we did, less'n they'd had quite a lot, both talk and radar. That means they had a pretty broad industrial base. You don't destroy that by scrubbin' cities. Too many crossroads machine shops and so forth; too much skill spread through the population. I'd be surprised if this planet's not on the way back up."

"But why have they rebuilt any cities?"

"Maybe they haven't gotten that far yet. Been less'n ten years, you know. Or, 'course, they might've got knocked clear down to savagery. I've seen places where it happened. We'll find out."

Walking beside the girl, Roan Tom did not look especially note-worthy, certainly not like the rover and trader chieftain whose name was already in the ballads of a dozen planets. He was of medium height, though

so broad in shoulders and chest as to look stocky. From his father, he had the long head, wide face, high cheekbones, snub nose and beardlessness of the Lochlanna. But his mother, a freedwoman said to be of Hermetian stock, had given him dark-red hair, which was no thinning, and star-blue eyes. Only the right of those remained; a patch covered where the left had been. (Some day, somewhere, he'd find someone with the knowledge and facilities to grow him a new one!) He walked with the rolling gait of a Krakener, whose planet is mostly ocean, and bore the intertwinning tattoos of his adopted people on most of his hide. A blaster and knife hung at his waist.

Dagny was in the detector shack. Viewscreens might be malfunctioning, along with a lot else, but such instruments as the radionic, spectroscopic, magnetic and sonic were not integrated with ship circuitry. They had kept their accuracy, and she was expert — not educated, but rule-of-thumb expert — in their use.

"Well, there," she said, looking around the console at which she sat. "What'd you see?"

Tom repeated in more detail what he had told Yasmin. Since Dagny spoke no Pelevah and only a little pidgin Anglic, while Yasmin had no Eylan, these two

of his wives communicated with difficulty. Maybe that was why they got along so well. "And how 'bout you?" he finished.

"I caught a flash of radiocast. Seemed like two stations communicating from either end of a continental-size area."

"Still, somebody is able to chat a bit," Tom said. "Hopeful." He lounged against the doorframe. "Anyone spot us, d'you think?"

Dagny grinned. "What do you think?"

His lips responded. A positive answer would have had them in action at once, he to the bridge, she to the main fire control turret. They couldn't be sure they had not been noticed — by optical system, quickly brushing radar or maser, gadget responsive to the neutrino emission of their proton converter, several other possible ways — but it was unlikely.

"Any further indications?" Tom asked. "Atomic powerplants?"

"I don't know."

"How come?"

"I don't know what the readings mean that I get, particle flux, magnetic variations and the rest. This is such a confoundedly queer sun and planet. I've never seen anything like them. Have you?"

"No."

They regarded each other for a moment that grew very quiet. Dagny, Od's daughter in the House of Brenning, was a big woman, a few years his senior. Her shoulder-length yellow mane was fading a bit, and her hazel eyes were burdened with those contact lenses that were the best help anyone on Kraken knew how to give. But her frame was still strong and erect, her hands still clever and murderously quick. It had been natural for an impoverished noble family to make alliance with an energetic young immigrant who had a goodly following and a spaceship. But in time, voyages together, childbirths and child-rearings, the marriage of convenience had become one of affection.

"Well . . . s'pose we better go on down," Tom said. "Sooner we get patched, sooner we can start back. And we'd better not be gone from home too long."

Dagny nodded. Yasmin saw the grimness that touched them and said, "What is wrong, my . . . my husband?"

Tom hadn't the heart to explain how turbulent matters were on Kraken also. She'd learn that soon enough, if they lived. He said merely, "There's some kind o' civilization goin' yet around here. But it may exist only as

traces o' veneer. The signs are hard to figure. This is a rogue planet, you see."

"Rogue?" Yasmin was bemused. "But that is a loose planet — sunless — isn't it?"

"You mean a bandit planet. A rogue's one that don't fit in with its usual type, got a skew-ball orbit or composition or whatever. Like this'n."

"Oh. Yes, I know."

"What?" He caught her shoulder, not noticing how she winced at so hard a grip. "You've heard o' this system before?"

"No . . . please . . . no, my people never came to this side of the Nebula either, with what few ships we had. But I studied some astro-physics and planetography at Anushirvan University."

"Huh?" He let her go and gaped. "Science? Real, Imperial-era science, not engineerin' tricks?" She nodded breathlessly. "But I thought — you said — you'd studied classics."

"Is not scientific knowledge one of the classic arts? We had a very complete collection of tapes in the Royal Library." Forlornness came upon her. "Gone, now, into smoke."

"Never mind. Can you explain how come this globe is as it is?"

"Well, I . . . well, no. I don't believe I could. I would need more information. Mass, and

chemical data, and — And even then, I would probably not be able. I am not one of the ancient experts.”

“Hardly anybody is,” Tom sighed. “All right. Let’s get us a snack, and then to our stations for planetfall.”

III

Descent was tricky. Sensor-computer-autopilot linkups could no longer be trusted. Tom had to bring *Firedrake* in on manual controls. His few instruments were of limited use, when he couldn’t get precise data by which to recalibrate them for local conditions. With no view-screens working properly, he had no magnification, infra-red and ultra-violet presentations, any of the conventional aids. He depended on an emergency periscope, on Dagny’s radar readings called via intercom and on the trained reflexes of a lifetime.

Yasmin sat beside him. There was nothing she could do elsewhere, and he wanted to be able to assist her in her inexperience if they must bail out. The space-suit and gravity impellers surrounded her with an awkward bulk that made the visage in the helmet look like a child’s. Neither one of them had closed a faceplate. Her voice came small through the gathering throb

of power: “Is it so difficult to land? I mean, I used to watch ships do it, and even if we are partly crippled — we could travel between the stars. What can an aircar do that we can’t?”

“Hyperdrive’s not the same thing as kinetic velocity, and most particular not the same as aerodynamic speed,” Tom grunted. “To start with, I know the theory o’ sublight physics.”

“You do?” She was frankly astounded.

“Enough of it, anyhow. I can read and write, too.” His hands played over the board. Vibration grew in the deck, the bulkheads, his bones. A thin shrilling was heard, the first cloven atmosphere. “A spaceship’s a sort o’ big and clumsy object, once out o’ her native habitat,” he said absently. “Got quite a moment of inertia, f’r instance. Means a sudden, hard wind can turn her top over tip and she don’t right easy. When you got a lot o’ sensitive machinery to do the work, that’s no problem. But we don’t.” He buried his face in the periscope hood. Cloudiness swirled beneath. “Also,” he said, “we got no screens and nobody at the guns. So we’d better be choosy about where we sit down. And . . . we don’t have any way to scan an area in detail. Now do be quiet and let me steer.”

Already in the upper air, he encountered severe turbulence. That was unexpected, on a planet which received less than 0.9 Terran . . . insolation, with a lower proportion of UV to boot. It wasn't that the atmosphere was peculiar. The spectroscope readout had said the mixture was ordinary oxy-nitro-CO₂, on the thin and dry side — sea-level pressure around 600 mm. — but quite breathable. Nor was the phenomenon due to excessive rotation; the period was twenty-five and a half hours. Of course, the inner moon, while small, was close in and must have considerable tidal effect — *Hoy!*

The outercom buzzed. Someone was calling. "Take that, Yasmin," Tom snapped. The ship wallowed. He felt it even through the cushioning internal gee-field, and the attitude meters were wavering crazily. Wind screamed louder. The clouds roiled near, coppery-headed blue-shadowed billows on the starboard horizon, deep purple below him. He had hoped that night and overcast would veil his arrival, but evidently a radar had fingered him. Or — "The knob marked A, you idiot! Turn it widdershins. I can't let go now!"

Yasmin caught her lower lip between her teeth and obeyed. The screen flickered to life. "Up

the volume," Tom commanded. "Maybe Dagny can't watch, but she'd better hear. You on, Dagny?"

"Aye." Her tone was crisp from the intercom speaker. "I doubt if I'll understand many words, though. Hadn't you better start aloft and I leave the radar and take over fire control?"

"No, stand where you are. See what you can detect. We're not after a tussle, are we?" Tom glanced at the screen for the instant he dared. It was sidewise to him, putting him outside the pickup arc, but he could get a profile of the three-dimensional image.

The man who gazed out was so young that his beard was brownish fuzz. Braids hung from beneath a goggled fiber crash helmet. But his features were hard; his background appeared to be an aircraft cockpit; and his green tunic had the look of a uniform.

"Who are you?" he challenged. Seeing himself confronted by a girl, he let his jaw drop. "Who are you?"

"Might ask the same o' you," Tom answered for her. "We're from offplanet."

"Why did you not declare yourselves?" The Anglic was thickly accented but comprehen-

sible, roughened with tension.

"We didn't know anybody was near. I reckon you had to try several bands before hittin' the one we were tuned to. Isn't a standard signal frequency any more." Tom spoke with careful casualness, while the ship bucked and groaned around him and lightning zigzagged in the clouds he approached. "Don't worry about us. We mean no harm."

"You trespass in the sky of Karol Weyer."

"Son, we never heard o' him. We don't even know what you call this planet."

The pilot gulped. "N-Nike," he said automatically. "The planet Nike. Karol Weyer is our Engineer, here in Hanno. Who are you?"

Dagny's voice said, in Eylan, "I've spotted him on the scope, Tom. Coming in fast at eleven o'clock low."

"Let me see your face," the pilot demanded harshly. "Hide not by this woman."

"Can't stop to be polite," Tom said. "S'pose you let us land, and we'll talk to your Engineer. Or shall we take our business elsewhere?"

Yasmin's gauntlet closed convulsively on Tom's sleeve. "The look on him grows terrible," she whispered.

"Gods damn," Tom said, "we're friends!"

"What?" the pilot shouted.

"Friends, I tell you! We need help. Maybe you — "

"The screen went blank," Yasmin cried.

Tom risked yawing *Firedrake* till he could see in the direction Dagny had bespoken. The craft was in view. It was a one- or two-man job, a delta wing whose contrail betrayed the energy source as chemical rather than atomic or electric. However, instruments reported it as applying that power to a gravity drive. At this distance he couldn't make out if the boat had guns, but hardly doubted that. For a moment it glinted silvery against the darkling clouds, banked and vanished.

"Prob'ly hollerin' for orders," Tom said. "And maybe reinforcements. Chil'ren, I think we'd better hustle back spaceward and try our luck in some place more sociable than Hanno."

"Is there any?" Dagny wondered.

"Remains to be seen. Let's hope it's not our remains that'll be seen." Tom concentrated on the controls. Lame and weakened, the ship could not simply reverse. She had too much downward momentum and was too deep in Nike's gravity well. He must shift vectors slowly and nurse her up again.

After minutes, Dagny called through the racket and shudderings: "Several of them — at least five — climbing faster than us, from all sides."

"I was afraid o' that," Tom said. "Yasmin, see if you can eavesdrop on the chit-chat between 'em."

"Should we not stay tuned for their call?" the Sassanian asked timidly.

"I doubt they aim to call. If ever anybody acted so scared and angry as to be past reason — No, hold 'er."

The screen had suddenly reawakened. This time the man who stared forth was middle-aged, leonine, bearded to the waist. His coat was trimmed with fur and, beneath the storm in his voice, pride rang. "I am the Engineer," he said. "You will land and be slaves."

"Huh?" Tom said. "Look, we was goin' away —"

"You declared yourselves friends!"

"Yes. We'd like to do business with you. But —"

"Land at once. Slave yourselves to me. Or my craft open fire. They have tommics."

"Nukes, you mean?" Tom growled. Yasmin stifled a shriek. Karol Weyer observed and looked grimly pleased. Tom cursed without words.

The Nikean shook his head.

Tom got a glimpse of that, and wasn't sure whether the gesture meant yes, no or maybe in this land. But the answer was plain: "Weapons that unleash the might which lurks in matter."

And our force-screen generator is on sick leave, Tom thought. He may be lyin'. But I doubt it, because they do still use gravs here. We can't outrun a rocket, let alone an energy beam. Nor could Dagny, by herself, shoot down the lot in time to forestall 'em.

"You win," he said. "Here we come."

"Leave your transceiver on," Weyer instructed. "When you are below the clouds, the fish will tell you where to go."

"Fish?" Tom choked. But the screen had emptied, save for the crackling and formlessnesses of static.

"D-d-dialect?" Yasmin suggested.

"Uh, yeh. Must mean somethin' like squadron leader. Good girl." Tom spared her a grin. The tears were starting forth.

"Slaves?" she wailed. "Oh, no, no."

"Course not, if I can help it," he said, *sotto voce* lest the hostiles be listening. "Rather die."

He did not speak exact truth. Having been a slave once, he didn't prefer death — assuming his owner was not unreasonable,

and that some hope existed of getting his freedom back. But becoming property was apt to be worse for a woman than a man: much worse, when she was a daughter of Sassania's barons or Kraken's sea kings. As their husband, he was honor bound to save them if he could.

"We'll make a break," he said. "Lot o' wild country underneath. One reason I picked this area. But first we have to get down."

"What's gone by me?" Dagny called.

Tom explained in Eylan while he fought the ship. "But that doesn't make sense!" she said. "When they know nothing about us —"

"Well, they took a bad clobberin', ten years back. Can't expect 'em to act terribly sensible about strangers. And s'posin' this is a misunderstandin' . . . we have to stay alive while we straighten it out. Stand by for a rough jaunt."

IV

The aircraft snarled into sight, but warily, keeping their distance in swoops and circles that drew fantastic trails of exhaust. For a moment Tom wondered if that didn't prove the locals were familiar with space-war techniques. Those buzzeroos seemed careful to stay beyond reach of
A TRAGEDY OF ERRORS

a tractor or pressor beam, that could have seized them But no. They were exposed to his guns and missiles, which had far greater range, and didn't know that these were unmanned.

Nevertheless, they were at least shrewd on this planet. From what Tom had let slip, and the battered condition of the vessel, Weyer had clearly guessed that the newcomers were weak. They could doubtless wipe out one or two aircraft before being hit, but could they handle half a dozen? That Weyer had taken the risk and scrambled this much of what must be a very small air fleet suggested implacable enmity. (Why? He couldn't be so stupid as to assume that everyone from off-planet was a foe. Could he?) What was worse, his assessment of the military situation was quite correct. In her present state, *Firedrake* could not take on so many opponents and survive.

She entered the clouds.

For a while Tom was blind. Thunder and darkness encompassed him. Metal toned. The instrument dials glowed like goblin eyes. Their needles spun; the ship lurched; Tom stabbed and pulled and twisted controls, sweat drenched his coverall and reeked in his nostrils.

Then he was through, into windy but uncluttered air. Fif-

teen kilometers beneath him lay that part of the north temperate zone he had so unfortunately chosen. The view was of a valley, cut into a checkerboard pattern that suggested large agricultural estates. A river wound through, shining silver in what first drawn-light reddened the eastern horizon. A few villages clustered along it, and traffic moved, barge trains and waterships. A swampy delta spread at the eastern end of a great bay.

That bay was as yet in the hour before sunrise, but glimmered with reflections. It had a narrow mouth, opening on a sea to the west. Lights twinkled on either side of the gate, and clustered quite thickly on the southern bayshore. Tom's glance went to the north. There he saw little trace of habitation. Instead, hills humped steeply toward a mountain which smoked. Forests covered them, but radar showed how rugged they were.

The outercom flashed with the image of the pilot who had first hailed him. Now that conditions were easier, Tom could have swiveled it around himself to let the scanner cover his own features. Yasmin could have done so for him at any time. But he refrained. Anonymity wasn't an ace in the hole — at most, a

deuce or a trey — but he needed every card he had.

"You will bear east-northeast," the "fish" instructed. "About a hundred kilos upriver lies a cave. Descend there."

"Kilos?" Tom stalled. He had no intention of leaving the refuges below him for the open flatlands.

"Distances. Thousand-meters."

"But a cave? I mean, look, I want to be a good fellow and so forth, but how'm I goin' to spot a cave from the air?"

"Spot?" It was the Nikean's turn to be puzzled. However, he was no fool. "Oh, so, you mean espy. A cave is a stronghouse. You will know it by turrets, projectors, setdown fields."

"Your Engineer's castle?"

"Think you we're so whetless we'd let you near the Great Cave? You might have a tommic boom aboard. No. Karol Weyer dwells by the bay gate. You go to the stronghouse guarding the Nereid River valley. Now change course, I said, or we fire."

Tom had used the talk-time to shed a good bit of altitude. "We can't," he said. "Not that fast. Have to get low first, before we dare shift."

"You go no lower, friend! Those are our folk down there."

"Be reasonable," Tom said. "A spaceship's worth your havin', I'm sure, even a damaged one

like ours. Why blang us for somethin' we can't help?"

"Um-m-m . . . hold where you are."

"I can't. This is not like an aircraft. I've got to either rise or sink. Ask your bosses."

The pilot's face disappeared. "But — " Yasmin began.

"Shhh!" Tom winked his good eye at her.

He was gambling that they hadn't had spacecraft on Nike for a long time. Otherwise they wouldn't have taken such a licking a decade ago; and they'd have sent a ship after him, rather than those few miserable, probably handmade gravplanes. So if they didn't have anyone around who was qualified in the practical problems of handling that kind of vessel —

Not but what *Firedrake* wasn't giving him practical problems of his own. Wind boomed and shoved.

The pilot returned. "Go lower if you must," he said. "But follow my word, do above the north-shore hills.

"Surely." *Right what I was hopin' for!* Tom switched to Eylan. "Dagny, get to the forward manlock."

"What do you say?" rapped the pilot.

"I'm issuin' orders to my crew," Tom said. "They don't speak Anglic."

"No! You'll not triple-talk me!"

Tom let out a sigh that was a production. "Unless they know what to do, we'll crash. Do you want live slaves and a whole spaceship, or no? Make up your mind, son."

"Um-m . . . well. At first ill-doing, we shoot."

Tom ignored him. "Listen, Dagny. You're not needed here any more. I can land on my altimeter and stuff. But I've got to set us down easy, and not get us hit by some overheated gunner. They must have what we need to make our repairs, but not to build a whole new ship, even s'posin' we knew how. So we can't risk defendin' ourselves, leastwise till we get away from the ship."

"She will be theirs," Dagny said, troubled. "And we will be hunted. Shouldn't we surrender peacefully and bargain with them?"

"What bargainin' power has a slave got? Whereas free, if nothin' else, I get we're the only two on Nike that can run a spacecraft. Besides, we don't know what these fellows are like. They could be mighty cruel. No, you go stand by that manlock along with Yasmin. The minute we touch dirt, you two get out — fast and far."

"But Tom, you'll be on the bridge. What about you?"

"Somebody's got to make that landin'. I dunno how they'll react. But you girls won't have much time to escape yourselves. I'll come after you. If I haven't joined you soon, figure I won't, and do whatever comes natural. And look after Yasmin, huh?"

Silence dwelt for a moment amidst every inanimate noise. Until: "I understand. Tom, if we don't see each other again, it was good with you." Dagny uttered a shaken laugh. "Tell her to kiss you for both of us."

"Aye-ya." He couldn't, of course, with that suspicious countenance glowering out of the screen. But in what little Pelevah he had, he gave Yasmin her orders. She didn't protest, too stunned by events to grasp the implications.

Down and down. The tilted wilderness swooped at him.

"The steerin's quit on me!" Tom yelled in Anglic. "Yasmin, go fantangle the dreelsprail! Hurry!" She flung off her safety webbing and left the bridge, as fast as possible in her clumsy armor. "I've got to make an emergency landin'," Tom said to the Nikean officer.

Probably that caused them to hold their fire as he had hoped. He didn't know, nor wonder. He was too busy. The sonoprobe

said firm solid below. The altimeter said a hundred meters, fifty, twenty-five, ten — Leaves surged around. Boughs and boles splintered. The further trees closed in like a cage. Impact shook, drummed, went to silence. Tom cut the engines and gee-field. Native gravity, one-half standard, hit him with giddiness. He unharnessed himself. The deck was canted. He slipped, skidded, got up and pounded down the companionway.

V

The manlock valves opened at Dagny's control while *Fire-drake* was still moving. The drop in air pressure hurt her eardrums. She glimpsed foliage against a sky red with dawn, gray with scattering stormclouds. The earthquake landing cast her to hands and knees. She rose, leaning against a bulkhead. Yasmin stumbled into sight. The faceplate stood open before the terrified young visage. "Chaos! Dog that thing!" Dagny cried. "We'll be at top speed." She was not understood. She grabbed the girl and snapped the plate shut herself. "You . . . know . . . fly?" she asked in her fragment of Anglic.

"Yes. I think so." Yasmin wet her lips. Her radio voice was unsteady in the other's earplugs.

"I mean . . . Lord Tom explained how."

"No practice, though?" Dagny muttered in Eylan. "You're about to get some." In Anglic: "Follow I."

She leaned out of the lock. High overhead she descried the gleam of a wheeling delta wing. The forest roared with wind. A little clearing surrounded the ship where trees had been flattened. Beyond the shadowy tangle of their trunks and limbs, their neighbors made a wall of night.

"Go!" Dagny touched her impeller stud and launched herself. She soared up. Flight was tricky in these gusts. Curving about, she saw Yasmin's suit helplessly cartwheel. She returned, caught the Sassanian girl, laid one arm around her waist and used the other to operate her drive units for her in the style of an instructor. They moved off, slowly and awkwardly.

A scream split the air. Dagny glanced as far behind as she could. Two of the aircraft were stooping . . . One took a hover-stance above *Firedrake*, the other came after her and Yasmin. She saw the muzzle of an energy gun and slammed the two impeller sets into full forward speed. Alone, she might have dived under the trees. But Yasmin hadn't the skill, and two couldn't slip through those dense branch-

es side by side. Tom had told her to look after Yasmin, and Dagny was his sworn woman.

She tried to summon before her the children they had had together, tall sons and daughters, the baby grandchildren, and Skerrygarth, their home that was the dowry she had brought him, towers steadfast above a surf that played white among the reefs —

Explosion smashed at her. Had she been looking directly aft, she would have been dazzled into momentary blindness. As it was, the spots before her eyes and the tolling in her ears lasted for minutes. A wave of heat pushed through her armor.

She yelled, clung somehow to Yasmin, and kept the two of them going. Fury spoke again and again. It dwindled with distance as they fled.

Finally it was gone. By that time the women had covered some twenty kilometers, more or less eastward. The sea-level horizon of Nike was only about six kilometers off; and this was not flat country. They were well into morning light and far beyond view of the spaceship. Dagny thought she could yet identify an aircraft or two, but maybe those sparks were something else.

Beneath her continued hills

and ravines, thickly wooded, and rushing streams. The volcano bulked in the north; smoke plumed from a frost-rimmed crater. Southward the land rolled down to the quicksilver sheet of the bay. Its shore was marshy — an effect of the very considerable tides that the nearer moon raised — but a village of neat wooden houses stood there on piles. Sailboats that doubtless belonged to fishermen were putting out. They must exist in such numbers because of a power shortage rather than extreme backwardness; for Dagny saw a good-sized motorship as well, crossing the bay from the gate to the lower, more populous south side. Its hull was of planks and its wake suggested the engine was minimal. At the same time, its lines and the nearly smokeless stack indicated competent design.

Here the wind had gentled, and the clouds were dissipating fast. (Odd to have such small cells of weather, she thought in a detached logical part of herself. Another indication of an atmosphere disturbed by violent solar conditions?) They shone ruddy-tinted in a deep purple vault of sky. The sun stood bright orange above mists that lay on the Nereid River delta.

"Down we go, lass," Dagny said, "before we're noticed."

"What happened? Lord Tom, where is he?"

The sob scratched at Dagny's nerves. She snapped, biting back tears: "Use your brain, you little beast, if it's anything except blubber! He went first to the main fire-control turret. When he saw us attacked, he cut loose with the ship's weapons. I don't see how he could have gotten all those bastards, though. If they didn't missile him, they've anyhow bottled him up. On *our* account!"

She realized she'd spoken entirely in Eylan. Suppressing a growl, she took over the controls of both suits. With no need for haste, she could ease them past the branches that tried to catch them, down to the forest floor.

"Now," she said in Anglic. "Out." Yasmin gaped. Dagny set the example by starting to remove her own armor.

"Wh-why?"

"Find us. In . . . in . . . instruments. Smell metal, no? Could be. Not take chance. We got — got to —" Dagny's vocabulary failed her. She had wanted to explain that if they stayed with the suits, they ran the risk of detection from afar. And even if the Nikeans didn't have that much technology left, whatever speed and protection the equipment lent wasn't worth its conspicuousness.

She was almost grateful for every difficulty. It kept her mind — somewhat — off the overwhelming fact that Tom, her Roan Tom, was gone.

Or maybe not. Just maybe, not. He might be a prisoner, and she might in time contrive to bargain for his release. No, she would not remember what she had seen done to prisoners, here and there in her wanderings, by vengeful captors!

Were that the case, though . . . Her hand went first to the blaster at one covered hip, next to the broad-bladed knife; and there it lingered. If she devoted the rest of her days to the project, and if the gods were kind, she might eventually get his murderers into her clutch.

Yasmin shed the last armor. She hugged herself and shivered in a chill breeze. "But we haven't any radios except in our helmets," she said. "How can he contact us?"

Dagny framed a reply: "If he'd been able to follow us, he'd already be here, or at least have called. I left my squealer circuit on, for him to track us by. That was safe; its frequency varies continuously, according to synchronized governors in both our suits. But he hasn't arrived, and we daren't stay near this much metal and resonant elec-

tronic stuff." Somehow, by words and gestures, she conveyed the gist. Meanwhile she filled their pockets with rations and medications, arranged the weapons beneath their garments, checked footgear. Last she hid the armor under leaf mould and canebrake, and took precise note of landmarks.

Yasmin's head drooped until the snarled dark locks covered her face. "I am so tired," she whispered.

Think I'm not? My lips are numb with it. "Go!" Dagny snapped.

She had to show the city-bred girl how to conceal their trail through the woods.

After a couple of hours, unhounded, the air warming and brightening around them, both felt a little better. It was up-and-down walking, but without much underbrush to combat, for the ground was densely carpeted with a soft mossy growth. Here and there stood clumps of fronded gymnosperm plants. This native vegetation was presumably chlorophyl-bearing, though its greenness was pale and had a curious bluish overcast. Otherwise the country had been taken over by the more efficient, highly developed species that man commonly brought with him. Oaks cast sun-speckled shadows; birches danced and glistened;

primroses bloomed in meadows, where grass had overwhelmed a pseudo-moss that apparently had a competitive advantage only in shade. A sweet summery smell was about, and Yasmin spoke of her homeland. Even Dagny, bred in salt winds and unrestful watery leagues, felt a stirring of ancient instinct.

She was used to denser atmosphere. Sounds — sough in leaves, whistle of birds, rilling of brooks they crossed, thud of her own feet — came as if muffled to her ears; and on a steep upgrade, her heart was apt to flutter. But oxygen shortage was more or less compensated for by a marvelous, almost floating low-gravity lightness.

A good many animals were to be seen. Again, terrestroid forms had crowded out most of the primitive native species. With a whole ecology open to them, they were now in the process of explosive evolution. A few big insect-like flyers, an occasional awkward amphibian, gave glimpses of the original biosphere. But thrushes, bulbuls, long-winged hawks rode the wind. Closer down swarmed butterflies and bees. A wild boar, tusked and rangy, caused Dagny to draw her blaster; but he went by, having perhaps learned to fear man. Splendid was the more distant sight of mustangs, cara-

bao, an entire herd of antlered six-legged tanithars.

A measure of peace came upon Dagny, until at last she could say, "All right, we stop, eat, rest."

They sat under a broad-spreading hilltop cedar, that hid them from above while openness, halfway down the heights to the forest, afforded ample ground vision. They had made for the bay and were thus at a lower altitude. The waters sheened to south, ridges and mountains stood sharply outlined to north. In this clear air, the blueness of their distance was too slight to hide the basic ochreous tint of rocks and soil.

Dagny broke out a packet of dehydrate. She hesitated for a moment before adding water to the tray from a canteen she had filled en route. Yasmin, slumped exhausted against the tree trunk, asked, "What is the matter?" And, her eyes and mind wandering a little, she tried to smile. "See, yonder, apples. They are green but they can be dessert."

"No," Dagny said.

"What? Why not?"

"Heavy metal." Dagny scowled. How to explain? "Young planet. Dense. Lots heavy metals. Not good."

"Young? But — "

"Look around you," Dagny wanted to say. "That sun, putting out radiation like an early Type F — in amount — but the color and spectral distribution are late G or early K. I've never seen anything like it. The way it flares, I don't believe it's quite stabilized at its proper position on the main sequence yet. Because of anomalous chemical composition, I suppose. You get that with very young suns, my dear. They've condensed out of an interstellar medium made rich in metals by the thermonuclear furnaces of earlier star generations. Or so I've been told.

"I know for fact that planets with super-abundant heavy elements can be lethal to men. So much . . . oh, arsenic, selenium, radioactives. Slow poison in some areas, fast and horrible death in others. This water, that fruit, may have stuff to kill us."

But she lacked words or inclination. She said, "Iron. Makes red in rocks. No? Lots iron. Could be lots bad metal. Young planet. Lots air, no?"

She had, in truth, never heard of a dwarf world like this, getting such an amount of sunlight, that had hung onto a proper atmosphere. Evidently, she thought, there had not been time for the gas to leak into space. The primitive life forms were another proof of a low age.

Beyond this, she didn't reason. She did not have the knowledge on which to base logic, nor did she have the scientific way of thinking. What little cosmology and cosmogony she had learned, for instance, was in the form of vague, probably distorted tradition — latter-day myth. And she was intelligent enough to recognize this.

Once, she imagined, any Imperial space officer had been educated in the details of astrophysics and planetology. And he would have seen, or read about, a far greater variety of suns than today's petty travels encompassed. So he would have known immediately what sort of system this was; or, if not, he would have known how to find out.

But that was centuries ago. The information might not actually be lost. It might even be moldering in the damp, uncatalogued library of her own Skerrygarth. Surely parts of it were taught in the universities of more civilized planets, though as a set of theoretical ideas, to be learned by rote without any need for genuine comprehension.

Practical spacefarers, like her and Tom, didn't learn it. They didn't get the chance. A rudiment of knowledge was handed down to them, largely by word of mouth, the minimum they needed for survival.

And speaking of survival — She reached her decision. “Eat,” she said. “Drink.” She took the first sample. The water had a woody taste, nothing unfamiliar.

After all, humans did flourish here. Perhaps they were adapted to metal-rich soil. But the adaptation could scarcely be enormous. Had that been the case, terrestroid species would not be so abundant and dominant, after a mere thousand years or whatever on this planet.

Thus Nike was biochemically safe — at least, in this general region — at least, for a reasonable time. Perhaps, if outworlders stayed as long as one or two decades, they might suffer from cumulative poisoning. But she needn't worry that far ahead, when a hunt was on immediately and when Tom —

Grimly, she fueled her body. Afterward she stood watch while Yasmin caught a nap. What she thought about was her own affair.

When the Sassanian awoke, they held a lengthy conference. The order Dagny had to issue was not complicated:

“We're in enemy territory. But I don't believe it covers the whole planet, or even the whole area between this sea and the next one east. ‘The Engineer of Hanno’ is a typical feudal title.

I've not heard before that ‘engineer’ changed meaning to the equivalent of ‘duke’ or ‘king,’ but it's easy to see how that could've happened, and I've met odder cases of wordshift. Well, our darling Engineer made it plain he regarded us as either the worst menace or the juiciest prey that'd come by in years. Maybe both. So he'd naturally call his full air power, or most of it, against us. Which amounted to half a dozen little craft, with gravmotors so weak they need wings! And look at those sailboats, and the absence of real cities, and the fact there's scarcely any radio in use . . . yes, they've fallen far on Nike. I'm sure that raid from space was only the latest blow. They must have a small half-educated class left, and some technicians of a sort; but the bulk of the people must've been poor and ignorant for many generations.

“And divided. I swear they must be divided. I've seen so many societies like this, I can practically identify them by smell. A crazy-quilt pattern of feudalisms and sovereignties, any higher authority a ghost. If as rich a planet as this one potentially is were united, it'd have made a far greater recovery by now, after the space attack, than it has done. Or it would have beaten the raiders off at least.

"So, if we have enemies here in Hanno, we probably have automatic friends somewhere else. And not dreadfully far away. At any rate, we're not likely to be pursued beyond the nearest border, nor extradited back here. In fact, the Engineer's rivals are apt to be quite alarmed when they learn he's clapped hands on a real space warship. They're apt to join forces to get it away from him. Which'll make you and me, my dear, much-sought-after advisors. We may or may not be able to get Tom back unhurt. I vow the gods a hundred Blue Giant seabests if we do! But we'll be free, even powerful.

"Or so I hope. We've nothing to go on but hope. And courage and wits and endurance. Have you those, Yasmin? Your life was too easy until now. But he asked me to care for you.

"You'll have to help. Our first and foremost job is to get out of Hanno. And I don't speak their damned language for diddly squat. You'll talk for both of us. Can you? We'll plan a story. Then, if and when you see there must be a false note in it, you'll have to cover — at once — with no ideas from me. Can you do that, Yasmin? You must!"

— But conference was perforce by single words, signs, sketches in the red dirt. It went

slowly. And it was repeated, over and over, in every possible way, to make certain they understood each other.

In the end, however, Yasmin nodded. "Yes," she said, "I will try, as God gives me strength . . . and as you do." The voice was almost inaudible, and the eyes she turned on the bigger, older woman were dark with awe.

VI

In midafternoon they reached a farm. Its irregular fields were enclosed by forest, through which a cart track ran to join a dirt road that, in turn, twisted over several kilometers until it entered the fisher village.

Dagny spent minutes peering from a thicket. Beside her, Yasmin tried to guess what evaluations the Krakener was making. *I should begin to learn these ways of staying alive, the Sassanian thought. More is involved than my own welfare. I don't want to remain a burden on my companions, an actual danger to them.*

And to think, not one year ago I took for granted the star rovers were ignorant, dirty, cruel, quarrelsome barbarians!

Yasmin had been taught about philosophic objectivity, but she was too young to practice it consistently. Her universe having

been wrecked, herself cast adrift, she naturally seized upon the first thing that felt like a solid rock and began to make it her emotional foundation. And that thing happened to be Roan Tom and Dagny Od's-daughter.

Not that she had intellectual illusions. She knew very well that the Krakeners had come to help the Shah of Sassania because the Pretender was allied with enemies of theirs. And she knew that, if successful, they would exact good pay. She had heard her father grumble about it.

Nevertheless, the facts were: First, compatriots of hers, supposedly civilized, supposedly above the greed and short-sightedness that elsewhere had destroyed civilization . . . had proven themselves every bit as animalistic. Second, the star-rover garrison in Anushirvan turned out to be jolly, well-scrubbed, fairly well-behaved. Indeed, they were rather glamorous to a girl who had never been past her planet's moon. Third, they had stood by their oaths, died in their ships and at their guns, for her alien people. Fourth, two of them had saved her life, and offered her the best and most honorable way they could think of to last out her days. Fifth (or foremost?), Tom was now her husband.

She was not exactly infatuated with him. A middle-aged, battle-

beaten, one-eyed buccaneer had never entered her adolescent dreams. But he was kind in his fashion, and a skillful lover, and . . . and perhaps she did care for him in a way beyond friendship . . . if he was alive — oh, let him be alive!

In any event, here was Dagny. She certainly felt grief like a sword in her. But she hid it, planned, guided, guarded. She had stood in the light of a hundred different suns, had warred, wandered, been wife and mother and living sidearm. She knew everything worth knowing (what did ancient texts count for?) except one language. And she was so brave that she trusted her life to what ability an awkward weakling of a refugee might possess.

Please don't let me fail her.

Thus Yasmin looked forth too and tried to make inferences from what she saw.

The house and outbuildings were frame, not large, well-built but well-weathered. Therefore they must have stood here for a good length of time. Therefore Imperial construction methods — alloy, prestressed concrete, synthetics, energy webs — had long been out of general use in these parts, probably everywhere on Nike. That primitiveness was emphasized by the agromech sys-



tem. A couple of horses drew a haycutter. It also was wooden; even the revolving blades were simply edged with metal. From its creaking and bouncing, the machine had neither wheel bearings nor springs. A man drove it. Two half-grown boys, belike his sons, walked after. They used wooden-tined rakes to order the windrows. The people, like the animals, were of long slim deep-chested build, brown-haired and fair-complexioned. Their garments were coarsely woven smock and trousers.

No weapons showed, which suggested that the bay region was free of bandits and vendettas. Nevertheless Dagny did not approach. Instead, she led a cautious way back into the woods and thence toward the house, so that the buildings screened off view of the hayfield.

The Krakener woman scowled. "Why?" she muttered.

"Why what . . . my lady?"

"Why make — " Dagny's hands imitated whirling blades. "Here. Planet . . . canted? . . . little. No cold?"

"Oh. Do you mean, why do they bother making hay? Well, there must be times when their livestock can't pasture."

Dagny understood. Her nod was brusque. "Why that?"

"Um-m-m . . . oh, dear, let me think. Lord Tom explained to me

what he — what you two had learned about this planet. Yes. Not much axial tilt. I suppose not an unusually eccentric orbit. So the seasons oughtn't to be very marked. And we are in a rather low latitude anyway, on a seacoast at that. It should never get too cold for grass. Too dry? No, this is midsummer time. And, well, they'd hardly export hay to other areas, would they?"

Dagny shrugged.

It is such a strange world, Yasmin thought. All wrong. Too dense. That is, if it had a great many heavy metals, humans would never have settled here permanently. So what makes it dense should be a core of iron, nickel and things, squeezed into compact quantum states. The kind that terrestroid planets normally have. Yes, and the formation of a true core causes tectonic processes, vulcanism, the outgassing of a primitive atmosphere and water. Later we get chemical evolution, life, photosynthesis, free oxygen —

But Nike is too small for that! It's Mars type. We have a Mars type planet in our own system — oh, lost and loved star that shines upon Sassania — and it's got a bare wisp of unbreathable air. Professor Nasruddin explained to us. If a world is small, it has weak gravity. So the differential migration of elements down

toward the center, that builds a distinct core, is too slow. So few gas molecules get unlocked from mineral combination by heat . . . Nike isn't possible!

(How suddenly, shockingly real came back to her the lecture hall, and the droning voice, young heads bent above notebooks, sunlight that streamed in through arched windows, and the buzz of bees, odor of roses, a glimpse of students strolling across a greensward that stretched between beautiful buildings.)

Dagny's fingers clamped about Yasmin's arm. "Heed! Fool!"

Yasmin started from her reverie. They were almost at the house. "Heavens! I'm sorry."

"Talk well." Dagny's voice was bleak with doubt of her.

Yasmin swallowed and stepped forth into the yard. She felt dizzy. The knocking of her heart came remote as death. Pinned cows, pigs, fowl were like things in a dream. There was something infinitely horrible about the windmill that groaned behind the barn.

Neither shot nor shout met her. The door opened a crack, and the woman who peered out did so fearfully.

Why, she's nervous of us!

Relief passed through Yasmin in a wave of darkness. But an odd, alert calm followed. She

perceived with utter clarity. Her thoughts went in three or four directions at once, all coherent. One chain directed her to smile, extend unclenched hands, and say: "Greeting to you, good lady." Another observed that the boards of the house were not nailed but pegged together. A third paid special heed to the windmill. It too was almost entirely of wood, with fabric sails. She saw that it pumped water into an elevated cistern, whence wooden pipes ran to the house and a couple of sheds. Attachments outside one of the latter indicated that there the water, when turned on, drove various machines, like the stone quern she could see.

No atomic or electric energy, then. Nor even solar or combustion power. And yet the knowledge of these things existed: if not complete, then sufficient to make aircraft possible, radio, occasional motorships, doubtless some groundcars. Why was it no longer applied by the common people? The appearance of this farm and of the fisher village as seen from a distance suggested moderate prosperity. The Engineer's rule could not be unduly harsh.

Well, the answer must be, Nike's economy had collapsed so far that hardly anyone could afford real power equipment.

But why not? Sunlight, wood, probably coal and petroleum were abundant. A simple generator, some batteries Such things took metal. A broken-down society might not have the resources to extract much Nonsense! Elements like iron, copper, lead, and uranium were surely simple to obtain, even after a thousand years of industrialization. Hadn't Dagny, who knew, said this was a young planet? Weren't young planets metal-rich?

Meanwhile the woman mumbled, "Day. You're from outcountry?"

"Yes," Yasmin said. No use trying to conceal that. Quite apart from accent and garments (the Hannoan woman wore a broad-sleeved embroidered blouse and a skirt halfway to her ankles), they were not of the local racial type. But it was presumably not uniform over the whole planet. One could play on a peasantry's likely ignorance of anything beyond its own neighborhood.

"I am from Kraken," Yasmin said. "My friend is from Sassandra." If no one on those comparatively cosmopolitan planets had heard of Nike, vice versa was certain. "We were flying on a mission when our aircraft crashed in the hills."

"That . . . was the flare . . . noises . . . this early-day?" the woman asked. Yasmin confirmed it. The woman drew breath and made a shaky sign in the air. "High 'Uns I thank! We feared, we, 'twas *them* come back."

Obvious who "they" were, and therefore impossible to inquire about them. A little hysterical with relief, the wife flung wide her door. "Enter you! Enter you! I call the men."

"No need, we thank you," Yasmin said quickly. The fewer who saw them and got a chance later to wonder and talk about them, the better. "Nor time. We must hurry. Do you know of our countries?"

"Well, er, far off." The woman was embarrassed. Yasmin noted that the room behind her was neat, had a look of primitive well-being — but how primitive! Two younger children stared half-frightened from an inner doorway. "Yes, far, and I, poor farm-wife, well, hasn't so much as been to the Silva border —"

"That's the next country?" Yasmin pounced.

"Why . . . next cavedom, yes, 'tother side of the High Sawtooths east'ard Well, we're both under the Emp'ror, but they do say as the Prester of Silva's not happy with our good Engineer You! A-travel like men!"

"They have different customs

in our part of the world," Yasmin said. "More like the Empire. Not your Empire. The real one, the Terran Empire, when women could do whatever a man might." That was a safe claim. Throughout its remnants, no one questioned anything wonderful asserted about the lost Imperium — except, perhaps, a few unpleasant scholars, who asked why it had fallen if it had been so great. "Yes, we're from far parts. My friend speaks little Anglic. They don't, in her country." That was why Dagny, clever Dagny, had said they should switch national origins. Krakener place names sounded more Anglic than Sassanian ones did, and Yasmin needed a ready-made supply.

"We have to get on with our mission as fast as possible," she said. "But we know nothing about these lands."

"Storm blow you off track?" the woman queried. As she relaxed, she became more intelligent. "Bad storm-time coming, we think. Lots rain already. Hope the hay's not ruined before it dries."

"Yes, that's what happened." *Thank you, madam, for inventing my explanation.* Yasmin could not resist probing further the riddle of Nike. "Do you really expect many storms?"

A TRAGEDY OF ERRORS

One child hustled after his father while they went in and took leather-covered chairs. The woman made a large to-do about coffee and cakes. Her name was Elanor, she said, and her husband was Petar Landa, a freeholder. One must not think them backwoods people. They were just a few hours from the town of Sea Gate, which lay nigh the Great Cave itself and was visited by ships from this entire coast. Yes, the Landa family went there often; they hadn't missed a Founders' Festival in ten years, except for the year after the friends came, when there had been none —

"You only needed a year to recover from something like that?" Yasmin exclaimed.

Dagny showed alarm, laying a hand on the Sassanian's and squeezing hard. Elanor Landa was surprised. "Well, Sea Gate wasn't hit. Not that important. Nearest place was . . . I forgot, all the old big cities went, they say, bombed after being looted, but seems me I heard Terrania was nearest to Hanno. Far off, though, and no man I know was ever there, because 'twas under the Mayor of Bollen and he wasn't any camarado to us western cavedoms, they say — "

Yasmin saw her mistake. Un-

thinkingly, she had taken "year" to mean a standard, Terran year. It came the more natural to her because Sassania's wasn't very different. *Well, thought the clarified brain within her, we came here to get information that might help us escape. And surely, if we're to pretend to be Nikeans, we must know how the planet revolves.*

"I've forgotten," she said. "Exactly when was the attack?"

Elanor was not startled. Such imprecision was common in a largely illiterate people. Indeed, it was somewhat astonishing that she should say, "A little over five years back. Five and a quarter, abs'lut, come Petar's father's birthday. I remember, for we planned a feast, and then we heard the news. We had radio news then. Everyone was so scared. Later I saw one black ship roar over us, and waited for my death, but it just went on."

"I think we must use a different calendar from you in Kraken," Yasmin said. "And — being wealthier, you understand — not that Hanno *isn't* — but we did suffer worse. We lost records and — Well, let's see if Kraken and Sassania were attacked on the same day you heard about it. That was . . . let me think . . . dear me, now, how many days in a year?"

"What? Why, why, five hundred and ninety-one."

Yasmin allayed Elanor's surprise by laughing: "Of course. I was simply trying to recollect if an intercalary date came during the period since."

"A what?"

"You know. The year isn't an exact number of days long. So they have to put in an extra day or month or something, every once in a while." That was a reasonable bet.

It paid off, too. Elanor spoke of an extra day every eleventh Nikean year. Yasmin related how in Kraken they added a month — "What do you call the moons hereabouts? . . . I mean by a month, the time it takes for them both to get back to the same place in the sky. . . . We add an extra one every twentieth year." Her arithmetic was undoubtedly wrong, but who was going to check? The important point was that Nike circled its sun in 591 days of 25.5 hours each, as near as made no difference.

And hadn't much in the way of seasons, but did suffer from irregular, scarcely predictable episodes when the sun grew noticeably hotter or cooler.

And was poor in heavy metals. Given all the prior evidence, what Yasmin wormed from the

chattersome Elanor was conclusive. Quite likely iron oxides accounted for the basic color. But they were too diffuse to be workable. Metals had never been mined on this globe; they were obtained electrochemically from the sea and from clays. (Aluminum, beryllium, magnesium and the like; possibly a bit of heavy elements too, but only a bit. For the most part, iron, copper, silver, uranium, etc., had been imported from outsystem, in exchange for old-fashioned Terrestrial agropducts that must have commanded good prices on less favored worlds. This would explain why, to the very present, Nike had such a pastoral character.)

The Empire fell. The starships came less and less often. Demoralization ruined the colonies in their turn; planets broke up politically; in the aftermath, most industry was destroyed, and the social resources were no longer there to build it afresh. Today, on Nike, heavy metals were gotten entirely through reclaiming scrap. Consequently they were too expensive for anything but military and the most vital civilian uses. Even the lighter elements came dear; some extractor plants remained, but not enough.

Elanor did not relate this directly. But she didn't need to.

A TRAGEDY OF ERRORS

Trying to impress her distinguished guests, she made a parade of setting an aluminum coffee-pot on the ceramic stove and mentioning the cost. (A foreigner could plausibly ask what that amounted to in real wages. It was considerable.) And, yes, Petar's grandmother had had a lot of ironware in her kitchen. When he inherited, Petar was offered enormous sums for his share. But he had it made into cutting-edge implements. He cared less about money than about good tools. Petar did. Also for his wife. See, ladies, see right here, I use a real steel knife.

"Gold," Dagny said, low and harsh in Yasmin's ear. "Animals, buy, ride."

The younger girl jerked to alertness. Tired, half lulled by Elanor's millwheel voice, she had drifted off into contemplation. Dagny said this was a young world. Nevertheless it was metal-poor. The paradox had an answer. This system could have formed in the galactic halo, where stars were few and the interstellar dust and gas were thin, little enriched. Yes, that must be the case. It had drifted into this spiral arm. . . . But wouldn't it, then, have an abnormal proper motion? Tom hadn't mentioned observing any such thing. Nor had he said there

was anything peculiar about Nike's own orbit. Yet he had remarked on less striking facts. . . .

"Tell! Buy!"

Yasmin nodded frantically. "I understand. I understand." They carried a number of Sassanian gold coins. In an age when interstellar currency and credit had vanished, the metal had resumed its ancient economic function. The value varied from place to place, but was never low, and should be fabulous on Nike.

"Good lady," Yasmin said, "we are grateful for your kindness. But we have imposed too much. We should not take any of your men away from the hayfields when storms may be coming. If you will spare us two horses, we can make our own way to Vala and thence, of course, to your Engineer."

Like fun we will! We'll turn east. Maybe we'll ride horseback, maybe we'll take passage on a river boat — whatever looks safest — but we're bound for his enemy, the Prester of Silva!

"We'll pay for them," Yasmin said. "Our overlords provided us well with money. See." She extended a coin. "Will this buy two horses and their gear?"

Elanor gasped. She made a sign again, sat down and fanned herself. Her youngest child sensed his mother's agitation and whimpered.

"Is that gold?" she breathed. "Wait. Till Petar comes. He comes soon. We ask him."

That was logical. But suppose the man got suspicious.

Yasmin glanced back at Dagny. The Krakener made an imperceptible gesture. Beneath their coveralls were holstered energy weapons.

No! We can't slaughter a whole, helpless family!

I hope we won't need to.

I won't! Not for anything!

VIII

Tom reached the fire-control turret as two aircraft peeled off their squadron and dove.

The skyview was full of departing stormclouds, tinged bloody with dawn. Against them, his space-armored women looked tiny. Not so their hunters. Those devilish shapes swelled at an appalling speed. Tom threw himself into a manual-operation seat and punched for Number Two blastcannon. A cross-hair screen lit for him with what that elevated weapon "saw." He twisted verniers. The auxiliary motors whirred. The vision spun giddily. There . . . the couple was separating . . . one to keep guard on him, its mate in a swoop after Dagny and Yasmin. Tom got the latter centered and pressed the discharge button.

The screen stepped down the searing brightness of the energy bolt. Through the open manlock crashed the thunderclap that followed. The Hannoan craft exploded into red-hot shards that rained down upon the trees.

"Gotcha!" Tom exulted. He fired two or three more times, raking toward the other boat where it hung on its negafield some fifty meters aloft. His hope was to scare it off and bluff its mates into holding their bombs — or whatever they had to drop on him. He didn't want to kill again. The first shot had looked necessary if the girls were to live. But why add to the grudge against him?

Not that he expected to last another five minutes.

"No! Wait! Tom swiveled around to another set of controls. Why hadn't he thought of this at once?

The nearby pilot had needed a couple of seconds to recover from the shock of what happened to his companion. Now he was bound hastily back upward. He was too late. Tom focused a tractor beam on him. Its generator hummed with power. Ozone stung the nostrils; rewiring job needed, a distant aspect of Tom took note. Most of him was being a fisherman. He'd gotten his prey, and on a heavy line — the force locked onto the airboat

A TRAGEDY OF ERRORS

was meant to grab kilotons moving at cosmic velocities — but his catch was a man-eater. And he wanted to land it just so.

The vessel battled futilely to escape. Tom pushed it down near *Firedrake's* hull, into the jumble of broken trees and canebrake that his own landing had made. Their branches probably damaged wings and fuselage, but their leaves, closing in above, hid any details of what was going on from the pilots overhead. Having jammed his capture against a fence of logs and brush, he held it there with a beam sufficiently narrow that the cockpit canopy wouldn't be pulled shut. Quickly, with a second tractor-pressor projections, he rearranged the tangle in the clearing, shifting trunks, snapping limbs and tossing them about, until he had a fairly good view through a narrow slot that wouldn't benefit observers in heaven. He trusted they were too poorly instrumented — or too agitated, or both — to see how useful the arrangement was for him, and would take the brief stirring they noticed as a natural result of a crash, heaped wood collapsing into a new configuration.

Thereafter he left the turret and made his way to the forward manlock. It was rather high off the ground; the access ladder

had automatically extruded, plunging down into the foliage that fluttered shadowy around the base of the hull. Tom placed himself in the chamber, invisible from the sky, hardly noticeable from beneath, and studied his fish more closely.

Fish: yes, indeed. In two senses.

The pilot was that youthful squadron leader with whom he had spoken before. Tom tuned his helmet radio in on the frantic talk that went between the downed man, his companions and Karol Weyer in Sea Gate. He gathered they had no prehensile force-beams on Nike, and only vaguely inferred the existence of such things from their experience with "friends."

Friends? The raiders from space? Tom scowled.

But he couldn't stop to think beyond this moment. His notion had been to take a man and an aircraft — the latter probably the more highly valued — as hostages. They'd not nuke him now. But as for what followed, he must play his cards as he drew them. At worst, he'd gotten the girls free. Perhaps he could strike some kind of bargain, though it was hard to tell why any Nikean should feel bound to keep a promise made to an outlaw. At best. . . .

Hoy!

The canopy slid back. Tom got a look at the plane's interior. There was room for two in the cockpit, if one scrooched, and aft of the seat was a rack of — something or other, he couldn't see what, but it didn't seem welded in place. His pulses leaped.

The pilot emerged, in a dive, flattening himself at once behind a fallen tree. Weyer had said, after several fruitless attempts to get a reply from Tom: "You in the ship! You killed one of ours. Another, and your whole ship goes. Do you seize me?" (That must mean "understand.") Next, to the flyboy: "Fish Aran, use own discretion."

So the young man, deciding he couldn't sit where he was forever, was trying to reach the woods. That took nerve. Tom laid his telescope to his good eye — his faceplate was open — and searched out details. Fiber helmet, as already noted; green tunic with cloth insignia, no metal; green trousers tucked into leather boots; a sidearm, but no indication of a portable communicator or, for that matter, a watch. Tom made sure his transmitter was off, trod a little further out in the lock chamber, and bawled from lungs that had often shouted against a gale at sea:

"Halt where you are! Or I'll chop the legs from under you!"

The pilot had been about to scuttle from his place. He froze. Slowly, he raised his gaze. Tom's armored shape was apparent to him, standing in the open lock, but not discernible by his mates. Likewise the blaster Tom aimed. The pilot's hand hovered at the butt of his own weapon.

"Slack off, son," the captain advised. "You wouldn't come near me with that pipgun — I said 'pip,' not even 'pop' — before I sizzled you. And I don't want to. C'mon and let's talk. That's right; on your feet; stroll over here and use this nice ladder.""

The pilot obeyed, though his scramble across the log jam was hardly a stroll. As he started up, Tom said: "They'll see in a minute what you're doin', I s'pose, when you come above the foliage Belay, there, I can see you quite well already I want you to draw your gun, as if you'd decided to come aboard and reconnoiter 'stead o' headin' for the nearest beer hall. Better not try shootin' at me, though. My friends'd cut you down."

The Hannoan paused a moment, rigid with outrage, before he yielded. His face, approaching, showed pale and wet in the first light. He swung himself into the lock chamber. For an instant, he and Tom stood with guns almost

A TRAGEDY OF ERRORS

in each other's bellies. The spaceman's gauntleted left hand struck like a viper, edge on, and the Nikean weapon clattered to the deck.

"You — you broke my wrist!" The pilot lurched back, clutching his arm and wheezing.

"I think not. I gauge these things pretty good if I do say so myself. And I do. March on ahead o' me, please." Tom conducted his prisoner into the passageway, gathering the fallen pistol en route. It was a slugthrower, ingeniously constructed with a minimum of steel. Tom found the magazine release and pressed it one-handed. The clip held ten high-caliber bullets. But what the hoo-hah! The cartridge cases were wood, the slugs appeared to be some heavy ceramic, with a mere skirt of soft metal for the rifling in the barrel to get a grip on!

"No wonder you came along meek-like," Tom said. "You never could've dented me."

The prisoner looked behind him. Footfalls echoed emptily around his words. "I think you are alone," he said.

"Aye-ya. I told you my chums *could* wiff you . . . if they were present. In here." Tom indicated the fire control turret. "Sit yourself. Now, I'm goin' 'tother side o' this room and shuck my armor, which is too hot and heavy for

informal wear. Don't get ideas about plungin' across the deck at me. I can snatch my blaster and take aim quicker'n that."

The young man crouched in a chair and shuddered. His eyes moved like a trapped animal's, around and around the crowding machines. "What do you mean to do?" he rattled. "You can't get free. You're alone. Soon the Engineer's soldiers come, with 'tillery, and ring you."

"I know. We should be gone by then, however. Look here, uh, what's your name?"

An aristocrat's pride firmed the voice. "Yanos Aran, third son of Rober Aran, who's chief computerman to Engineer Weyer's self. I am a fish in the air force of Hanno — and you are a dirty friend!"

"Maybe so. Maybe not." Tom stripped fast, letting the pieces lie where they fell. He hated to abandon his suit, but it was too bulky and perhaps too detectable for his latest scheme.

"Why not? Didn't you business Evin Sato?"

"You mean that plane I gunned?"

"Yes. Evin Sato was my camarado."

"Well, I'm sorry about that, but wasn't he fixin' to shoot two o' my people? We came down frien — intendin' no harm, and you set on us like hungry eels. I don't

want to hurt you, Yanos, lad. In fact, I hope betwixt us we can maybe settle this whole affair. But — " Tom's features assumed their grimmest look, which had terrified stronger men than Aran — "you try any fumblydiddles and you'll find out things about friendship that your mother never told you."

The boy seemed to crumple. "I . . . yes, I slave me to you," he whispered.

He wouldn't stay crumpled long, Tom knew. He must be the scion of a typical knightly class. Let him recover from the dismay of the past half hour, the unbalancing effect of being surrounded by unknown powers, and he'd prove a dangerous pet. It was necessary to use him while he remained useable.

Wherefore Tom, having peeled down to coveralls, gave him his orders in a few words. A slight demurral fetched a brutal cuff to the cheek. "And if I shoot you with this blaster, short range, low intensity," Tom added, "you won't have a neat hole drilled through your heart. You'll be cooked alive, medium rare, so you'll be some days about dyin'. Seize me?"

He didn't know if he'd really carry out his threat, come worst to worst. Probably not.

Having switched off the trac-

tor beam, he brought Aran far down into the ship, to an emergency lock near the base. It was well hidden by leaves. The vague dawnlight aided concealment. They crept forth, and thence to the captured aircraft.

It had taken a beating, Tom saw. The wingtips were crumpled, the fuselage punctured. (The covering was mostly some fluorosynthetic. What a metal shortage they must have here!) But it ought to fly anyhow, after a fashion. Given a gravity drive, however weak, airfoils were mainly for auxiliary lift and control.

"In we go," Tom said. He squeezed his bulky form behind Aran's seat so that it concealed him. The blaster remained in his fist, ready to fire through the back.

But there was no trouble. Aran followed instructions. He called his squadron: "— Yes, you're right, I did 'cide I'd try looking at the ship. And no one! None aboard. 'Least, none I saw. Maybe robos fought us, or maybe the rest of the crew got away on foot, not seen. I found a switch, looked like a main power-line breaker, and opened it. Maybe now I can rise."

And he started the engine. The airboat climbed, wobbling on its damaged surfaces. A cheer sounded from the receiver. Tom wished

he could see the face in the screen, but he dared not risk being scanned himself.

"You land, if Engineer Weyer approves," Aran directed. "Go aboard. Be careful. Me, best I take my craft back to base immediately."

Tom had figured that would be a natural move for a pilot on Nike, even a squadron leader. A plane was obviously precious. It couldn't get to the repair shop too fast.

He must now hope that Aran's expression and tone didn't give him away. The "fish" was no actor. But everyone was strung wire-taut. Nobody noticed how much more perturbed this fellow was. After a few further words had passed, Aran signed off and started west.

"Keep low," Tom said. "Like you can't get much altitude. Soon's you're out o' their sight here, swing north. Find us a good secret place to land. I think we got a bucketful to say to each other, no?"

One craft was bound eagerly down. The rest stayed at hover. They'd soon learn that the spaceship was, indeed, deserted. Hence they wouldn't suspect what had happened to Aran until he failed to report. However, that wasn't a long time. He, Roan Tom, had better get into a bolt-hole quick!

IX

The volcano's northern side was altogether wild. On the lower flanks, erosion had created a rich lava soil and vegetation was dense. For some reason it was principally native Nikean, dominated by primitive but tree-sized "ferns." An antigrav flyer could push its way under their soft branches and come to rest beneath the overhang of a cliff, camouflaged against aerial search.

Tom climbed out of the cockpit and stretched to uncramp himself. The *abris* was rough stone at his back, the forest brooded shadowy before him. Flecks of copper sunlight on bluish-green fronds and the integuments of bumbling giant pseudo-insects made the scene look as if cast in metal. But water rilled nearby, and the smells of damp growth were organic enough.

"C'mon, son. Relax with me," Tom invited. "I won't eat you. 'Specially not if you've packed along a few sandwiches."

"Food? No." Yanos Aran spoke as stiffly as he moved.

"Well, then we'll have to make do with what iron rations I got in my pockets." Tom sighed. He flopped down on a chair-sized boulder, took out pipe and tobacco pouch, and consoled himself with smoke.

He needed consolation. He was

a fugitive on an unknown planet. His ship had been taken. His wives were out of touch; an attempt to raise Dagny on the plane's transmitter, using the Krakener military band, had brought silence. She must already have discarded her telltale space armor.

"And all 'count of a stupid lingo mistake!" he groaned.

Aran sat down on another rock and regarded him with eyes in which alertness was replacing fear. "You say you are not truly our friend?"

"Not in your sense. Look, where I come from, the Anglic word 'friend' means . . . well, a fellow you like, and who likes you. When I told your Engineer we were friends, I wanted him to understand we didn't aim at any harm, in fact we could do good business with him."

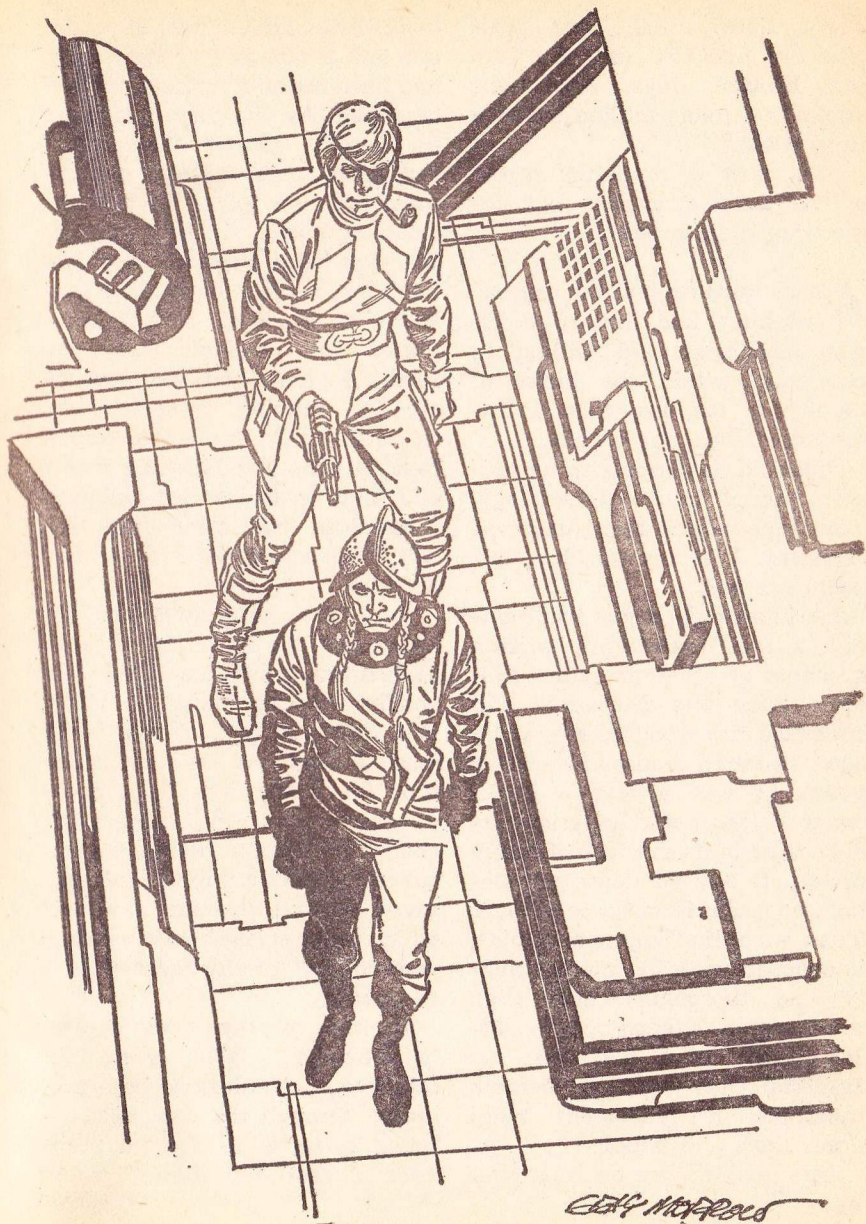
"Business!" Aran exploded.

"Whoops-la. Sorry. Said the wrong thing again, didn't I?"

"I think," Aran replied slowly, "what you have in mind is what we would call 'change.' You wanted to 'change goods and services with our people. And to you, a 'friend' is what we call a 'camarado.'"

"Reckon so. What're your definitions?"

"A friend is a space raider, such as did business with our planet some five years ago."



Edgar Allan Poe

They destroyed the last great cities we had left from the Ter-ran Empire days, and none knows how many million Nikeans they killed.””

“Ah, now we’re gettin’ some-where. Let’s straighten out for me what did happen.”

A ran’s hostility had not depart-ed, but it had diminished. He was intelligent and willing to cooperate within the limits of loyalty to his own folk. Informa-tion rushed out of him.

Nike did not appear to be unique, except in its planetology. Tom asked about that. Aran was surprised. Was his world so un-usual per se?

He knew only vague traditions and a few fragmentary written accounts of other planetary sys-tems. Nike was discovered and colonized five hundred-odd years ago — about a thousand standard years. It was always a back-water. Fundamentally agricultural because of its shortage of heavy metals, it had no dense popula-tion, no major libraries or schools. Thus, when the Empire fell apart, knowledge vanished more quick-ly and thoroughly here than most places. Nikean society dis-integrated; what had been an Imperial sub-province became hundreds of evanescent king-doms, fiefs and tribes.

The people were on their way

back, Aran added defiantly. Or-der and a measure of prosperity had been restored in the advanced countries. As yet, they paid mere lip service to an “Emperor,” but the concept of global govern-ment did now exist. Technology was improving. Ancient appar-tus was being repaired and put back into service, or being repro-duced on the basis of what dia-grams and manuals could be found. Schemes had been broach-ed for making interplanetary ships. Some dreamers had hoped that in time the Nikeans might end their centuries-long isolation themselves, by re-inventing the lost theory and practice of hy-perdrive.

For that, of course, as for much else, the tinkering of tech-nicians was insufficient. Basic sci-entific research must be done. But this was also slowly being started. Had not Aran remarked that his father was head com-puterman in the Engineer’s court? He used a highly sophis-ticated machine which had sur-vived to the present day and which two generations of modern workers had finally learned how to operate.

Its work at present was mainly in astronomy. While some ele-mentary nucleonics had been pre-served through the dark ages — being essential to the mainten-ance of what few atomic power

plants remained — practically all information about the stars had vanished. Today's astronomers had learned that their sun (as distinguished from their planet) was not typical of its neighborhood. It was unpredictably variable, and not even its ground state could be fitted onto the main sequence diagram. No one had yet developed a satisfactory theory as to what made this sun abnormal, but the consensus was that it must be quite a young star.

One geologist had proposed checking this idea by establishing the age of the planet. Radioactive minerals should provide a clock. The attempt had failed, partly because of the near-non-existence of isotopes with suitable half-lives and partly, Tom suspected, because of lousy laboratory technique. But passing references in old books did seem to confirm the idea held by latter-day theorists, that stars and planets condensed out of interstellar gas and dust. If so, Nike's sun could be very new, as cosmic time went, and not yet fully stabilized.

“Aye, I'd guess that myself,” Tom nodded.

“Good! Important to be sure. You seize, can we make a mathematical model of our sun, then we can predict its variations.

A TRAGEDY OF ERRORS

Right? And we will never predict our weather until then. Unforeseen storms are our greatest natural woe. Hanno's self, a southerly land, can get killing frosts any season.”

“Well, don't take my authority, son. I'm no scientist. The Imperialists must've known for sure what kind o'star they had here. And a scholar of astronomy, from a planet where they still keep universities and such, should could tell you. But not me.” Tom struck new fire to his pipe. “Uh, we'd better stay with less fun topics. Like those 'friends.'”

Aran's enthusiasm gave way to starkness. He could relate little. The raiders had not come in any large fleet, a dozen ships at most. But there was no effective opposition to them. They smashed defenses from space, landed, plundered, raped, tortured, burned, during a nightmare of weeks. After sacking a major city, they missiled it. They were human, their language another dialect of Anglic. Whether in sarcasm or hypocrisy or because of linguistic change, they described themselves to the Nikeans as “your friends, come to do business with you.” Since “friend” and “business” had long dropped out of the local speech, Tom saw the origin of their present meaning here.

“Do you know who they might

have been?" Aran asked. His tone was thick with unshed tears.

"No. Not sure. Space's full o' their kind." Tom refrained from adding that he too wasn't above a bit of piracy on occasion. After all, he observed certain humane rules with respect to those whom he relieved of their portable goods. The really bestial types made his flesh crawl, and he'd exterminated several gangs of them with pleasure.

"Will they return, think you?"

"Well . . . prob'ly not. I'd reckon they destroyed your big population centers to make sure no one else'd be tempted to come here and start a base that might be used against 'em. They bein' too few to conquer a whole world, you see. 'Course, I wouldn't go startin' major industries and such again without husky space defenses."

"No chance. We hide instead," Aran said bitterly. "Most leaders dare allow naught that might draw other friends. Radio a bare minimum; no rebuilding of cities; yes, we crawl back to our dark age and cower."

"I take it you don't pers'nally agree with that policy."

Aran shrugged. "What matter my thoughts? I am but a third son. The chiefs of the planet have 'cided. They fought a war or two, forcing the rest to go with them

in this. I myself bombed soldiers of Silva, when its Prester was made stop building a big atomic power plant. Our neighbor cave-dome! And we had to fight them, not the friends!"

Tom wasn't shocked. He'd seen human politics get more hashed than that. What pricked his ears up was the information that, right across the border, lived a baron who couldn't feel overly kindly toward Engineer Weyer.

"You can seize, now, why we feared you," Aran said.

"Aye-ya. A sad misunderstanding'. If you hadn't been so bloody impulsive, though — if you'd been willin' to talk — we'd've quick seen what the lingo problem was."

"No! You were the ones who refused talk. When the Engineer called on you to be slaves — "

"What the muck did he expect us to do after that?" Tom rumbled. "Wear his chains?"

"Chains? Why . . . wait — oh-oh!"

"Oh-oh, for sure," Tom said. "Another little shift o' meanin', huh? All right, what does 'slave' signify to you?"

It turned out that, on Nike, to be "enslaved" was nothing more than to be taken into custody: perhaps as a prisoner, perhaps merely for interrogation or protection. In Hanno, as in every advanced Nikean realm, slavery

in Tom's sense of the word had been abolished a lifetime ago.

The two men stared at each other. "Events got away from both sides," Tom said. "After what'd happened when last spacemen came, you were too spooked to give us a chance. You reckoned you had to get us under guard right away. And we reacted to that. We've seen a lot o' cruelty and treachery. We couldn't trust ourselves to complete strangers, 'specially when they acted hostile. So . . . neither side gave the other time to think out the busi — the matter o' word shift. If there'd been a few minutes' pause in the action, I think I, at least, would've guessed the truth. I've seen lots o' similar cases. But I never had any such pause, till now."

He grinned and extended a broad hard hand. "All's well that ends well, I'm told," he said. "Let's be camarados."

Aran ignored the gesture. The face he turned to the outworlder was only physically youthful. "We cannot," he said. "You wrecked a plane and stole another. Worse, you killed a man of ours."

"But — well, self-defense!"

"I might pardon you," Aran said. "I do not think the Engineer would or could. It is more than the damage you work-
A TRAGEDY OF ERRORS

ed. More than the anger of the powerful Sato family, who like it not if a son of theirs dies un-avenged because of a comic mix in s'mantics. It is the policy that he, Weyer's self, strove to bring."

"You mean . . . nothin' good can come from outer space . . . wall Nike off . . . treat anyone that comes as hostile . . . right?" Tom rubbed his chin and scowled sullenly.

Weyer was probably not too dogmatic, nor too tightly bound by the isolationist treaty, to change his mind in time. But Tom had scant time to spare. Every hour that passed, he and his womenfolk risked getting shot down by some hysteric. Also, a bunch of untrained Nikeans, pawing over his spaceship, could damage her beyond the capacity of this planet's industry to repair.

Also, he was needed back on Kraken soon, or his power there would crumble. And that would be a mortally dangerous situation for his other wives, children, grandchildren, old and good comrades

In short, there was scant value in coming to terms with Weyer eventually. He needed to reach agreement fast. And, after what had happened this day, he didn't see how he could.

Well, the first thing he must do was reunite his party. To-

gether, they might accomplish something. If nothing else, they could seek refuge in the adjacent country, Silva. Though that was doubtless no very secure place for them, particularly if Weyer threatened another war.

"You should slave yourself," Aran urged. "Afterward you can talk."

"As a prisoner — a slave — I'd have precious little bargainin' leverage," Tom said. "Considerin' what that last batch o' spacers did, I can well imagine we bein' tortured till I cough up for free everything I've got to tell. S'posin' Weyer himself didn't want to treat me so inhospitable, he could break down anyhow under pressure from his court or his fellow bosses."

"It may be," Aran conceded, reluctantly, but too idealistic at his age to violate the code of his class and lie.

"Whereas if I can stay loose, I can try a little pressure o' my own. I can maybe find somethin' to offer that's worth makin' a deal with me. That'd even appease the Sato clan, hm?" Tom fumed on his pipe. "I've got to contact my women. Right away. Can'h risk their fallin' into Weyer's hands. If they do, he's got me! Know any way to raise a couple o' girls who don't have a radio and 're doin' their level best to disappear?"

X

Sunset rays turned the hilltops fiery. Further down, the land was already blue with a dusk through which river, bay, and distant sea glimmered argent. Cloud banks towered in the east, blood-colored, dwarfing the Sawtooth Mountains that marked Hanno's frontier.

At the lowest altitude where this was visible — the highest to which a damaged, overloaded flyer could limp — the air was savagely cold. It wasn't too thin for breathing; the atmospheric density gradient is less for small than for large planets. But it swept through the cracked canopy to sear Tom's nostrils and numb his fingers on the board. Above the drone of the combustion powerplant, he heard Yanos Aran's teeth clatter. Stuffed behind the pilot chair, the boy might have tried to mug his captor. But he wasn't dressed for this temperature and was chilled half insensible. Tom's clothes were somewhat warmer. Besides, he felt he could take on any two Nikeans hand-to-hand.

The controls of the plane were simple to a man who'd used as wide a variety of machines as he. Trickiness came from the broken and twisted airfoil surfaces. And, of course, he must keep a watch for Weyer's boys. He didn't think

they'd be aloft, nor that they could scramble and get here in the few minutes he needed. But you never knew. If one did show up, maybe Tom could pot him with a lucky blast from the guns.

He swung through another carousel curve. That should be that. Now to skate away. He throttled the engine back. The negafield dropped correspondingly, and he went into a glide. But he was no longer emitting enough exhaust for a visible trail.

The tracks he had left were scribbled over half the sky. The sun painted them gold-orange against that deepening purple.

Abruptly, turbulence across the buckled delta wing gained mastery. The glide became a tailspin. Aran yelled.

"Hang on," Tom said. "I can ride 'er."

Crazily whirling, the dark land rushed at him. He stopped Aran's attempt to grab the stick with a karate chop and concentrated on his altimeter. At the last possible moment, allowing for the fact that he must coddle this wreck lest he tear her apart altogether, he pulled out of his tumble. A prop, jet or rocket would never have made it, but you could do special things with gravs if you had the knack in your fingers. Or whatever part of the anatomy it was.

Finally the plane whispered a

few meters above the bay. Its riding lights were doused, and the air here was too warm for engine vapor to condense. Tom believed his passage had a fair chance of going unnoticed.

Hills shouldered black around the water. Here and there among them twinkled house lamps. One cluster bespoke a village on the shore. Tom's convoluted contrail was breaking up, but slowly. It glowed huge and mysterious, doubtless frightening peasants and worrying the military.

Aran stared at it likewise, as panic and misery left him. "I thought you wrote a message to your camarados," he said. "That's no writing."

"Couldn't use your alphabet, son, seein' I had to give 'em directions to a place with a local name. Could I, now? Even Kraken's letters look too much like yours. But those're Momotaroan phonograms. Dagny can read 'em. I hope none o' Weyer's folk'll even guess it is a note. Maybe they'll think I went out o' control tryin' to escape and, after staggerin' around a while, crashed . . . Now, which way is this rendezvous?"

"Rendez — oh. The togethering I advised. Follow the north shore eastward a few more kilos. At the end of a headland stands Or-gino's Cave."

"You absolutely sure nobody'll be there?"

"As sure as may be; and you have me for hostage. Orgino was a war chief of three hundred years ago. They said he was so wicked he must be in pact with the Wanderer, and to this day the commons think he walks the ruins of his cave. But it's a landmark. Let your camarados ask shrewdly, and they can find how to get there with none suspecting that for their wish."

The plane sneaked onward. Twilight was short in this thin air. Stars twinkled splendidly forth, around the coalsack of the Nebula. The outer moon rose, gradually from the eastern cloud-banks, almost full but its disk tony and corroded-bronze dark. An auroral glow flickered. This far south? Well, Nike had a fairly strong magnetic field — which, with the mean density, showed that it possessed the ferrous core it wasn't supposed to — but not so much that charged solar particles couldn't strike along its sharp curvature clear to the equator.

If they were highly energetic particles, anyhow. And they must be. Tom had identified enormous spots as well as flares on that ruddy sun disk. Which oughtn't to be there! Not even when output was rising. A young star, its outer layers cool and reddish be-

cause they were still contracting, shouldn't have such intensity. Should it?

Regardless, Nike's sun did.

Well, Tom didn't pretend to know every kind of star. His travels had really not been so extensive, covering single corner of the old Imperium, which itself had been insignificant compared to the whole galaxy. And his attention had naturally always been focused on more or less Sol-type stars. He didn't know what a very young or very old, very large or very small sun was like in detail.

Most certainly he didn't know what the effects of abnormal chemical composition might be. And the distribution of elements in this system was unlike that of any other Tom had ever heard about. Conditions on Nike bore out what spectroanalysis had indicated in space: impoverishment with respect to heavy elements. Since it had formed recently, the sun and its planets must therefore have wandered here from some different region. Its velocity didn't suggest that. However, Tom hadn't determined the galactic orbit with any precision. Besides, it might have been radically changed by a close encounter with another orb. Improbable as the deuce, yes, but then the whole crazy situation was very weird.

The headland loomed before him, and battlements against the Milky Way. Tom made a vertical landing in a courtyard. "All right." His voice sounded jarringly loud. "Now we got nothin' much to do but wait."

"What if they come not?" Aran asked.

"I'll give 'em a day or two," Tom said. "After that, we'll see." He didn't care to dwell on the possibility. His unsentimental soul was rather astonished to discover how big a part of it Dagny had become. And Yasmin was a good kid, he wished her well.

He left the crumbling flagstones for a walk around the walls. Pseudo-moss grew damp and slippery on the parapet. Once mail-clad spearmen had tramped their rounds here, and the same starlight sheened on their helmets as tonight, or as in the still more ancient, vanished glory of the Empire, or the League before it, or — And what of the nights yet to come? Tom shied from the thought and loaded his pipe.

Several hours later, the nearer moon rose from the hidden sea; its apparent path was retrograde and slow. Although at half phase, with an angular diameter of a full degree it bridged the bay with mercury.

Rising at the half — local midnight, more or less — would the girls never show? He ought to

A TRAGEDY OF ERRORS

get some sleep. His eyelids were sandy. Aran had long since gone to rest in the tumbledown keep. He must be secured, of course, before Tom dozed off . . . *No. I couldn't manage a snooze even if I tried. Where are you, Dagny?*

The cold wind lulled, the cold waves lapped, a winged creature fluttered and whistled. Tom sat down where a portcullis had been and stared into the woods beyond.

There came a noise. And another. Branches rustled. Hoofbeats clopped. Tom drew his blaster and slid into the shadow of a tower. Two riders on horseback emerged from the trees. For a moment they were unrecognizable, unreal. Then the moon . . . slight struck Dagny's tawny mane. Tom shouted.

Dagny snatched her own gun forth. But when she saw who lumbered toward her, it fell into the rime-frosted grass.

XI

Afterward, in what had been a feasting hall, with a flash-light from the aircraft to pick faces out of night, they conferred. "No, we had no trouble," Dagny said. "The farmer sold us those animals without any fuss."

"If you gave him a thirty-gram gold piece, on this planet, I reckon

on so," Tom said. "You could prob'ly've gotten his house thrown into the deal. He's bound to gossip about you, though."

"That can't be helped," Dagny said. "Our idea was to keep traveling east and hide in the woods when anyone happened by. But we'd no strong hope, especially with that wide cultivated valley to get across. Tom, dear, when I saw your sky writing, it was the second best moment of my life."

"What was the first?"

"You were involved there too," she said. "Rather often, in fact."

Yasmin stirred. She sat huddled on the floor, chilled, exhausted, wretched, though nonetheless drawing Aran's appreciative gaze. "Why do you grin at each other?" she wailed. "We're hunted!"

"Tell me more," Tom said.

"What can we *do*?"

"You can shut up, for the gods' sake, and keep out o' my way!" he snapped impatiently. She shrank from him and knuckled her eyes.

"Be gentle," Dagny said. "She's only a child."

"She'll be a dead child if we don't get out o' here," Tom retorted. "We got time before dawn to slip across the Silvan border in yon airboat. After that, we'll have to play 'er as she lies. But I been pumpin' my — shall I

say, my friend, about politics and geography and such. I think with luck we got a chance o' stayin' free."

"What chance of getting our ship back, and repaired?" Dagny asked.

"Well, that don't look so good, but maybe somethin'll come down the slot for us. Meanwhile, let's move."

They went back to the courtyard. The inner moon was so bright that no supplement was needed for the job on hand. This was to unload the extra fuel tanks, which were racked aft of the cockpit. The plane would lose cruising range, would indeed be unable to go past the eastern slope of the Sawtooths. But it would gain room for two passengers.

"You stay behind, natural," Tom told Aran. "You been a nice lad, and here's where I prove I never aimed at any hurt for you. Have a horse on me, get a boat from the village to Weyer's place, tell him what happened — and to tell him we want to be his camarados and 'change with him."

"I can say it." Aran shifted awkwardly from foot to foot. "I think no large use comes from my word."

"The prejudice against spacemen —"

"And the damage you worked.

How shall you repay that? Since 'tis been 'cited there's no good in spacefaring, I expect your ship'll be stripped for its metal."

"Try, though," Tom urged.

"Should you leave now?" Aran wondered. "Weather looks twisty."

"Aye, we'd better. But thanks for frettin' 'bout it."

A storm, Tom thought, was the least of his problems. True, conditions did look fanged about the mountains. But he could sit down and wait them out, once over the border, which ought to remain in the bare fringes of the tempest. Who ever heard of weather moving very far west, on the western seacoast of a planet with rotation like this? What was urgent was to get beyond Weyer's pursuit.

Yasmin and Dagny fitted themselves into the rear fuselage as best they could, which wasn't very. Tom took the pilot's seat again. He waved good-by to Yanos Aran and gunned the engine. Overburdened as well as battered, the plane lifted sluggishly and made no particular speed. But it flew, and could be out of Hanno before dawn. That sufficed.

Joy at reunion, vigilance against possible enemies, concentration on the difficult task of operating his cranky vessel, drove

weariness out of him. He paid scant attention to the beauties of the landscape sliding below, though they were considerable — mist-magical delta, broad sweep of valley, river's sinuous glow, all white under the moons. He must be one with the wind that blew across this sleeping land.

And blew.

Harder.

The plane bucked. The noise around it shrilled more and more clamorous. Though the cloud wall above the mountains must be a hundred kilometers distant, it was suddenly boiling zenithward with unbelievable speed.

It rolled over the peaks and hid them. Its murk swallowed the outer moon and reached tendrils forth for the inner one. Lightning blazed in its caverns. Then the first raindrops were hurled against the plane. Hail followed, and the snarl of a hurricane.

East wind! Couldn't be! Tom had no further chance to think. He was too busy staying alive.

As if across parsecs, he heard Yasmin's scream, Dagny's profane orders that she curb herself. Rain and hail made the cockpit a drum, himself a cockroach trapped between the skins. The wind was the tuba of marching legions. Sheathing ripped loose from wings and tail. Now and then he could see through the night, when lightning burned.

The thunder was like bombs, one after the next, a line of them seeking him out. What followed was doomsday blackness.

His instrument panel went dark. His altitude control stick waggled loose in his hand. The airflaps must be gone, the vessel whirled leaf-fashion on the wind. Tom groped until his fingers closed on the grav-drive knobs. By modulating fields and thrust beams, he could keep a measure of command. Just a measure; the powerplant had everything it could do to lift this weight, without guiding it. But let him get sucked down to earth, that was the end!

He must land somehow, and survive the probably hard impact. How?

The river flashed lurid beneath him. He tried to follow its course. Something real, in this raving night — There was no more inner moon, there were no more stars.

The plane groaned, staggered, and tilted on its side. The starboard wing was torn off. Had the port one gone too, Tom might have operated the fuselage as a kind of gravity sled. But against forces as unbalanced as now fought him, he couldn't last more than a few seconds. Minutes, if he was lucky.

Must be back above the river-

mouths, thought the tiny part of him that stood aside and watched the struggle of the rest. Got to set down easy-like. And find some kind o' shelter. Yasmin wouldn't last out this night in the open.

Harshly: Will she last anyway? Is she anything but a dangerous drag on us? I can't abandon her, I swore her an oath, but I almost wish —

The sky exploded anew with lightnings and showed him a wide vista of channels among forested, swampy islands. Trees tossed and roared in the wind, but the streams were too narrow for great waves to build up and —
Hoy!

Suddenly, disastrously smitten, a barge train headed from Sea Gate to the upriver towns had broken apart. In the single blazing moment of vision that he had, Tom saw the tug itself reel toward safety on the northern side of the main channel. Its tow was scattered, some members sinking, some flung aground, and one — yes, driven into a tributary creek, woods and water-plants closing behind it, screening it —

Tom made this decision.

He hoped for nothing more than a bellyflop in the drink, a scramble to escape from the plane and a swim to the barge. But lightning flamed again and again,

enormous sheets of it that turned every raindrop and hailstone into brass. And once he was down near the surface of that natural canal, a wall of trees on either side, he got some relief. He was actually able to land on deck.

The barge had ended on a sandbar and lay solid and stable. Tom led his women from the plane. He and Dagny found some rope and lashed their remnant of a vehicle into place. The cargo appeared to be casks of petroleum. A hatch led below, to a cabin where a watchman might rest. Tom's flashlight picked out bunk, chair, a stump of candle.

"We're playin' a good hand," he said.

"For how long?" Dagny mumbled.

"Till the weather slacks off." Tom shrugged. "What comes after that, I'm too tired to care. I don't s'pose . . . gods, yes!" he whooped. "Here, on the shelf! A bottle — lemme sniff — aye-ya, booze! Got to be booze!" And he danced upon the deckboards till he cracked his pate on the low overhead.

Yasmin regarded him with a dull kind of wonder. "What are you so happy about?" she asked in Anglic. When he had explained, she slumped. "You can laugh . . . at that . . . tonight? Lord Tom, I did not know how alien you are to me."

A TRAGEDY OF ERRORS

Through hours the storm continued.

They sat crowded together, the three of them, in the uneasy candlelight, which threw huge misshapen shadows across the roughness of bulkheads. Rather, Dagny sat on the chair, Tom on the foot of the bunk, while Yasmin lay. The wind-noise was muffled down here, but the slap of water on hull came loud. From time to time, thunder cannonaded, or the barge rocked and grated on the sandbar.

Wet, dirty, haggard, the party looked at each other. "We should try to sleep," Dagny said.

"Not while I got this bottle," Tom said. "You do what you like. Me, though, I think we'd better guzzle while we can. Prob'ly won't be long, you see."

"Probably not," Dagny agreed, and took another pull herself.

"What will we do?" Yasmin whispered.

Tom suppressed exasperation — she had done a good job in Petar Landa's house, if nowhere else — and said, "Come mornin', we head into the swamps. I s'pose Weyer'll send his merry men lookin' for us, and whoever owns this hulk'll search after it, so we can't claim squatter's rights. Maybe we can live off the country, though, and eventually, one way or another, reach the border."

"Would it not be sanest . . . they do seem to be decent folk . . . should we not surrender to them and hope for mercy?"

"Go ahead, if you want," Tom said. "You may or may not get the mercy. But you'll for sure have no freedom. I'll stay my own man."

Yasmin tried to meet his hard gaze, and failed. "What has happened to us?" she pleaded.

He suspected that she meant, "What has become of the affection between you and me?" No doubt he should comfort her. But he didn't have the strength left to play father image. Trying to distract her a little, he said, with calculated misunderstanding of her question:

"Why, we hit a storm that blew us the exact wrong way. It wasn't s'posed to. But this's such a funny planet. I reckon, given a violent kind o' sun, you can get weather that whoops out o' the east, straight seaward. And, o' course, winds can move almighty fast when the air's thin. Maybe young Aran was tryin' to warn me. He spoke o' twisty weather. Maybe he meant exactly this, and I got fooled once more by his Nikean lingo. Or maybe he just meant what I believed he did, unreliable weather. He told me himself, their meteorology isn't worth sour owl spit, 'count o' they can't predict the solar output.

Young star, you know. Have a drink."

Yasmin shook her head. But abruptly she sat straight. "Have you something to write with?"

"Huh?" Tom gaped at her. "I have an idea. It is worthless," she said humbly, "but since I cannot sleep, and do not wish to annoy my lord, I would like to pass the time."

"Oh. Sure." Tom found a pad and penstyl in a breast pocket of his coverall and gave them to her. She crossed her legs and began writing numbers in a neat, foreign-looking script.

"What's going on?" Dagny said in Eylan.

Tom explained. The older woman frowned. "I don't like this, dear," she said. "Yasmin's been breaking down, closer and closer to hysteria, ever since we left those peasants. She's not prepared for a guerrilla existence. She's used up her last resources."

"You reckon she's quantum-jumpin' already?"

"I don't know. But I do think we should force her to take a drink, to put her to sleep."

"Hm." Tom glanced at the dark head, bent over some arithmetical calculations. "Could be. But no. Let her do what she chooses. She hasn't bubbled her lips yet, has she? And — we are the free people."

He went on with Dagny in a rather hopeless discussion of possibilities open to them. Once they were interrupted, when Yasmin asked if he had a trigonometric slide rule. No, he didn't. "I suppose I can approximate the function with a series," she said, and returned to her labors.

Has she really gone gollywob-ble? Tom wondered. Or is she just soothin' herself with a hobby?

Half an hour later, Yasmin spoke again. "I have the solution."

"To what?" Tom asked, a little muzzily after numerous gulps from the bottle. They distilled potent stuff in Hanno. "Our problem?"

"Oh, no, my lord. I couldn't — I mean, I am nobody. But I did study science, you remember, and . . . and I assumed that if you and Lady Dagny said this was a young system, you must be right, you have traveled so widely. But it isn't."

"No? What're you aimed at?"

"It doesn't matter, really. I'm being an awful picky little nuisance. But this *can't* be a young system. It has to be old."

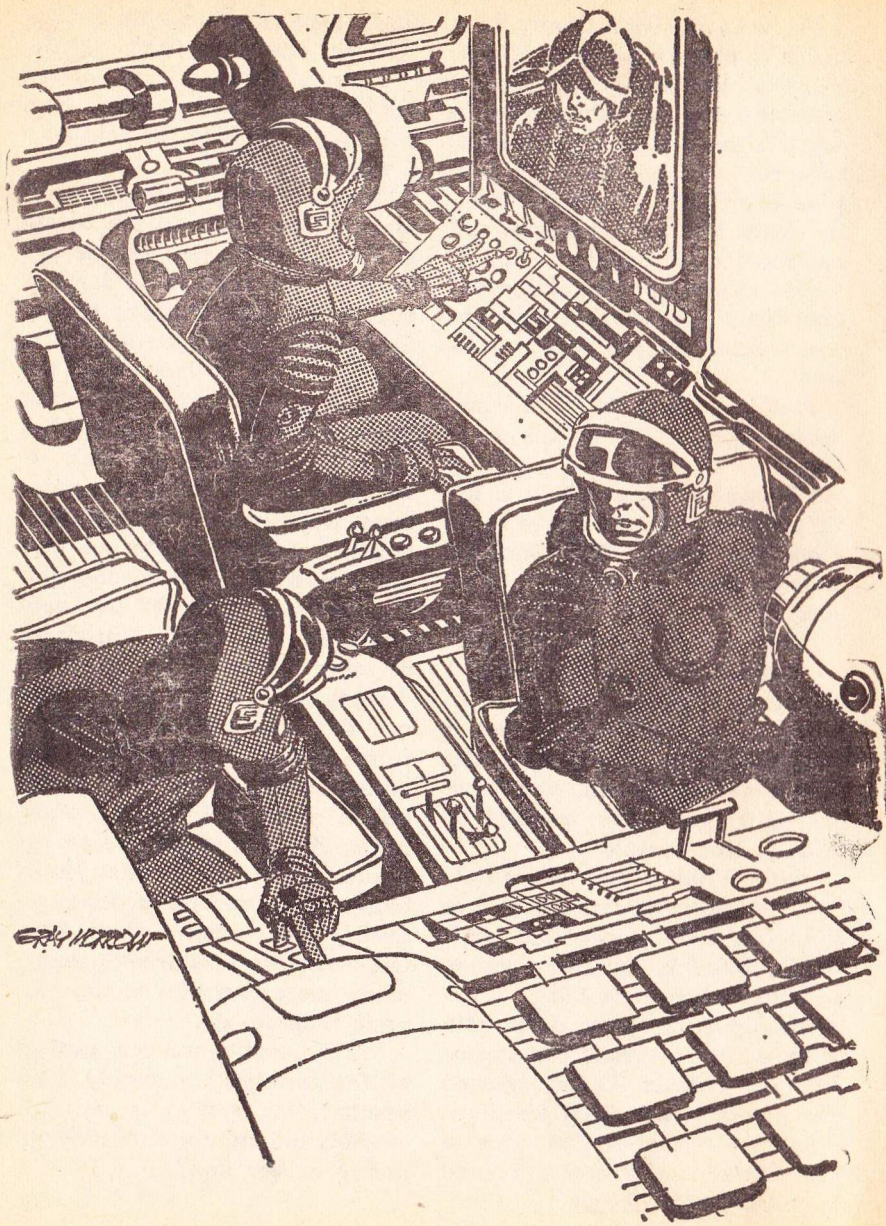
Tom put the bottle down with a thud that overrode the storm-yammer outside. Dagny opened her mouth to ask what was happening. He shushed her. Out of the shadows across his scarred

face, the single eye blazed blue. "Go on," he said, most quietly.

Yasmin faltered. She hadn't expected any such reaction. But, encouraged by him, she said with a waxing confidence:

"From the known average distance of the sun, and the length of the planet's year, anyone can calculate the sun's mass. It turns out to be almost precisely one Sol. That is, it has the mass of a G₂ star. But it has twice the luminosity, and more than half again the radius, and the reddish color of a late G or early K type. You thought those paradoxes were due to a strange composition. I don't really see how that could be. I mean, any star is something like 98 per cent hydrogen and helium. Variations in other elements can affect its development some, but surely not this much. Well, we know from Nikean biology that this system must be at least a few billion years old. So the star's instability cannot be due to extreme youth. Any solar mass must settle down on the main sequence far quicker than that. Otherwise we would have many, many more variables in the universe than we do.

"And besides, we can explain all the paradoxes so simply if we assume this system is old. Incredibly old, maybe almost as old as the galaxy itself."



“Belay!” Tom exclaimed, though not loudly. “How could this planet have this much atmosphere after so long a time? Or any? Don’t sunlight kick gases into space? And Nike hasn’t got the gravity to nail molecules down for good. Half a standard gee; and the potential is even poorer, the field strength dropping off as fast as it does.”

“But my lord,” Yasmin said, “an atmosphere comes from within a planet. At least, it does for the smaller planets, that can’t keep their original hydrogen like the Jupiter types. On the smaller worlds, gas gets forced out of mineral compounds. Vulcanism and tectonism provide the heat for that, as well as radioactivity. But the major planetological forces originate in the core. And a core originates because the heavier elements, like iron, tend to migrate toward the center. We know Nike has some endowment of those. Perhaps more, even, than the average planet of its age.

“Earth-sized planets have strong gravity. The migration is quick. The core forms in their youth. But Mars-sized worlds . . . the process has to be slow, don’t you think? So much iron combines first in surface rocks that they are red. Nike shows traces of this still today. The midget planets can’t outgas more than a wisp until their old

age, when a core finally has taken shape.”

Tom shook his head in a stunned fashion. “I didn’t know. I took for granted — I mean, well, every Mars-type globe I ever saw or heard of had very little air — I reckoned they’d lost most o’ their gas long ago.”

“There are no extremely ancient systems in the range that your travels have covered,” Yasmin deduced. “Perhaps not in the whole Imperial territory. They aren’t common in the spiral arms of the galaxy, after all. So people never had much occasion to think about what they must be like.”

“Uh, what you been sayin’, this theory . . . you learned it in school?”

“No. I didn’t major in astronomy, just took some required basic courses. It simply appeared to me that some such idea is the only way to explain this system we’re in.” Yasmin spread her hands. “Maybe the professors at my university haven’t heard of the idea either. The truth must have been known in Imperial times, but it could have been lost since, not having immediate practical value.” Her smile was sad. “Who cares about pure science any more? What can you buy with it?”

“Even the original colonists on Nike — Well, to them the fact

must have been interesting, but not terribly important. They knew the planet was so old that it had lately gained an atmosphere and oxygen-liberating life. So old that its sun is on the verge of becoming a red giant. Already the hydrogen is exhausted at the core, the nuclear reactions are moving outward in a shell, the photosphere is expanding and cooling while the total energy output rises. But the sun won't be so huge that Nike is scorched for — oh, several million years. I suppose the colonists appreciated the irony here. But on the human time-scale, what difference did it make? No wonder their descendants have forgotten and think, like you, this has to be a young system."

Tom caught her hands between his own. "And . . . that's the reason . . . the real reason the sun's so rambunctious?" he asked hoarsely.

"Why, yes. Red giants are usually variable. This star is in a transition stage, I guess, and hasn't 'found' its period yet." Yasmin's smile turned warm. "If I have taken your mind off your troubles, I am glad. But why do you care about the aspect of this planet ten megayears from now? I think best I do try to sleep, that I may help you a little tomorrow."

Tom gulped. "Kid," he said,

"you don't know your own strength."

"What's she been talking about?" Dagny demanded.

Tom told her. They spent the rest of that night laying plans.

XII

Now and then a mid-morning sunbeam struck coppery through the fog. But otherwise a wet, dripping, smoking mystery enclosed the barge. Despite its chill, Tom was glad. He didn't care to be interrupted by a strafing attack.

To be sure, the air force might triangulate on the radio emission of his ruined plane and drop a bomb. However —

He sat in the cockpit, looked squarely into the screen, and said, "This is a parley. Agreed?"

"For the moment." Karol Weyer gave him a smoldering return stare. "I talked with Fish Aran."

"And he made it clear to you, didn't he, about the lingo scramble? How often your Anglic and mine use the same word different? Well, let's not keep on with the farce. If anybody thinks 'tother's said somethin' bad, let's call a halt and thresh out what was intended. Aye?"

Weyer tugged his beard. His countenance lost none of its sternness. "You have yet to prove

your good faith," he said. "After what harm you worked —"

"I'm ready to make that up to you. To your whole planet."

Weyer cocked a brow and waited.

"S'pose you give us what we need to fix our ship," Tom said. "Some of it might be kind of expensive — copper and silver and such, and handcrafted because you haven't got the dies and jigs — but we can make some gold payment. Then let us go. I, or a trusty captain o' mine, will be back in a few months . . . uh, a few thirty-day periods."

"With a host of friends to do business?"

"No. With camarados to 'change. Nike lived on trade under the Terran Empire. It can once more."

"How do I know you speak truth?"

"Well, you'll have to take somethin' on my word. But listen. Kind of a bad storm last night, no? Did a lot o' damage, I'll bet. How much less would've been done if you'd been able to predict it? I can make that possible." Tom paused before adding cynically, "You can share the information with all Nike, or keep it your national secret. Could be useful, if you feel like maybe the planet should have a really strong Emperor, name of Weyer, for instance."

A TRAGEDY OF ERRORS

The Engineer leaned forward till his image seemed about to jump from the screen. "How is this?"

Tom related what Yasmin had told him. "No wonder your solar meteorologists never get anywhere," he finished. "They're usin' exactly the wrong mathematical model."

Weyer's eyes dwelt long upon Tom. "Are you giving this information away in hopes of my good will?" he said.

"No. As a free sample, to shake you loose from your notion that every chap who drops in from space is necessarily a hound o' hell. And likewise this. Camarado Weyer, your astronomers'll tell you my wife's idea makes sense. They'll be right glad to hear they've got an old star. But they'll need many years to work out the details by themselves. You know enough science to realize that, I'm sure. Now I can put you in touch with people that *already* know the details — that can come here, study the situation for a few weeks, and predict your weather like dice odds.

"That's my hole card. And you can only benefit by helpin' us leave. Don't think you can catch us and beat what we know out of us. First, we haven't got the information. Second, we'll die before we become slaves, in any

meanin' o' the word. If it don't look like we can get killed fightin' the men you send to catch us, why, we'll turn on our weapons on ourselves. Then all you've got is a spaceship that to you is nothin' but scrap metal."

Weyer drew a sharp breath. But he remained cautious. "This may be," he said. "Nonetheless, if I let you go, why should you bring learned people back to me?"

"Because it'll pay. I'm a trader and a warlord. The richer my markets, the stronger my allies, the better off I am." Tom punched a forefinger at the screen. "Get rid o' that conditioned reflex o' yours and think a bit instead. You haven't got much left that's worth anybody's lootin'. Why should I bother returnin' for that purpose? But your potential, that's somethin' else entirely. Given as simple a thing as reliable weather forecasts — you'll save, in a generation, more wealth than the 'friends' ever destroyed. And this's only one for instance o' what the outside universe can do for you. Man, you can't afford not to trust me!"

They argued, back and forth, for a long time. Weyer was intrigued but wary. Granted, Yasmin's revelation did provide evidence that Tom's folk were not utter savages like the last visitors from space. But the evidence

wasn't conclusive. And even if it was, what guarantee existed that the strangers would bring the promised experts?

The wrangle ended as well as Tom had hoped, in an uneasy compromise. He and his wives would be brought to Sea Gate. They'd keep their sidearms. Though guarded, they were to be treated more or less as guests. Discussions would continue. If Weyer judged, upon better acquaintance, that they were indeed trustworthy, he would arrange for the ship's repair and release.

"But don't be long about makin' up your mind," Tom warned, "or it won't do us a lot o' good to come home."

"Perhaps," Weyer said, "you can depart early if you leave a hostage."

"You'll be all right?" Tom asked for the hundredth time.

"Indeed, my lord," Yasmin said. She was more cheerful than he, bidding him good-by in the Engineer's castle. "I'm used to their ways by now, comfortable in this environment — honestly! And you know how much in demand an outworlder is."

"That could get dull. I won't be back too bloody soon, remember. What'll you do for fun?"

"Oh," she said demurely, "I

plan to make arrangements with quite a number of men."

"Stop teasin' me." He hugged her close. "I'm goin' to miss you."

And so Roan Tom and Dagny Od's-daughter left Nike.

He fretted somewhat about Yasmin, while *Firedrake* made the long flight back to Kraken, and while he mended his fences there, and while he voyaged back with his scholars and merchants. Had she really been joking, at the very last? She'd for sure gotten almighty friendly with Yanos Aran, and quite a few other young bucks. Tom was not obsessively jealous, but he could not afford to become a laughing stock.

He needn't have worried. When he made his triumphant landing at Sea Gate, he found that Yasmin had been charming, plausible, devious and, in short, had convinced several feudal

lords of Nike that it was to their advantage that the rightful Shah be restored to the throne of Sasaniana. They commanded enough men to do the job. If the Krakeners could furnish weapons, training, and transportation —

Half delighted, half stunned, Tom said, "So this time we had a lingo scramble without some-thin' horrible happenin'? I don't believe it!"

"Happy endings do occur," she murmured, and came to him. "As now."

And everyone was satisfied except, maybe, some few who went to lay a wreath upon a certain grave.

In the case of the King and Sir Christopher, however, a compliment was intended. A later era would have used the words "awe-inspiring, stately and ingeniously conceived."

—POUL ANDERSON

Science-Fiction Stories From The Planet Earth!

Something new in science fiction! A brand-new magazine devoted to bringing you the best in science fiction from other countries — a "must" for collectors, and reading pleasure for any science-fiction reader! Stories from —

**THE NETHERLANDS • FRANCE • ENGLAND
GERMANY • ITALY • THE SOVIET UNION**

*Watch for the new INTERNATIONAL SCIENCE FICTION —
on sale at all good newsstands now!*

The Planet Slummers

by TERRY CARR & ALEXEI PANSHIN

What a day for collectors — a whole planet to buy and own!



When Dave and Annie bought the Edsel they didn't stop to wonder about things like gas consumption, wear-and-tear on the springs over the years, or anything else practical. Dave solemnly kicked both front tires, then walked around the back and saw the *Dewey for President* sticker and said immediately. "We'll take it." How could anyone resist?

And even when they drove to England on their vacation and began to discover the inconveniences of a fifteen-year-old, nouveau-classic car, they didn't really mind. After all, it was positive —

"Oh, wait!" said Annie. "Look, look!"

They were passing a white clapboard church which stood comfortably under shaggy evergreens softly lit by strings of yellow lights. The gravel yard was full of cars, and there was a hand-drawn sign of a tree out front saying:

CHARITY BAZAAR
RUMMAGE SALE
TONIGHT

"Let's stop," Annie said. "They might have — anything."

"Right," Dave said and turned into the parking area. "A left-

handed anything with a secret decoder on the back."

They got out of the car. Dave's head was shaved smooth, and he wore bell-bottom trousers — they were the style in his circle. Annie had a decal on her right arm that said "Arm." She had a decal on her left arm that said "Another Arm." She was wearing a multicolored net dress. That was style, too.

Dave didn't know what he was expecting inside, but then there it was, a treasure house of beautiful, wonderful junk, laid out on tables, hanging on racks, standing proud and free. Not like the picture of Mussolini that hung in their living room at home — Mussolini with his arm lifted and a balloon saying, "I use deodorant. I'm not afraid." That was just a gagged-up picture, but these were *things*, a gas in themselves.

Like, my God, there was an upright Atwater-Kent radio and a black china turtle fifteen inches long, and a jelly-bag cap with a red tassel, and a four-color map of Storyland. He called Annie over to look at that, and she laughed in delight, a kind of Debbie Reynolds giggle that she'd picked up during the Fifties Festival at the New Yorker. The map's frame needed painting, but he put it with the bear-paw snowshoes he'd found. Snowshoes

under Mussolini would look great.

And suddenly there was a noise, and Dave turned, and an old woman was yanking this marvelous World War I uniform with the puttees and all out of Annie's hands. It was small enough that Annie could have cut it down for herself with almost no trouble.

"You can't have it," the woman said and held it behind her.

Annie just looked stunned.

A man, seeing the fuss, started toward them. The woman saw him and immediately appealed to him.

"Sheriff, they can't have this. I don't want it sold."

He looked tiredly at her and said, "What's the matter, Helen? You threw it in for sale."

But the woman looked at Annie and burst into tears and held the uniform all the tighter. Dave came up and took Annie's arm, the one that said "Another Arm."

"That's all right, Sheriff," he said. "We don't really want it."

Annie said, "But — "

Dave put pressure on her arm and turned her away. The woman was still crying, very softly, as if murmuring to herself. "We don't really want it," Dave said. "Let's just take the things we've found and leave."

Annie looked at the old woman,

hesitated, then nodded. Dave gathered up their finds and took them to the cashier's desk.

Outside, back on the road, the night was clear and cool and moonless. Dave and Annie were subdued, wondering about the old woman.

"What could *she* want with an old World War I uniform?" Annie asked. "We could have — "

"I don't know," Dave said and switched on the radio. On came the Sturm and Drang's dixie-rock version of *Lili Marlene*, and they forgot about the woman as they sang along, Dave whistling the kazoo part.

Suddenly, unaccountably, the radio faded. The lights dimmed, too, which was odd, and the motor sputtered. And then everything went completely dead, motor, lights, radio. They continued to roll down the road, and Dave's eyes had to make an adjustment to the dark. He touched the brakes, and they came to a silent halt.

They got out, and Dave was about to lift the hood — uselessly, ritualistically, since he didn't know anything about engines — when he saw the thing silently moving toward them across the sky. It looked like a fantastic cross between a World War I airplane and a basketball.

It settled down beside the road,

and only then did Dave realize how big it was; its wings hung over the road, blocking the lane in front of them.

On the front of the basketball was something that looked like an elevator shaft. A door at the bottom of it split in the middle and slid back on either side.

"Dave . . .?" said Annie.

"I don't believe it," he said.

He reached through the open window of the car and pulled out a snowshoe to defend himself and Annie.

Then out of the door of the spaceship came rolling two dark furry balls about four feet in diameter. They rolled down the road toward the car.

As they came closer, Dave could hear that the balls were laughing — ordinary, very human, jolly laughter. But there was no sound. It was simply in his head, but nonetheless it got louder as they approached.

The one on the left was saying, "What a marvelous road! Imagine, it needs a line to tell it where to go."

Dave said, "We're friendly." His voice cracked a little.

The other ball said, "It vocalizes! Oh, delightful! Beautiful! Say something else."

"Yes yes, keep vocalizing! Do you do it all the time, or is it some sort of cultural thing?"

"Cultural thing?" said Dave;

and he looked bewilderedly at Annie. She was staring open-mouthed at the creatures as they rolled toward them. She began to edge behind him.

"Maybe they're acultural," said the first ball. "Primitive and unspoiled! Oh, can you imagine? They'll never believe us at home."

"I can hardly believe it myself, and I'm here!" said the other. The two balls had rolled right up to them, and they sat pulsating in front of them.

"What do you want?" Dave asked, hefting the snowshoe and feeling mortified as he realized what a ridiculous weapon it was.

"It still talks out loud," said the first ball, and suddenly it rolled up against him and changed form, flowing around him.

"Hey!" Dave said. He tried to struggle, but even though the creature's touch felt light and fuzzy he couldn't work himself loose.

"Marvelous, marvelous!" said the ball. "It's got so many angles!"

"Damn it, let me go!" Dave said. He raised his snowshoe high and brought it down against the creature. The snowshoe gave a *whanggggg* and rebounded.

Both of the balls laughed in surprise, and the one holding Dave released him. It rolled

THE PLANET SLUMMERS

backward and then around in little circles, chuckling, "Beautiful, oh, *beautiful!* Do you think they can be trained to flop around like that on command?"

"Dave, what are they?" Annie asked faintly, backing away.

"The other one vocalizes too," said the first ball. "It sounds different, though. Which one do you like best?"

"Oh, they're *both* just wonderful! Couldn't we take them both? Couldn't we?"

"Take us?" said Annie. "Oh, Dave . . ."

"Let's try the other one," said the first ball, and it shot forward before Annie could even turn to run and flowed around her.

"Oh, this one's bumpier! *Much* bumpier!"

"Dave!" Annie screamed, struggling frantically against the creature, striking her fists awkwardly against its round fur.

"This one does it too! This one does it too!"

Dave threw down the snowshoe and attacked the creature with feet and hands. He kicked and felt his foot sink into soft fuzziness; he pounded both fists into it, but it was like hitting dandelion fluff, like beating on air. But the creature flowed back into its ball-form and bounced up and down, chuckling.

"They're *great!* I've never seen

anything that's quite like them!"

"Oh, couldn't we please take them both? A pair of them would be completely marvelous! *Think of it!*"

"I know, but we don't have enough room. If we found something funnier somewhere, we'd just have to throw one out. No, we'll have to choose just one of them."

"Annie!" said Dave. "Run for the car! Go on — get going!"

"But — "

"*Run for it!*" he said, and he threw himself bodily at the nearer of the two balls.

He felt the impact when he hit, but it wasn't solid. The creature seemed to flow around him like water — no, like spray, like fog — and as Dave rolled over to get to his feet he saw both creatures rolling pellmell after Annie, who was trying to make it to the car. He got up and ran after them, but they'd already caught Annie.

"Dave, help me!" Annie was being carried toward the spaceship, and as Dave tried to get to her the second ball flowed around his feet, tripping him.

"*Dave!*" Annie screamed.

He tried to get up, but the second creature bounced up in front of him and settled on his head, flowing down over his face, blinding him. He heard giggling all around him.

"Oh, look, look! Are you *sure* we can't take both?"

"Only one. Come on; I have this one in the compartment."

The creature withdrew itself from Dave's head.

Neither Annie nor the first creature was visible.

The second ball reached the open door well before Dave and bounced inside. The doors slid shut behind it. Dave slammed against solid metal, tried desperately to pry the doors apart. He was crying, the tears running down his face. He was still trying to get his fingers into the door when the ship took off.

He stared, panting and gasping, as it soared away into the night sky.

He stood silent and numb, not knowing what to do. Bob Harrison had once had a bandicoot which he'd bought on impulse just because of the name. Eventually it had died or Bob had gotten rid of it. Anyway, he didn't have it any more. Dave wondered what would happen to Annie.

The headlights of the car flickered on behind him, and he whirled, startled. In a few seconds the radio started to play, sounding out of place in the empty night. It was Society's Children singing *Inside-Out Banana*.

— Terry Carr
& Alexei Panshin

GALAXY



CRAZY ANNAOJ

by FRITZ LEIBER

*Crazy Annaoj was in love . . .
and proved it throughout her
incredibly long-lasting life!*

Two things will last to the end of time, at least for the tribes of Western Man, no matter how far his spaceships rove. They are sorcery and romantic love, which come to much the same thing in the end.

For the more that becomes possible to man, the more wildly he yearns for the impossible, and runs after witches and sorcerers to find it.

While the farther he travels, to the star-ribboned rim of the Milky Way and beyond, the more he falls in love with far-off things and yearns for the most distant and unattainable beloved.

Also, witchcraft and sorcery are games it takes two to play; the witch or sorcerer and his or her client.

The oldest and wealthiest man in the Milky Way and its loveliest girl laughed as they left the gypsy's tent pitched just outside the jewel-pillared spacefield of the most exclusive pleasure planet between the galaxy's two dizzily-whirling, starry arms. The gypsy's black cat, gliding past them back into the tent, only smiled cryptically.

A private, eiderdown-surfaced slidewalk, rolled out like the red carpet of ancient cliché, received the begemmed slippers of the honeymooning couple and carried them toward the most diamond-glittering pillar of them all, the private hyperspace yacht *Eros* of the galactic shipping magnate Piliph Foelitsack and his dazzling young bride Annaoj.

He looked 21 and was 20 times that old. Cosmetic surgery and organ replacements and implanted featherweight power-prosthetics and pacemakers had worked their minor miracles. At any one time there were three physicians in the *Eros* listening in on the functionings of his body.

She looked and was 17, but the wisdom in her eyes was that of Eve, of Helen of Troy, of Cleopatra, of Forzane. It was also the wisdom of Juliet, of Iseult, of Francesca da Rimini. It was a radiant but not a rational wisdom, and it had a frightening ingredient that had been known to make nurses and lady's maids and the wives of planetary presidents and systemic emperors shiver alike.

Together now on the whispering white slidewalk, planning their next pleasures, they looked the pinnacle of cosmic romance fulfilled — he dashing and handsome and young, except that there was something just a shade careful about the way he carried himself; she giddy and slim with a mind that was all sentimental or amorous whim, except for that diamond touch of terrifyingly fixed white light in her most melting or mischievous glance. Despite or perhaps because of those two exceptions, they seemed more akin to the sparkling stars above them than even to the

gorgeous pleasure planet around them.

He had been born in a ghetto on Andvari III and had fought his way up the razor-runged ladder of economic power until he owned fleets of hyperspace freighters, a dozen planets, and the governments of ten times that many.

She had been born in a slum on Aphrodite IV, owning only herself. It had taken her six Terran months to bring herself to the attention of Piliph Foelitsack by way of three beauty contests and one bit part in a stereographic all-senses sex-film, and six more months to become his seventeenth wife instead of one more of his countless casual mistresses.

The beepers of social gossip everywhere had hinted discreetly about the infatuation-potential of fringe senile megabillionaires and the coldly murderous greed of teenage starlets. And Annaoj and Piliph Foelitsack had smiled at this gossip, since they knew they loved each other and why: for their matching merciless determination to get what they wanted and keep it, and for the distance that had been between them and was no longer. Of the two, Annaoj's love was perhaps the greater, accounting for the icy, fanatic glint in her otherwise nymphet's eyes.

They had laughed on leaving the drab tent of the gypsy fortuneteller, who herself owned a small, beat-up spaceship covered with cabalistic signs, because the last thing she had said to the shipping king, fixing his bright youthful eyes with her bleared ones, had been, "Piliph Foelitsack, you have journed far, very far, for such a young man, yet you shall make even longer jour-nies hereafter. Your past travels will be trifles compared to your travels to come."

Both Piliph and Annaoj knew that he had been once to the Andromeda Galaxy and twice to both Magellanic Clouds, though they had not told the silly old gypsy so, being despite their iron wills kindly lovers, still enamored of everything in the cosmos by virtue of their mutual love. They also knew that Piliph had determined to restrict his jauntings henceforth to the Milky Way, to keep reasonably close to the greatest geriatric scientists, and they were both reconciled, at least by day, to the fact that despite all his defenses, death would come for him in ten or twenty years.

Yet, although they did not now tell each other so, the gypsy's words had given a spark of real hope to their silly night-promises under the stars like gems and the galaxies like puffs of powder

that: "We will live and love forever." Their loveliest night had been spent a hundred light-years outside the Milky Way — it was to be Piliph's last extragalactic venture — where the *Eros* had emerged briefly from hyperspace and they had lolled and luxuriated for hours under the magnifying crystal skylight of the Master Stateroom, watching only the far-off galaxies, with all of their moiling, toiling home-galaxy out of sight beneath the ship.

But now, as if the cryptic universe had determined to give an instant sardonic rejoinder to the gypsy's prediction, the eiderdown slidewalk had not murmured them halfway to the *Eros* when a look of odd surprise came into Piliph's bright youthful eyes and he clutched at his heart and swayed and would have toppled except that Annaoj caught him in her strong slender arms and held him to her tightly.

Something had happened in the body of Piliph Foelitsack that could not be dealt with by all its pacemakers and its implanted and remotely controlled hormone dispensers, nor by any of the coded orders frantically tapped out by the three physicians monitoring its organs and systems.

It took thirty seconds for the ambulance of the *Eros* to hurtle out from the yacht on a track

paralleling the slidewalk and brake to a bone-jolting silent halt.

During that half minute Annaoj watched the wrinkles come out on her husband's smooth face, like stars at nightfall in the sky of a planet in a star cluster. She wasted one second on the white-hot impulse to have the gypsy immediately strangled, but she knew that the great aristocrats of the cosmos do not take vengeance on its vermin and that in any event she had far more pressing business with which to occupy herself fully tonight. She clasped the pulseless body a trifle more tightly, feeling the bones and prosthetics through the layer of slack flesh.

In two minutes more, in the surgery of the *Eros*, Philip's body was in a dissipatory neutrino field, which instantly sent all its heat packing off at the speed of light, but in particles billions of times slimmer than the photons of heat, so that the body was supercooled to the temperature of frozen helium without opportunity for a single disruptive crystal to form.

Then without consulting the spacefield dispatching station or any other authority of the pleasure planet, Annaoj ordered the *Eros* blasted into hyperspace and driven at force speed to the galaxy's foremost geriatrics clinic on Menkar V, though it lay half-

way across the vast Milky Way.

During the anxious, grueling trip, she did only one thing quite out of the ordinary. She had her husband's supercooled body sprayed with a transparent insulatory film, which would adequately hold its coolth for a matter of days, and placed in the Master Stateroom. Once a week the body was briefly returned to the dissipatory neutrino field, to bring its temperature down again to within a degree of zero Kelvin.

Otherwise she behaved as she always had, changing costume seven times a day, paying great attention to her coiffure and to her cosmetic and juvenation treatments, being idly charming to the officers and stewards.

But she spent hours in her husband's office, studying his business and working to the edge of exhaustion his three secretaries. And she always took her small meals in the Master Stateroom.

On Menkar V they told her, after weeks of test and study, that her husband was beyond reawakening, at least at the present state of medical skill, and to come back in ten years. More would be known then.

At that, Annaoj nodded frigidly and took up the reins of her husband's business, conducting them entirely from the *Eros* as

it skipped about through space and hyperspace. Under her guidance the Foelitsack economic empire prospered still more than it had under its founder. She successfully fought or bought off the claims of Philip's eleven surviving divorced wives, a hundred of his relatives and a score of his prime managers.

She regularly returned to Menkar V and frequently visited other clinics and sought out famous healers. She became expert at distinguishing the charlatans from the dedicated, the conceited from the profound. Yet at times she also consulted sorcerers and wizards and witchdoctors. Incantations in exotic tongues and lights were spoken and glowed over Philip's frigid form, extra-terrestrial stenches filled the surgery of the *Eros*, and there were focused there the meditations of holy creatures which resembled man less than a spider does — while three or four fuming yet dutiful doctors of the *Eros*' dozen waited for the crucial moment in the ceremony when they would obediently work a five-second reversal of the neutrino field to bring the body briefly to normal temperature to determine whether the magic had worked.

But neither science nor sorcery could revive him.

She bullied many a police

force and paid many a detective agency to hunt down the gypsy with the black cat, but the old crone and her runic spaceship had vanished as utterly as the vital spark in Philip Foelitsack. No one could tell whether Annaoj really believed that the gypsy had had something to do with the striking down of her husband and might be able to bring him alive, or whether the witch had merely become another counter in the sorcery game of which Annaoj had suddenly grown so fond.

In the course of time Annaoj took many lovers. When she tired of one, she would lead him for the first time into the Master Stateroom of the *Eros* and show him the filmed and frosty body of her husband and send him away without as much as a parting touch of her fingertips and then lie down beside the cold, cold form under the cold, cold stars of the skylight.

And she never once let another woman set foot in that room.

Not the humblest, nor ugliest maid. Not the greatest sculptress of the Pleiades. Not the most feared and revered sorceress in the Hyades.

She became known as Crazy Annaoj, though no one thought it to her face or whispered it within a parsec of her.

When she still looked 17, though her age was 70 times that — for the sciences of geriatrics and juvenation had progressed greatly since her husband's collapse — she felt an unfamiliar weariness creeping on her and she ordered the *Eros* to make once more for Menkar V at force speed.

The *Eros* never emerged from hyperspace. Most say she was lost there, scuttled by Annaoj as she felt death coming on her. A few maintain she exited into altogether another universe,

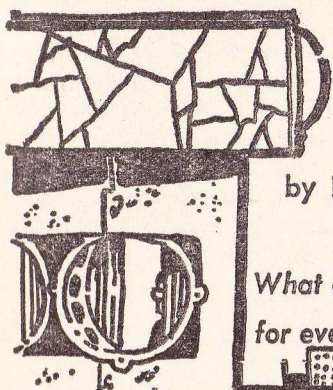
where Crazy Annaoj is still keeping up her search for the healer who can revive Piliph, or playing her game with the doctors and witchdoctors and with her lovers.

But in any case the gypsy's prediction was fulfilled, for in the course of Annaoj's voyages, the body of Piliph Foelitsack had been carried twice to Andromeda and also to two galaxies in Virgo, three in Leo and one in Coma Berenices.

—FRITZ LEIBER

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of October 23, 1962; Section 4369, Title 39, United States Code). 1. Date of filing: October 1, 1967. 2. Title of Publication: *Galaxy Magazine*. 3. Frequency of issue: Bi-monthly. 4. Location of known offices of publication: 421 Hudson Street, New York, New York 10014. 5. Location of headquarters or general business offices of the publishers: 421 Hudson Street, New York, New York 10014. 6. Names and addresses of the publisher, editor and managing editor. Publisher: Robert M. Guinn, 421 Hudson Street, New York, New York 10014. Editor: Frederik Pohl, 421 Hudson Street, New York, New York 10014. Managing Editor: None. 7. Owner: Galaxy Publishing Corporation, 421 Hudson Street, New York, New York 10014; Robert M. Guinn (sole stockholder), 421 Hudson Street, New York, New York 10014. 8. Known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None. 9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear on the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation. 10. A. Total no. copies printed (net press run). Average no. copies each issue during preceding 12 months: 108,000. Single issue nearest to filing date: 108,500. B. Paid circulation: 1. Sales through dealers and carriers, street vendors and counter sales. Average no. copies each issue during preceding 12 months: 67,800; Single issue nearest filing date: 67,900. 2. Mail subscriptions: Average no. copies each issue during preceding 12 months, 6,900; Single issue nearest to filing date, 6,950. C. Total paid circulation: Average no. copies each issue during preceding 12 months, 74,700; Single issue nearest to filing date, 74,850. D. Free distribution (including samples) by mail, carrier or other means: Average no. copies each issue during preceding 12 months, 50; Single issue nearest to filing date, 50. E. Total distribution (sum of C and D): Average no. copies each issue during preceding 12 months, 74,750; Single issue nearest to filing date, 74,900; F. Office use, left-over, unaccounted, spoiled after printing: Average no. copies each issue during preceding 12 months, 33,250; Single issue nearest to filing date, 33,600. G. Total (sum of E and F—should equal net press run shown in A): Average no. copies each issue during preceding 12 months, 108,000. Single issue nearest to filing date, 108,500. I certify that the statements made by me are correct and complete. Robert M. Guinn, Publisher.

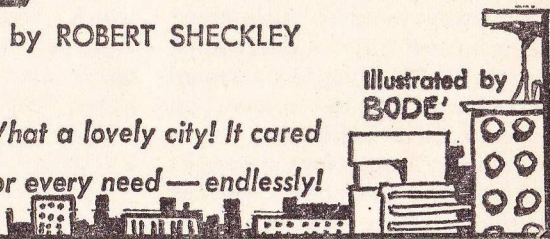
Street of Dreams, Feet of Clay



by ROBERT SHECKLEY

*What a lovely city! It cared
for every need — endlessly!*

Illustrated by
BODE'



I

Carmody had never really planned to leave New York. Why he did so is inexplicable. A born urbanite, he had grown accustomed to the minor inconveniences of metropolitan life. His snug apartment on the 290th floor of Levitrack Towers on West Ninety-Ninth Street was nicely equipped in the current "Spaceship" motif. The windows were double-sealed in tinted lifetime plexiglass, and the air ducts worked through a blind baffle filtration system which sealed automatically when the Combined Atmosphere Pollution Index reached 999.8 on the Con

Ed scale. True, his oxygen-nitrogen air recirculation system was old, but it was reliable. His water purification cells were obsolete and ineffective; but then, nobody drank water anyhow.

Noise was a continual annoyance, unstoppable and inescapable. But Carmody knew that there was no cure for this, since the ancient art of soundproofing had been lost. It was urban man's lot to listen, a captive audience, to the arguments, music and watery gurglings of his adjacent neighbors. Even this torture could be alleviated, however, by producing similar sounds of one's own.

Going to work each day en-

tailed certain dangers; but these were more apparent than real. Disadvantaged snipers continued to make their ineffectual protests from rooftops and occasionally succeeded in potting an unwary out-of-towner. But as a rule, their aim was abominable. Additionally, the general acceptance of lightweight personal armor had taken away most of their sting, and the sternly administered State law forbidding the personal possession of surplus cannon had rendered them ineffectual.

Thus, no single factor can be adduced for Carmody's sudden decision to leave what was generally considered the world's most exciting megapolitan agglomeration. Blame it on a vagrant impulse, a pastoral fantasy, or on sheer perversity. The simple, irreducible fact is, one day Carmody opened his copy of the *Daily Times-News* and saw an advertisement for a model city in New Jersey.

"Come live in Bellwether, the city that cares," the advertisement proclaimed. There followed a list of utopian claims which need not be reproduced here.

"Huh," said Carmody, and read on.

Bellwether was within easy commuting distance. One simply drove through the Ulysses S. Grant Tunnel at 43rd Street, took the Hoboken Shunt Sub-

road to the Palisades Interstate Crossover, followed that for 3.2 miles on the Blue-Charlie Sorter Loop that led onto U.S. 5 (The Hague Memorial Tollway), proceeded along that a distance of 6.1 miles to the Garden State Supplementary Access Service Road (Provisional), upon which one tended west to Exit 1731A, which was King's Highbridge Gate Road, and then continued along that for a distance of 1.6 miles. And there you were.

"By jingo," said Carmody, "I'll do it."

And he did.

II

King's Highbridge Gate Road ended on a neatly trimmed plain. Carmody got out of his car and looked around. Half a mile ahead of him he saw a small city. A single modest signpost identified it as Bellwether.

This city was not constructed in the traditional manner of American cities, with outliers of gas stations, tentacles of hot-dog stands, fringes of motels and a protective carapace of junkyards; but rather, as some Italian hill towns are fashioned, it rose abruptly, without physical preamble, the main body of the town presenting itself at once and without amelioration.

Carmody found this appealing. He advanced into the city itself.

Bellwether had a warm and open look. Its streets were laid out generously, and there was a frankness about the wide bay windows of its store-fronts. As he penetrated deeper, Carmody found other delights. Just within the city he entered a piazza, like a Roman piazza, only smaller; and in the center of the piazza there was a fountain, and standing in the fountain was a marble representation of a boy with a dolphin, and from the dolphin's mouth a stream of clear water issued.

"I do hope you like it," a voice said from behind Carmody's left shoulder.

"It's nice," Carmody said.

"I constructed it and put it there myself," the voice told him. "It seemed to me that a fountain, despite the antiquity of its concept, is esthetically functional. And this piazza, with its benches and shady chestnut trees, is copied from a Bolognese model. Again, I did not inhibit myself with the fear of seeming old-fashioned. The true artist uses what is necessary, be it a thousand years old or one second new."

"I applaud your sentiment," Carmody said. "Permit me to introduce myself. I am Edward Carmody." He turned, smiling.

STREET OF DREAMS, FEET OF CLAY

But there was no one behind his left shoulder, or behind his right shoulder, either. There was no one in the piazza, nobody at all in sight.

"Forgive me," the voice said. "I didn't mean to startle you. I thought you knew."

"Knew what?" Carmody asked.

"Knew about me."

"Well, I don't," Carmody said. "Who are you and where are you speaking from?"

"I am the voice of the city," the voice said. "Or to put it another way, I am the city itself, Bellwether, the actual and veritable city, speaking to you."

"Is that a fact?" Carmody said sardonically. "Yes," he answered himself, "I suppose it is a fact. So all right, you're a city. Big deal!"

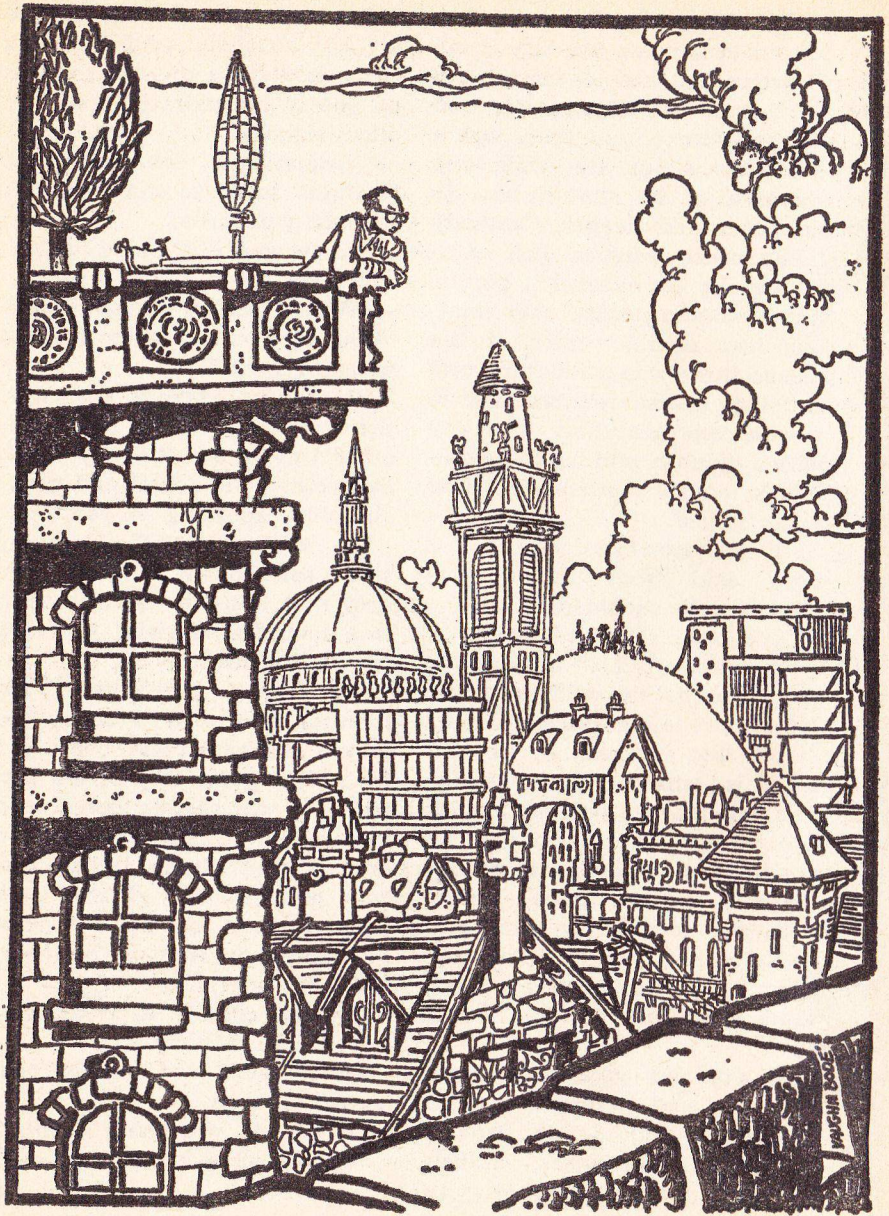
He turned away from the fountain and strolled across the piazza like a man who conversed with cities every day of his life, and who was slightly bored with the whole thing. He walked down various streets and up certain avenues. He glanced into store windows and noted houses. He paused in front of statuary, but only briefly.

"Well?" the city of Bellwether asked after a while.

"Well what?" Carmody answered at once.

"What do you think of me?"

"You're okay," Carmody said.



"Only okay? Is that all?"

"Look," Carmody said, "a city is a city. When you've seen one, you've pretty much seen them all."

"That's untrue!" the city said, with some show of pique. "I am distinctly different from other cities. I am unique."

"Are you indeed?" Carmody said scornfully. "To me you look like a conglomeration of badly assembled parts. You've got an Italian piazza, a couple of Greek-type buildings, a row of Tudor houses, an old-style New York tenement, a California hot-dog stand shaped like a tug-boat and God knows what else. What's so unique about that?"

"The combination of those forms into a meaningful entity is unique," the city said. "These older forms are not anachronisms, you understand. They are representative styles of living, and as such are appropriate in a well wrought machine for living. Would you care for some coffee and perhaps a sandwich or some fresh fruit?"

"Coffee sounds good," Carmody said. He allowed Bellwether to guide him around the corner to an open-air cafe. The cafe was called O You Kid and was a replica of a Gay Nineties saloon, right down to the tiffany lamps and the cutglass chandelier.

STREET OF DREAMS, FEET OF CLAY

lier and the player piano. Like everything else that Carmody had seen in the city, it was spotlessly clean, but without people.

"Nice atmosphere, don't you think?" Bellwether asked.

"Campy," Carmody pronounced. "Okay if you like that sort of thing."

A foaming mug of cappuccino was lowered to his table on a stainless steel tray. Carmody sipped.

"Good?" Bellwether asked.

"Yes, very good."

"I rather pride myself on my coffee," the city said quietly. "And on my cooking. Wouldn't you care for a little something? An omelette, perhaps, or a soufflé?"

"Nothing," Carmody said firmly. He leaned back in his chair and said, "So you're a model city, huh?"

"Yes, that is that I have the honor to be," Bellwether said. "I am the most recent of all model cities; and, I believe, the most satisfactory. I was conceived by a joint study group from Yale and the University of Chicago, who were working on a Rockefeller fellowship. Most of my practical details were devised by M.I.T., although some special sections of me came from Princeton and from the RAND Corporation. My actual construction was a General Electric project,

and the money was procured by grants from the Ford and Carnegie Foundations, as well as several other institutions I am not at liberty to mention."

"Interesting sort of history," Carmody said, with hateful nonchalance. "That's a Gothic cathedral across the street, isn't it?"

"Modified Romanesque," the city said. "Also interdenominational and open to all faiths, with a designed seating capacity for three hundred people."

"That doesn't seem like many for a building of that size."

"It's not, of course. Designedly. My idea was to combine awesomeness with coziness."

"Where are the inhabitants of this town, by the way?" Carmody asked.

"They have left," Bellwether said mournfully. "They have all departed."

"Why?"

The city was silent for a while, then said. "There was a breakdown in city-community relations. A misunderstanding, really. Or perhaps I should say, an unfortunate series of misunderstandings. I suspect that rabble-rousers played their part."

"But what *happened*, precisely?"

"I don't know," the city said. "I really don't know. One day

they simply all left. Just like that! But I'm sure they'll be back."

"I wonder," Carmody said.

"I am convinced of it," the city said. "But putting that aside; why don't *you* stay here, Mr. Carmody?"

"I haven't really had time to consider it," Carmody said.

"How could you help but like it?" Bellwether said. "Just think — you would have the most modern, up-to-date city in the world at your beck and call."

"That does sound interesting," Carmody said.

"So give it a try, how could it hurt you?" the city asked.

"All right, I think I will," Carmody said.

He was intrigued by the city of Bellwether. But he was also apprehensive. He wished he knew exactly why the city's previous occupants had left.

At Bellwether's insistence, Carmody slept that night in the sumptuous bridal suite of the King George V Hotel. Bellwether served him breakfast on the terrace and played a brisk Hayden quartet while Carmody ate. The morning air was delicious. If Bellwether hadn't told him, Carmody would never have guessed it was reconstituted.

When he was finished, Carmody leaned back and enjoyed

the view of Bellwether's western quarter — a pleasing jumble of Chinese pagodas, Venetian foot-bridges, Japanese canals, a green Burmese hill, a Corinthian temple, a Californian parking lot, a Norman tower and much else besides.

"You have a splendid view," he told the city.

"I'm so glad you appreciate it," Bellwether replied. "The problem of style was argued from the day of my inception. One group held for consistency: a harmonious group of shapes blending into a harmonious whole. But quite a few model cities are like that. They are uniformly dull, artificial entities created by one man or one committee, unlike real cities."

"You're sort of artificial yourself, aren't you?" Carmody asked.

"Of course! But I do not pretend to be anything else. I am not a fake 'city of the future' or a mock-florentine bastard. I am a true agglutinated congeries. I am supposed to be interesting and stimulating in addition to being functional and practical."

"Bellwether, you look okay to me," Carmody said, in a sudden rush of expansiveness. "Do all model cities talk like you?"

"Certainly not. Most cities up to now, model or otherwise, never said a word. But their in-
STREET OF DREAMS, FEET OF CLAY

habitants didn't like that. It made the city seem too huge, too masterful, too soulless, too impersonal. That is why I was created with a voice and an artificial consciousness to guide it."

"I see," Carmody said.

"The point is, my artificial consciousness personalizes me, which is very important in an age of depersonalization. It enables me to be truly responsive. It permits me to be creative in meeting the demands of my occupants. We can reason with each other, my people and I. By carrying on a continual and meaningful dialogue, we can help each other to establish a dynamic, flexible and truly viable urban environment. We can modify each other without any significant loss of individuality."

"It sounds fine," Carmody said. "Except, of course, that you don't have anyone here to carry on a dialogue with."

"That is the only flaw in the scheme," the city admitted. "But for the present, I have you."

"Yes, you have me," Carmody said and wondered why the words rang unpleasantly on his ear.

"And, naturally, you have me," the city said. "It is a reciprocal relationship, which is the only kind worth having. But now, my dear Carmody, suppose I show you around myself. Then we can

get you settled in and regularized."

"Get me what?"

"I didn't mean that the way it sounded," the city said. "It simply is an unfortunate scientific expression. But you understand, I'm sure, that a reciprocal relationship necessitates obligations on the part of both involved parties. It couldn't very well be otherwise, could it?"

"Not unless it was a *laissez-faire* relationship."

"We're trying to get away from all that," Bellwether said. "*Laissez-faire* becomes a doctrine of the emotions, you know, and leads non-stop to *anomie*. If you will just come this way"

III

Carmody went where he was asked and beheld the excellencies of Bellwether. He toured the power plant, the water filtration center, the industrial park and the light industries section. He saw the children's park and the Odd Fellow's Hall. He walked through a museum and an art gallery, a concert hall and a theater, a bowling alley, a billiards parlor, a Go-Kart track and a movie theater. He became tired and wanted to stop. But the city wanted to show itself off, and Carmody had to look at the five-story American Express building,

the Portuguese synagogue, the statue of Buckminster Fuller, the Greyhound Bus Station and several other attractions.

At last it was over. Carmody concluded that beauty was in the eye of the beholder, except for a small part of it that was in the beholder's feet.

"A little lunch now?" the city asked.

"Fine," Carmody said.

He was guided to the fashionable Rochambeau Cafe, where he began with *potage au petit pois* and ended with *petits fours*.

"What about a nice Brie to finish off?" the city asked.

"No, thanks," Carmody said. "I'm full. Too full, as a matter of fact."

"But cheese isn't filling. A bit of first-rate Camembert?"

"I couldn't possibly."

"Perhaps a few assorted fruits. Very refreshing to the palate."

"It's not my palate that needs refreshing," Carmody said.

"At least an apple, a pear and a couple of grapes?"

"Thanks, no."

"A couple of cherries?"

"No, no, no!"

"A meal isn't complete without a little fruit," the city said.

"My meal is," Carmody said.

"There are important vitamins, only found in fresh fruit."

"I'll just have to struggle along without them."

"Perhaps half an orange, which I will peel for you? Citrus fruits have no, bulk at all."

"I couldn't possibly."

"Not even one quarter of an orange? If I take out all the pits?"

"Most decidedly not."

"It would make me feel better," the city said. "I have a completion compulsion, you know, and no meal is complete without a piece of fruit."

"No! No! No!"

"All right, don't get so excited," the city said. "If you don't like the sort of food I serve, that's up to you."

"But I do like it!"

"Then if you like it so much, why won't you eat some fruit?"

"Enough," Carmody said. "Give me a couple grapes."

"I wouldn't want to force anything on you."

"You're not forcing. Give me, please."

"You're quite sure?"

"Gimme!" Carmody shouted.

"So take," the city said and produced a magnificent bunch of muscatel grapes. Carmody ate them all. They were very good.

"Excuse me," the city said. "What are you doing?"

Carmody sat upright and opened his eyes. "I was taking a little nap," he said. "Is there anything wrong with that?"

"What should be wrong with a perfectly natural thing like that?" the city said.

"Thank you," Carmody said, and closed his eyes again.

"But why nap in a chair?" the city asked.

"Because I'm *in* a chair, and I'm already half asleep."

"You'll get a crick in your back," the city warned him.

"Don't care," Carmody mumbled, his eyes still closed.

"Why not take a proper nap? Over here, on the couch?"

"I'm already napping comfortably right here."

"You're not really comfortable," the city pointed out. "The human anatomy is not constructed for sleeping sitting up."

"At the moment, mine is," Carmody said.

"It's not. Why not try the couch?"

"The chair is fine."

"But the couch is finer. Just try it, please, Carmody. Carmody?"

"Eh? What's that?" Carmody said, waking up.

"The couch. I really think you should rest on the couch."

"All right!" Carmody said, struggling to his feet. "Where is this couch?"

He was guided out of the restaurant, down the street, around the corner, and into a building marked "The Snoozerie." There

were a dozen couches. Carmody went to the nearest.

"Not that one," the city said. "It's got a bad spring."

"It doesn't matter," Carmody said. "I'll sleep around it."

"That will result in a cramped posture."

"Christ!" Carmody said, getting to his feet. "Which couch would you recommend?"

"This one right back here," the city said. "It's a king-size, the best in the place. The yield-point of the mattress has been scientifically determined. The pillows —"

"Right, fine, good," Carmody said, lying down on the indicated couch.

"Shall I play you some soothing music?"

"Don't bother."

"Just as you wish. I'll put out the lights, then."

"Fine."

"Would you like a blanket? I control the temperature here, of course, but sleepers often get a subjective impression of chilliness."

"It doesn't matter! Leave me alone!"

"All right!" the city said. "I'm not doing this for myself, you know. Personally, I never sleep."

"Okay, sorry," Carmody said.

"That's perfectly all right."

There was a long silence. Then Carmody sat up.

"What's the matter?" the city asked.

"Now I can't sleep," Carmody said.

"Try closing your eyes and consciously relaxing every muscle in your body, starting with the big toe and working upward to —"

"I can't sleep!" Carmody shouted.

"Maybe you weren't very sleepy to begin with," the city suggested. "But at least you could close your eyes and try to get a little rest. Won't you do that for me?"

"No!" Carmody said. "I'm not sleepy and I don't need a rest."

"Stubborn!" the city said. "Do what you like. I've tried my best."

"Yeah," Carmody said, getting to his feet and walking out of the Snoozerie.

IV

Carmody stood on a little curved bridge and looked over a blue lagoon.

"This is a copy of the Rialto bridge in Venice," the city said. "Scaled down, of course."

"I know," Carmody said. "I read the sign."

"It's rather enchanting, isn't it?"

"Sure, it's fine," Carmody said, lighting a cigarette.

"You're doing a lot of smoking," the city pointed out.

"I know. I feel like smoking."

"As your medical advisor, I must point out that the link between smoking and lung cancer is conclusive."

"I know."

"If you switched to a pipe, your chances would be improved."

"I don't like pipes."

"What about a cigar, then?"

"I don't like cigars." He lit another cigarette.

"That's your third cigarette in five minutes," the City said.

"Goddamn it, I'll smoke as much and as often as I please!" Carmody shouted.

"Well, of course you will!" the city said. "I was merely trying to advise you for your own good. Would you want me to simply stand by and not say a word while you destroyed yourself?"

"Yes," Carmody said.

"I can't believe that you mean that. There is an ethical imperative involved here. Man can act against his best interests; but a machine is not allowed that degree of perversity."

"Get off my back," Carmody said sullenly. "Quit pushing me around."

"Pushing you around? My dear Carmody, have I coerced you in any way? Have I done any more than advise you?"

STREET OF DREAMS, FEET OF CLAY

"Maybe not. But you talk too much."

"Perhaps I don't talk enough," the city said. "To judge from the response I get."

"You talk too much," Carmody repeated and lit a cigarette.

"That is your fourth cigarette in five minutes."

Carmody opened his mouth to bellow an insult. Then he changed his mind and walked away.

"What's this?" Carmody asked.

"It's a candy machine," the city told him.

"It doesn't look, like one."

"Still, it is one. This design is a modification of a design by Saarionmen for a silo. I have miniaturized it, of course, and —"

"It still doesn't look like a candy machine. How do you work it?"

"It's very simple. Push the red button. Now wait. Press down one of those levers on Row A; now press the green button. There!"

A Baby Ruth bar slid into Carmody's hand.

"Huh," Carmody said. He stripped off the paper and bit into the bar. "Is this a real Baby Ruth bar or a copy of one?" he asked.

"It's a real one. I had to subcontract the candy concession be-

cause of the pressure of work.”

“Huh,” Carmody said, letting the candy wrapper slip from his fingers.

“That,” the city said, “is an example of the kind of thoughtlessness I always encounter.”

“It’s just a piece of paper,” Carmody said, turning and looking at the candy wrapper lying on the spotless street.

“Of course it’s just a piece of paper,” the city said. “But multiply it by a hundred thousand inhabitants and what do you have?”

“A hundred thousand Baby Ruth wrappers,” Carmody answered at once.

“I don’t consider that funny,” the city said. “You wouldn’t want to *live* in the midst of all that paper, I can assure you. You’d be the first to complain if this street were strewn with garbage. But do you do your share? Do you even clean up after yourself? Of course not! You leave it to me, even though I have to run all of the other functions of the city, night and day, without even Sundays off.”

Carmody bent down to pick up the candy wrapper. But just before his fingers could close on it, a pincer arm shot out of the nearest sewer, snatched the paper away and vanished from sight.

“It’s all right,” the city said.

“I’m used to cleaning up after people. I do it all the time.”

“Yuh,” said Carmody.

“Nor do I expect any gratitude.”

“I’m grateful, I’m grateful!” Carmody said.

“No, you’re not,” Bellwether said.

“So okay, maybe I’m not. What do you want me to say?”

“I don’t want you to say anything,” the city said. “Let us consider the incident closed.”

“**H**ad enough?” the city said, after dinner.

“Plenty,” Carmody said.

“You didn’t eat much.”

“I ate all I wanted. It was very good.”

“If it was so good, why didn’t you eat more?”

“Because I couldn’t hold any more.”

“If you hadn’t spoiled your appetite with that candy bar”

“Goddamn it, the candy bar didn’t spoil my appetite! I just —”

“You’re lighting a cigarette,” the city said.

“Yeah,” Carmody said.

“Couldn’t you wait a little longer?”

“Now look,” Carmody said, “Just what in hell do you —”

“But we have something more important to talk about,” the



city said quickly. "Have you thought about what you're going to do for a living?"

"I haven't really had much time to think about it."

"Well, I have been thinking about it. It would be nice if you became a doctor."

"Me? I'd have to take a special college courses, then get into medical school, and so forth."

"I can arrange all that," the city said.

"Not interested."

"Well . . . What about law?"

"Never."

"Engineering is an excellent line."

"Not for me."

"What about accounting?"

"Not on your life."

"What do you want to be?"

"A jet pilot," Carmody, said impulsively.

"Oh, come now!"

"I'm quite serious."

"I don't even have an air field here."

"Then I'll pilot somewhere else."

"You're only saying, that to spite me!"

"Not at all," Carmody said.

"I want to be a pilot, I really do. I've *always* wanted to be a pilot! Honest I have!"

There was a long silence. Then the city said, "The choice is entirely up to you." This was said in a voice like death.

"Where are you going now?" "Out for a walk," Carmody said.

"At nine-thirty in the evening?"

"Sure. Why not?"

"I thought you were tired."

"That was quite some time ago."

"I see. And I also thought that you could sit here and we could have a nice chat."

"How about if we talk after I get back?" Carmody asked.

"No, it doesn't matter," the city said.

"The walk doesn't matter," Carmody said, sitting down.

"Come on, we'll talk."

"I no longer care to talk," the city said. "Please go for your walk."

V

"Well, good night," Carmody said.

"I beg your pardon?"

"I said, 'good night.'"

"You're going to sleep?"

"Sure. It's late, I'm tired."

"You're going to sleep now?"

"Well, why not?"

"No reason at all," the city said, "except that you have forgotten to wash."

"Oh . . . I guess I did forget. I'll wash in the morning."

"How long is it since you've had a bath?"

"Too long. I'll take one in the morning."

"Wouldn't you feel better if you took one right now?"

"No."

"Even if I drew the bath for you?"

"No! Goddamn it, no! I'm going to sleep!"

"Do exactly as you please," the city said. "Don't wash, don't study, don't eat a balanced diet. But also, don't blame me."

"Blame you? For what?"

"For anything," the city said.

"Yes. But what did you have in mind, specifically?"

"It isn't important."

"Then why did you bring it up in the first place?"

"I was only thinking of you," the city said.

"I realize that."

"You must know that it can't benefit *me* if you wash or not."

"I'm aware of that."

"When one cares," the city went on, "when one feels one's responsibilities, it is not nice to hear oneself sworn at."

"I didn't swear at you."

"Not this time. But earlier today you did."

"Well . . . I was nervous."

"That's because of the smoking."

"Don't start that again!"

"I won't," the city said. "Smoke like a furnace. What does it matter to me?"

"Damned right," Carmody said, lighting a cigarette.

"But my failure," the city said.

"No, no," Carmody said.

"Don't say it, please don't!"

"Forget I said it," the city said.

"All right."

"Sometimes I get overzealous."

"Sure."

"And it's especially difficult because I'm right. I am right, you know."

"I know," Carmody said.

"You're right, you're right, you're always right. Right right right right right —"

"Don't overexcite yourself bedtime," the city said. "Would you care for a glass of milk?"

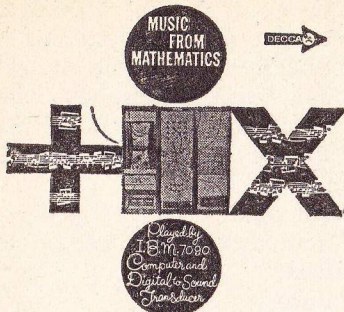
"No."

"You're sure?"

Carmody put his hands over his eyes. He felt very strange. He also felt extremely guilty, fragile, dirty, unhealthy and sloppy. He felt generally and irrevocably bad, and it would always be this way unless he changed, adjusted, adapted . . .

But instead of attempting anything of the sort he rose to his feet, squared his shoulders, and marched away past the Roman piazza and the Venetian bridge.

"Where are you going?" the city asked. "What's the matter?"



MUSIC OF TOMORROW

Here is music composed on computer and transducers, ranging from computer-played versions of Christmas carols and rounds to the complex sounds that offer a new dimension in musicology. Composers include Dr. John R. Pierce, Dr. M. V. Mathews, David Lewin, James Tenny, etc. 18 selections on a 12-inch, high-fidelity, long-playing record produced by Decca. A "must" for your record library and a conversation piece for all occasions. Priced \$5.75 postpaid — send in the coupon today.

Galaxy Publishing Corp.
421 Hudson Street,
New York City 10014

Yes, send me my 12-inch hi-fi record of *Music from Mathematics* right away. I enclose check or money order of \$5.75.

Name

Address

City & State Zip Code

(Offer good in U. S. A. Only)

Silent, tight-lipped, Carmody continued past the children's park and the American Express building.

"What did I do wrong?" the city cried. "What, just tell me what?"

Carmody made no reply but strode past the Rochambeau Cafe and the Portuguese synagogue, coming at last to the pleasant green plain that surrounded Bellwether.

"Ingrate!" the city screamed after him. "You're just like all the others. All of you humans are disagreeable animals, and you're never really satisfied with anything."

Carmody got into his car and started the engine.

"But of course," the city said, in a more thoughtful voice, "you're never really *dissatisfied* with anything, either. The moral, I suppose, is that a city must learn patience."

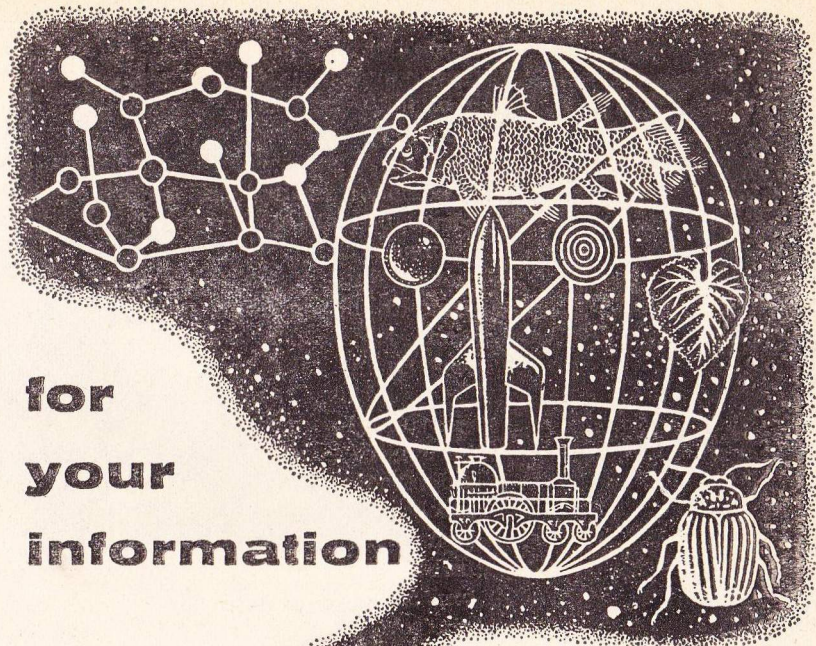
Carmody turned the car onto King's Highbridge Gate Road and started east, toward New York.

"Have a nice trip!" Bellwether called after him. "Don't worry about me, I'll be waiting up for you."

Carmody stepped down hard on the accelerator. He really wished he hadn't heard that last remark.

— ROBERT SHECKLEY

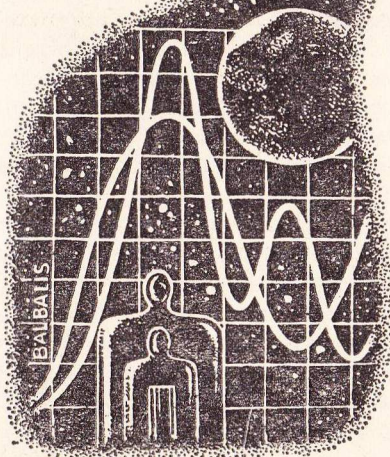
**for
your
information**

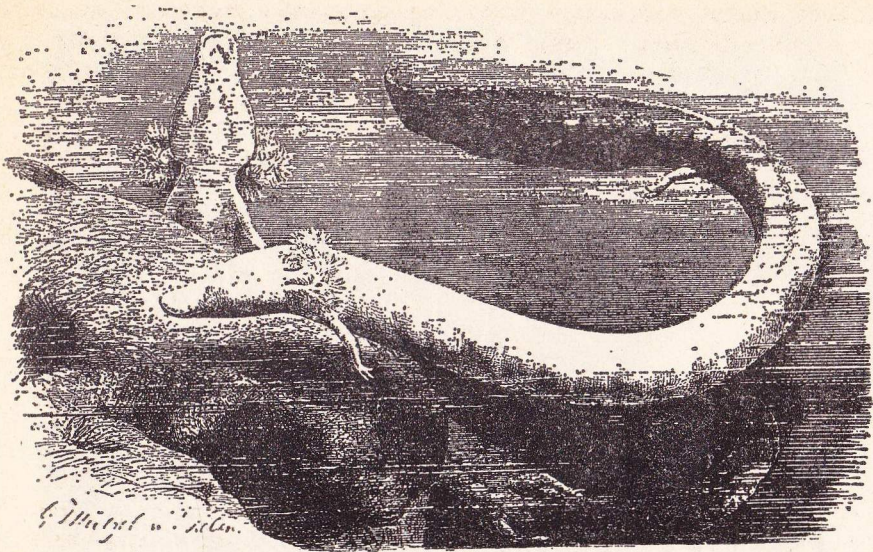


BY WILLY LEY

EPITAPH FOR A LONELY OLM

About eight months ago the New York Zoological Society suffered a loss that was not noticed by most of the visitors to the Zoo. A single olm that had survived its companions for five lonely years finally died, presumably of old age. This sole survivor of a group of eight that





The Balkan cave salamander *Proteus anguinus*, known as olm.
Drawn from a live specimen by G. Mützel in 1895.

had arrived in 1961 had been the only olm in the United States.

The man who first mentioned the olm in print, and might therefore be called its discoverer, was Johann Weichard, Baron von Valvasor, who, in 1689, published a book with the title *Die Ehre des Herzogthums Krain*. Translated this reads: The Honor of the Dukedom of Krain. The Krain was a part of the old Austro-Hungarian Empire and is now a section of northern Yugoslavia. Somewhere in the mountains of that section of the Balkans dragons could be found, the people insisted. The baron was not sure

whether the existence of dragons would increase or decrease "the honor" of the dukedom he was writing about — at any event he investigated. Finally somebody brought him a "young dragon"; it was a span, or about 9 inches, in length, "and resembled a lizard." He also added a remark that seems to mean that they are found only sometimes but not all the time.

About sixty years later an Italian, Scopoli by name, became interested in the small animal with the red external gills and the dead-white skin. The local fishermen told him that they

never caught one except when the river flooded. Scopoli, of whom practically nothing is known otherwise, also reported that the fishermen called it "the humanfish," presumably because it lacks scales and its skin is white. Scopoli's final service to zoology consisted in presenting a specimen to the deacon of a local church, Court Siegmund von Hohenwart, who was interested in local natural history. He in turn forwarded the specimen to Professor Laurenti of the University of Vienna, who provided the first scientific description and also coined its scientific name: *Proteus anguinus*. The first part of the name refers to Neptune's herdsman (only Prof. Laurenti knows why), while the second part comes from the Latin word *anguis* meaning "snake" and especially a small snake.

The common name olm appeared first in the German biological journal *Isis* in about 1825 and was coined by its editor, the naturalist Lorenz Oken (1779-1851). I have never been able to find out what "olm" means or whether it has a meaning, but the name caught on and is in international use. (To pronounce it properly say ollem first and then suppress the "e".)

Laurenti had determined correctly that the animal was
FOR YOUR INFORMATION

an amphibian related to newts and salamanders and that it lived in subterranean waters all its life. By now the idea of "cave salamanders" is well established, but the olm was the first to be discovered and it was quite sensational for this reason. Soon both its main habitat and the reason for its sporadic appearance became known. The main habitat was, and is, a large subterranean lake, the Grotto of Adelsberg (or *Postojna jama* in Serbian, now the official name). When the spring thaw was sudden, releasing large quantities of water, the Adelsberg grotto and a dozen smaller ones in the vicinity were flooded and the olms were washed into the rivers.

The average length of a fully grown olm is 10 inches; a few specimens that grew to 12 inches have been reported. The olm swims by wriggling its whole body; the four short legs are useless for locomotion. The forelegs have three clawless toes, the hindlegs only two. Because of the concentration of blood vessels the gills are a brilliant red, while the body is white or very faintly pink. There are no visible eyes; the skin extends unbroken over the places where the eyes should be. But when dissecting an olm, rudimentary eyes, connected to the brain by optical nerves, can easily be found.

Now a salamander is considered to be the larval form as long as it has gills; normally a salamander, after spending its youth in water, goes on land, sheds its gills and, among other things, propagates its kind. The environment of the olm prevents it from following this procedure, but the olms propagated nonetheless. It was the first case of a larva being capable of sexual activity — another fact that increased the olm's fame. Naturalists were so surprised that they coined a new term for this behavior: "neoteny." We now know that the olm is not the only neotenic salamander; the Mexican axolotl as well as the "mudpuppies" (*Necturus*) of the United States are neotenic too. A complete list of neotenic forms would probably consist of at least a dozen mostly unfamiliar names.

Naturalists saw themselves confronted by an eyeless neotenic salamander that spends its whole life in the cold water of a lightless cave, and the first question that occurred to them was: what does it eat? And speaking of food, how does it find whatever it eats? Salamanders do not eat anything vegetable, hence the food had to consist of insects, spiders, small fresh-water crustaceans, possibly fish eggs. Strictly speaking we still do not know what the olms of the Adels-

berg grotto eat when at home, we only know what they will eat in captivity.

For decades the olm was the favorite aquarium animal of European naturalists, if only because the preferred observation "in the field" was an impossibility. Just to get to the "noble mountain" (this is what Adelsberg means) was a tiring journey. A trip across the cave could be arranged by local guides for a fee, but people need light to see; and while the cave fauna is blind, it is still light-sensitive enough to swim away from illumination. Therefore, since the journey of the naturalist to the olm was useless, the olm was brought to the naturalist.

The first long series of observations of captive specimens was carried out by Fraulein Marie von Chauvin, one of the early female scientists, who lived in Freiburg im Breisgau, in western Germany. Her study began in about 1880 and lasted for many years. She fed small worms (*Tubifex*, as well as small earthworms), young water snails, tadpoles and fresh-water crustaceans to her olms and soon saw that it was the motion of the food animals that made the olms aware of their presence. If a snail remained motionless it was disregarded. In general that olms re-

mained at the bottoms of their containers, but if the water was very shallow they might come to the surface to inhale air. Marie von Chauvin noticed that a sudden shock (somebody in the house had dropped something heavy) caused the olms to panic; in their subterranean lakes a shock wave in the water is evidently a danger signal.

Marie von Chauvin could do almost anything for her olms; she could provide fresh water at a temperature of from 48 to 52 degrees Fahrenheit; she could feed them what they liked to eat or would at least accept; but she could not keep light away all the time. After all, she wanted to observe them. If the period of illumination was not longer than 2 or 3 minutes per day, nothing happened, but if the olms were exposed even to weak light for a few hours a day they developed color in their skin. Some turned a reddish brown. Others, and this was the more customary change, turned a bluish black. It began with spots that enlarged and blended together and in some individuals tiny yellow or reddish spots appeared on the dark background.

Was this dark coloration with small spots the original color of the olm's ancestors? It seemed likely, for the olm certainly had not evolved in those dark waters.

At one time its ancestors must have been open-air salamanders with protective coloration and with functioning eyes. Then they became trapped underground in an environment that kept them alive by feeding them, but where there was no need for either eyesight or for coloration. Since they could not evolve into finished salamanders they turned neotenic, though they might have had this characteristic while still in the open air.

When Marie von Chauvin began to keep olms, she had already had experience with another neotenic salamander, the axolotl.

Back in 1864 the *Jardin d'acclimation* in Paris had received half a dozen axolotls from Mexico. They were cared for by the curator, Monsieur A. Dumeril, who knew what was then known about them and who was, therefore, not too surprised when they started mating a year later. The second generation was raised in separate tanks and grew nearly as large as the original imports half a year after hatching. So far everything went as expected, but then some of the new generation began to change into a finished gill-less adult salamander. Monsieur Dumeril tried to accelerate the change in those that had stayed in the water by amputat-

ing half of their gills. It did not work; the axolotls simply grew another bunch of gills.

Marie von Chauvin, after reading Dumeril's report, decided on persuasion rather than operation. When she saw that one of her five axolotls stayed near the surface of the water most of the time she put him into another aquarium where there was only a small and shallow water area; most of the floor space was land, with lush wet moss. The axolotl took just four days to change into the adult form. Three others went through the same change a few weeks later, but the fifth specimen (which was the smallest of the lot) never changed. It remained a water-living axolotl.

Since it had been so easy to make the axolotl go through its full life cycle, Marie von Chauvin tried to make the olm do the same. It did not work; olms would grow black but never shed their gills. Any attempt to force the issue only resulted in the death of the specimen. The olms, it seemed, had adjusted so well to their cave environment that they could not revert to the original any more.

As a by-product of her work Marie von Chauvin had established that the eggs of the olm are spherical with a diameter of about 10 millimeters. They have a sticky outer layer, and the fe-

mals attached them one by one to a stone. That olms lay eggs had also been seen seven years earlier, in 1875, by one of the tourist guides at Adelsberg. The larvae hatching from the eggs had been quite large, about an inch in length as had been established by A. Zeller in 1888 — he had needed patience for this observation, for 90 days went by between the laying of the eggs and the hatching of a few of them.

Zeller was pleased with his results, but somebody else had been digging in a library and had come up with an issue of Oken's *Isis* dating from the year 1831. And that issue contained a report from a landowner at Stratil (in the area where the olm occurs naturally) with the name of J. Geck von Verch. He was the county judge in addition to being a landowner, and his story was put down in language fit for a supreme court decision. "On June 17, 1852 I, as well as members of my own family and members of my neighbor's families, witnessed the birth of a live young olm." The young was 1½ inches long and shaped like an adult, but it had two black spots "like poppyseeds" where one would expect the eyes to be.

What could one say now?
Several tourist guides, one

professional naturalist (Marie von Chauvin) and one amateur naturalist (Zeller) had watched the egg-laying. Zeller had even watched the hatching. But one could not disregard the solemn statement of the old county judge.

Was it possible that there were two species of olms, indistinguishable by humans and certainly closely related, but differing from each other by the method of propagation? One species that laid eggs — from 35 to 50 in number — like most salamanders? And another species that hatched an egg in the oviduct and produced a live and larger young? And all this coupled with neoteny!

That something looks incredible does not matter in nature. Facts are facts, and what was needed to arrive at an opinion were more facts. The next fact came from a Professor Nusbaum in Lemberg.

He had bought five specimens for dissection and placed the glass jar holding them on the window sill. Of course they turned dark, but that was unimportant considering their final fate. When Professor Nusbaum — who had already dissected two of them — looked at the jar on the morning of October 12, 1904, he saw four olms instead of three. The fourth was pale, skinny and

small; it must have been born alive during the night. That it died a few hours later is unimportant; here was another case of a live birth with no eggs in evidence anywhere.

By that time experiments with olms were being carried on in Vienna, at the Institute for Experimental Biology. It belonged to the venerable University of Vienna but was located in the Vienna Prater, the amusement area. The heavy stone building had originally been sponsored by a Habsburg prince as a public aquarium. Subsequently it had been turned — more in keeping with the surroundings — into a very intimate night club. When the night club went bankrupt, around the year 1900, the University of Vienna acquired the building.

The basement then had contained a cistern and was not waterproof in general; one of the first steps taken by the University's contractor was to pump it dry. But the windowless basement, where the temperature never rose above 55 degrees Fahrenheit, was a perfect natural grotto, suitable for cave salamanders. One quarter of the now dry basement was enclosed by a foot-high wall and filled with well water, making a dark aquarium one foot deep with an area of 120 square feet.

In 1903 it was ready and forty olms were purchased to be kept there. The purpose of the experiment was to find out whether the olm lays eggs or produces live young — or whether there were two species which humans could not tell apart. Humans cannot even tell the sexes apart. Hence the large number; it was highly unlikely that all forty would belong to the same sex. The young biologist in charge, Dr. Paul Kammerer, saw to it that they were well fed and otherwise left them alone.

During his frequent trips to the basement for feeding and inspection he looked for young or eggs. One year went by and there were neither young nor eggs. Another half year went by with the same negative result. Kammerer, unwilling to believe in the improbability of all 39 olms (one had died) being either male or females, lost interest. It does not seem to have occurred to him that the olm's asexual behavior was due to overfeeding, but his loss of interest corrected this factor.

He fed them when he thought of it, and in October 1905 he thought he saw a few smaller ones in the tank but did not accept them as young. He thought they had shrunk from lack of food and became a little more diligent as a result. By May 1906 he saw

a few small specimens that had to be young because they still had eye spots. In October 1907 he saw a large olm that looked pregnant. He caught it and put it into a separate jar which was left in the dark basement. Two weeks later there were two small olms, nearly 4 inches long, in the jar with the adult.

Then he really went to work, and two years later he announced his findings. When olms are kept in water that is warmer than 55 degrees Fahrenheit the females will lay eggs, of which only a small percentage (say one in twenty-five), will hatch. If the water is colder, one egg will hatch in one oviduct of the female, or sometimes, one in each oviduct while the other eggs degenerate into a kind of jelly which may be absorbed either by the body of the mother or else feed the embryo that has hatched. At any event the young that are born alive are about twice as large as those that have hatched from eggs. Since the temperature in the natural cave lakes is always colder than 55 degrees Fahrenheit, Kammerer concluded that live birth was normal for the olm.

Because of subsequent events Kammerer's name acquired a bad reputation. He was obsessed with proving a discredited biological concept, namely the in-

heritance of acquired characteristics, and he produced charts that could not be true. He faked "acquired characteristics" by such means as injections of India ink under the skin of toads and, after having been found out, committed suicide.

It is not surprising that everything Kammerer had said was suspect after his death, but his first set of experiments with olms was probably genuine. For his second olm experiment one cannot be certain any more. He decided that he would succeed where Marie von Chauvin had failed; he would force an olm to acquire the adult shape of its ancestors. Specifically he would try to make a young olm keep and develop its eyes.

In the meantime the keepers of other aquaria had solved a problem. They had olms and they wanted to exhibit them to the public. Of course one could just illuminate the aquaria, but then the olms would turn black. The ideal was to exhibit olms that stayed pale. One of the keepers reasoned as follows: a photographic plate, exposed to light, turns black. But in the darkroom undeveloped plates can be handled safely under red light, red light being less capable of causing chemical changes than white light. He tried it, and it worked; an olm under "darkroom illumina-

tion" was made dimly visible to visitors but it remained pale.

Kammerer took a young olm and let it grow under red light, hoping that this would stimulate the eyes without thickening the skin that covered them. From time to time he exposed it to daylight for stronger stimulation. Of course the skin slowly turned black but only after the eyes were established and stayed uncovered. All the while the specimen was kept in only one inch of water to stimulate the lungs. He obtained a black olm with clearly visible and presumably functioning eyes that could live for short periods outside the water.

When Kammerer announced this result nobody doubted his word — after all this was a possible result which merely had required extra-ordinary care. But after it became known that Kammerer had been dishonest in other experiments, the "adult olm" was doubted in retrospect.

Since I knew that old professor Dr. Richard B. Goldschmidt had known Kammerer personally (I had not because of an age difference of about 25 years), I asked him whether he had seen the "adult olm." Professor Goldschmidt, then at the University of California, replied that Kammerer had shown him a specimen with normal eyes. But he, also

doubtful in retrospect, added that Kammerer might have transplanted "different eyes," meaning the eyes of another amphibian. Goldschmidt summed up his and everybody's feelings by writing: "The thing should be repeated!"

The University of Vienna did nothing to clear up the uncertainties caused by Kammerer. After the second World War a new research center, approximately named the Underground Laboratory of the *Centre Nationale de la Recherche Scientifique*, began to be interested in olms. As its name indicates it is French, located at Moulis, France, under

the leadership of Professor Albert Vandel. Professor Vandel keeps his olms in tanks 3 feet in diameter and ten times as long with running water but a layer of cave mud and flat stones at the bottom. The water is kept at about 55 degrees Fahrenheit; the darkness in the underground laboratory is complete. Under these circumstances the olms are egg-layers and Vandel swears that *this* is the normal method.

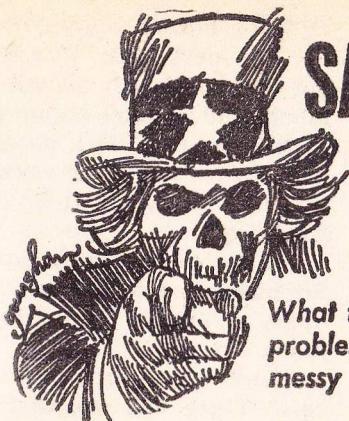
Most of what has been reported so far is not new or adds only small detail to the information that can be found in zoological literature. The number of eggs laid by one female is from 20 to 60, and the interval between laying and hatching runs from 100 to 120 days. At hatching the young olm still has a reserve of yolk that lasts for about a month. Its rate of growth afterward is exceedingly slow; it needs 8 to 10 years to reach a length of 6 inches. The reduction of the embryonic eye is reported to begin at the age of three months.

Well, this means that we know about as much as we did in 1900. So far the French laboratory seems to have limited its activities to observation only. One day, one hopes, Professor Vandel will be overcome by the urge to experiment a little. Then he may clear up Kammerer's doubtful legacy.

— WILLY LEY



AVAILABLE BY MAIL ONLY. A MAG BY
PROS FOR FANS. FRAZETTA, CRANDALL
ETC., WALLACE WOOD, BOX 882
ANSONIA STATION, N.Y.C. 10023



SALES OF A DEATHMAN

by ROBERT BLOCH

What to do with the population problem? Killing people's so messy — unless they'll help!

January 15, 2047. Big day today. Flying in, I got quite a shock seeing that mushroom cloud over Washington. Looked just like an H-bomb, but of course it's only the population explosion. Smog.

It's everywhere, of course, but this air-conditioned underground living makes you forget. I hate the nuisance of wearing a respirator, but this time I was grateful for it. Even without the smog, the crowd here is so thick that the fumes from their halitosis would probably choke you.

Priority Escort had a zip-car waiting for me when we landed. That was a break — we took the fifth-level freeway right straight in, down what used to be the old Pennsylvania Avenue.

Could do a whole book on the White House. Like stepping

into the past; so quiet and empty. Huge rooms. Some of them twenty, thirty, even fifty feet long — you wouldn't believe it. To think people used to live that way; all that space, and not even a high-rise! Gives you a sense of History.

Of course the big thing was meeting the President. Kind of surprising to see he's such a small man. Watching him on TV, in full makeup, you get the impression he's quite tall. But without the gray wig and the beard and the Uncle Sam costume, he's only a little guy. Can't quite remember when Presidents started wearing the outfit — way back, I guess, maybe twenty-thirty years after they started electing actors to public office. It's effective, of course, and I can see the sense, but it's still kind of a

letdown when you see a President offscreen. Without a teleprompter and the folksy delivery he sounds quite different.

But he's an exec, no doubt about it. The way he handled the meeting, all the biggies there — Cabinet, Defense, even the top lobbyists. Cut right through protocol and got down to cases.

No sense trying to remember exact quotes. What he said was Security-sealed anyway, and I could get into trouble just paraphrasing it. But then, nobody is going to be playing this diary-tape anyway, and I want to keep it for the record.

He started right out by laying all the cards on the table. The population crisis — 988,000,000 people in the United States as of last week's Gallupcomputer census.

"That's the *official* figure," he said.

"Actually, we're way over a billion. But we can't let that get out, for psychological reasons. There's enough panic as it is. And with a world population of nineteen billion, a projected fifty billion within another generation — "

He stopped and looked around the table; I wish I had a photo of those faces. "I can see your reactions," he said. "But right now I'm more interested in hearing your solutions."

That's how it began. And for the next hour it went on, hot and heavy. All the old arguments and counter-arguments.

Start a war? Too dangerous, and besides it's never worked — if it had, we wouldn't be in this fix today.

What about a sterilization law? Six bills voted down already, too much religious opposition, so that's out.

Metal fatigue in jets and zip-cars? There was one that made me sit up and take notice. Some character from the Department of Transport had it all laid out, a full presentation with a lot of figures on stress-factors and built-in structural defects. He was willing to guarantee that accidents, freeway and airway, would eliminate at least a hundred million over a three-year period.

It made a lot of sense to me, until the President reminded him that (a) such a program would shake confidence in automotive and aviation products, thus disrupting the economy, and (b) the present rate of population increase would soon offset and overtake the possible death-rate. He was loudly seconded by the lobbyists, particularly in regard to point (a).

The next joker came up with the moon-colorization bit again and had to be reminded that it

would be impossible to manufacture enough space-hardware to transport more than a few million people a year — granted that the economy could support such a program.

Somebody else urged official government backing of homosexuality; not just quiet approval, but a full-fledged open endorsement. The Secretary of Health and Welfare pointed out that even without open sanction, homosexuality was already a widespread popular craze, but largely due to the fact that it *wasn't* officially blessed. Such approval, he thought, would backfire, robbing the practice of any illicit "kick," and bring the movement to a fag-end.

This remark got a laugh, but didn't solve anything.

The next proposal came from Top Brass — all creased red neck and eyebrows, and no nonsense. At first he sounded way off the track, talking about smog and its lethal effect on the human organism, but then he hit it. "If you really want to reduce the population, quit wasting your breath. Waste theirs. *Take away their respirators.*"

That did it. Everybody started screaming, but the President got the final word in.

"You just can't go ahead and start a mass-murder program — it's un-American!"

And then he looked at me. "You're the expert, Mr. Crothers. What does Psychological Engineering propose?"

I let them have it, then. "Of course it's un-American to kill our own citizens. Also, it's bad for business." That got a nod from everybody, so I went on. "But there's another solution. I call it planned population-obsolescence."

The President frowned. "And just what does that mean?"

"Simple. Since we can't kill our own citizens, and we can't encourage them to kill each other, there's only one sensible alternative. We've got to get the people to kill themselves."

Now they *really* screamed. "Mass suicide? Impossible — they'd never go for it — talk about hurting business, this would really do it — never work out —"

I waited until they wore themselves out, then opened my folder and my mouth.

"Gentlemen, I have prepared a plan. If you're ready to listen, I think I can demonstrate to you that it *can* be done."

I made my pitch. It grabbed them, because it made sense. The President was the only one with reservations.

"I don't know," he sighed. "A wiser statesman than myself once said, 'You can kill some of the

people some of the time, but you can't kill all of the people all of the time."

"Maybe so," I said. "But it's worth a try."

February 10, 2047. We're in business.

Haven't had time to tape notes — it's just one meeting after another. Key people in industry, advertising, communication channels. Even with official backing, it's a big selling job.

At first, of course, everybody comes up with the same objection — "But we need consumers."

The answer I give them is, "Let the consumers consume themselves." And then I show them the merchandising possibilities. The whole bit, right from history. How the morticians, a hundred years ago, proved that you could sell caskets with all kinds of fancy gadgets, including innerspring mattresses — even sell coffins for cremations.

Then I give them the real angle, way back to the days of the Egyptians, who used to bury their bodies with a complete wardrobe of new clothing, all kinds of jewelry, household equipment, and furniture.

And I even give them a slogan for their sales-campaigns — "You Can Take It With You."

They can see the sales-poten-

tial, but they're still a little skeptical about whether or not the idea will catch on. So it's up to me to prove that they'll make a killing.

September 12, 2047. The last six months have been murder.

Figure of speech, of course. But I've been working myself to death.

So much to do. Started with the funeral directors, setting up the campaign. Commercials.

"Tired of high taxes? Troubled about illness, old age? Bills got you down? Time for a vacation — now you can take the **BIG Trip!**" Lovely shots of cemetery landscapes, soft hymn music in the background.

The morticians have been helpful, I must say. They pitch the theme hard. "Now you can enjoy Permanent Retirement. Ask about our Layaway Plan."

It seems to be going over with the Senior Citizens, but we've got to get a gut-reaction from the younger set, too. Maybe the cemeteries need jazzing-up. I'm going down to Washington with a real-estate subsidy plan; we've got to get a lot of new land developments to prepare for the rush, and it isn't just a matter of money. The whole concept has to be revitalized.

Statues and benches and sou-

venir-stands are good enough for the old folks, but I'm targeting at the kiddies. What we need are a few amusement-park touches; what I have in mind is something on the order of Grislyland

March 1, 2048. Just a little over a year since I started, and it's going over better than I'd ever hoped for.

Even the wildest optimist would never have believed the national death-rate would jump 80% in so short a time. And this is only the beginning!

Right now I'd like to go on record congratulating the medical profession — and, particularly, the psychiatrists and psychologists — for their cooperation and suggestions.

Not only have they supported the new DeadiCare program; they've come up with some ideas I never would have known about.

Almost all the psyches are concentrating now on *Thanatos*, bringing out and encouraging the Death Wish in patients. Using suggestion and hypnosis, too; not just in the asylums but in private practice. Since most people go for treatment because they're already depressed, sick of crowds and smog and underground living and synthetic food and taxes and official forms and

SALES OF A DEATHMAN

regulations, it's easy enough to work them into deep melancholia. Government cooperation doesn't hurt, either — next month the Pure Food and Drug Act amendment goes on the books and then we'll have another assist. Free poison — for Home Use Only.

The tricky bit, of course, is to make sure that people keep turning their aggressions inward; they've got to kill themselves, not murder others. But it seems to be working. Lots of things help.

For example, the new art boom in death masks. Everybody wants one. I understand a lot of people with money are really going the whole Egyptian route — mummy-cases and all, or at least statues of themselves. There's one down in Texas that's fifty feet tall; built over the frame of an old oil derrick.

Of course, as we expected, the biggest opposition came from the churches. We've had to make a big point of the fact that from now on death is strictly non-sectarian. And the insurance companies did a lot of beefing before DeadiCare; now they're all switching over from life insurance to death insurance — the perpetual care angle seems to work.

I'm in Washington permanently now. Full-time job, just one

thing after another, but I must say everybody pitches in to help. We've got the posters up — everything from "Join the Marine Corpse" to "Uncle Sam DOESN'T Want You!" And there's a big publicity campaign for the development of Death Valley National Monument.

October 5, 2051. Where does time go to?

I couldn't begin to set down what's happened in the past three years or so; all I know is that the official death rate for last year was 172,468,327. And this year started off with such a bang that we're averaging twenty million a month.

Never saw such prosperity. Half the country seems to be converted to cemeteries — free-ways jammed with funeral processions — factories can't keep up with orders. Strain on natural resources, of course; we're going to have to do a complete aboutface and campaign for simple burials, with plastic coffins.

But the big thing is we've got the youngsters. Everybody wants to fly to Vegas and play Russian roulette. Even the kiddies get into the act — playing "undertaker" and burying their dolls. Or each other. And skipping rope to, "I-tisket, I-tasket, a green and yellow casket."

I think our troubles are over.

May 22, 2052. I was wrong. Didn't figure on the backlash — Situation Overkill.

Can't blame it on the psyches. They did their best. But aggression gets out of hand. Sure, the death rate keeps going up, but a lot of it is due to murders now. Not just the free poison, but assault with deadly weapons, etc. Lots of sex crimes, too, mostly necrophilia.

Of course we're in there pitching. Setting up those Suicide Clubs ("If you don't like your neighbor, why not urge him to join?") and doing a big selling job on the sex angle, too, with the new Lovers' Leaps; free ski-lifts to mountaintops and special high-rise jumps for city dwellers.

But it isn't enough. The churches aren't helping. For a while we got them off on this ancestor-worship kick, but now they're going too far. Understand there's a lot of new cults around, based on human sacrifices. Barbaric.

Worst of all, it's affecting business. With all this illegal murder going on, the mortality rate is climbing too high; getting out of control. Understand we're down to 200,000,000 as of this year, and pretty soon there won't be enough working population to keep up with the demands.

I'm setting up a crisis conference for June 1st. We've got to

put some new life in our program.

June 4th, 2052. Let's face it — we're in trouble.

The conference was a disaster. Every time I suggested a roll-back on our program, some damned psyche or other came up with an argument to prove it wouldn't work — things have gone too far now.

Of course I knew the idea had spread. If it wasn't worldwide, this country would have been invaded long ago. But with other areas even more overpopulated than our own, I knew they'd copy us and our methods. And they have.

The thing is (and this I didn't know, until they filled us in at the conference) that the situation is even worse abroad. Death cults all over the place, religious fanatics, and what one of the psychiatrists called the "lemming urge." Whole cities, whole sections of a country, starting to march to the seashore, throwing themselves off cliffs. Mass hysteria.

"Heaven help us when it starts over here," he said. "Can you imagine what's going to happen when the entire West Coast converges inland to jump off the edge of the Grand Canyon?"

"So what do you suggest?" I asked.

He didn't answer me. He couldn't. Because as soon as he finished speaking, he'd gone over and jumped out of the window

December 1, 2058. 40,000.
Not the mortality rate.

That's the official population figure for the entire country, as of today: 40,000.

Don't ask me how they arrived at the total. Living underground this way, I'm sure all they can do is guess.

But at least, a few of us have survived. When you look at what's happened, it's amazing that there still are that many left.

First the mass suicides, then the murder gangs, then the breakdown in industry and communications — pileups on the freeways, funeral services disrupted, casket industries shut down, cemeteries weeded-over and neglected. When the food factories went and the water desalinization plants stopped working, the end was in sight. Then they began to listen to our campaign again, but it was too late; no rallying point, no way to get people reorganized. We should have acted sooner, declared martial law — but once the famine started and they began to drink that poisoned water from rivers and lakes, it was no use.

Virus and plague, that's what did it in the end. And people running wild — the new Sterilization Cults coming in, nobody having babies any more.

Of course the smog is gone, they tell me, but so is everything else.

Here in the new Pentagon — Dead Center — we're quite comfortable. Plenty of food, plenty of supplies, all the comforts of home and a safe five levels underground. At least we can keep telecasting; we've got the facilities. But with an audience of only 40,000, I don't know.

Still, they say while there's life, there's hope

*A*pril 1, 2067. Running out of tape.

Doesn't really matter, because we're running out of everything else, too.

Eleven people left.

That's all. *Eleven.*

Best medical care these past eight or nine years, but it doesn't help. Underground living seems to lead inevitably to underground dying. And the surface is still deadly — virus everywhere.

No more communication. None of us talk about it, but we all know the answer. Everybody's gone, everywhere. We're the last survivors.

Six old men, all over seventy. Myself, forty-nine. Three elderly women. One girl, Rena Stafford, pretty blonde thing, about eighteen or so.

Had another conference today, possibly the last one. Faced the facts. In a few years we'll all be gone. Maybe the surface will clear, the virus will die out — but so will the human race.

The president put it right on the line. (Funny thing, he *really* looks like Uncle Sam now, even without makeup).

"We're got to repopulate," he said. "Start all over again from the beginning." He looked at me. "You're our only hope. You and the girl."

I nodded. So did she.

So tonight they're setting the two of us up in a living unit of our own. Regular honeymoon suite. From now on, it's up to me.

Too bad. I just don't think I'm going to make it. I've come to the conclusion Thoreau was right. In times like these, one must seek the peaceful serenity of Walden Pond.

I think I'll go there tonight. And drown myself.

— ROBERT BLOCH



TOTAL ENVIRONMENT

by BRIAN W. ALDISS



*To solve the world's population crisis,
they built a model world in a box —
and filled it with a world's desperation!*

Illustrated by GAUGHAN

I

“**W**hat’s that poem about ‘caverns measureless to man?’” Thomas Dixit asked. His voice echoed away among the caverns, the question unanswered. Peter Crawley, walking a pace or two behind him, said nothing, lost in a reverie of his own.

It was over a year since Dixit had been imprisoned here. He had taken time off from the resettlement area to come and have a last look round before everything was finally demolished. In these great concrete workings, men still moved — Indian technicians mostly, carrying instruments, often with their own head-

lights. Cables trailed everywhere; but the desolation was mainly an effect of the constant abrasion all surfaces had undergone. People had flowed here like water in a subterranean cave; and their corporate life had flowed similarly, hidden, forgotten.

Dixit was powerfully moved by the thought of all that life. He, almost alone, was the man who had plunged into it and survived.

Old angers stirring in him, he turned and spoke directly to his companion. “What a monument to human suffering! They should leave this place standing as an everlasting memorial to what happened.”

The white man said, “The Del-

hi government refuses to entertain any such suggestion. I see their point of view, but I also see that it would make a great tourist attraction!"

"Tourist attraction, man! Is that all it means to you?"

Crawley laughed. "As ever, you're too touchy, Thomas. I take this whole matter much less lightly than you suppose. Tourism just happens to attract me more than human suffering."

They walked on side by side. They were never able to agree.

The battered faces of flats and houses — now empty, once choked with humanity — stood on either side, doors gaping open like old men's mouths in sleep. The spaces seemed enormous; the shadows and echoes that belonged to those spaces seemed to continue indefinitely. Yet before . . . there had scarcely been room to breathe here.

"I remember what your buddy, Senator Byrnes, said," Crawley remarked. "He showed how both East and West have learned from this experiment. Of course, the social scientists are still working over their findings; some startling formulae for social groups are emerging already. But the people who lived and died here were fighting their way towards control of the universe of the ultra-small, and that's where the biggest advances have come.

They were already developing power over their own genetic material. Another generation, and they might have produced the ultimate in automatic human population control: anoestrus, where too close proximity to other members of the species leads to reabsorption of the embryonic material in the female. Our scientists have been able to help them there, and geneticists predict that in another decade—"

"Yes, yes, all that I grant you. Progress is wonderful." He knew he was being impolite. These things were important, of revolutionary importance to a crowded earth. But he wished he walked these eroded passageways alone.

Undeniably, India had learned too, just as Peter Crawley claimed. For Hinduism had been put to the test here and had shown its terrifying strengths and weaknesses. In these mazes, people had not broken under deadly conditions — nor had they thought to break away from their destiny. *Dharma* — duty — had been stronger than humanity. And this revelation was already changing the thought and fate of one-sixth of the human race.

He said, "Progress is wonderful. But what took place here was essentially a religious experience."

Crawley's brief laugh drifted away into the shadows of a great



gaunt stairwell. "I'll bet you didn't feel that way when we sent you in here a year ago!"

What had he felt then? He stopped and gazed up at the gloom of the stairs. All that came to him was the memory of that appalling flood of life and of the people who had been a part of it, whose brief years had evaporated in these caverns, whose feet has endlessly trodden these warren-ways, these lugubrious decks, these crumbling flights

II

The concrete steps climbed up into darkness. The steps were wide, and countless children sat on them, listless, resting against each other. This was an hour when activity was low and even small children hushed their cries for a while. Yet there was no silence on the steps; silence was never complete there. Always, in the background, the noise of voices. Voices and more voices. Never silence.

Shamim was aged, so she preferred to run her errands at this time of day, when the crowds thronging Total Environment were less. She dawdled by a sleepy seller of life-objects at the bottom of the stairs, picking over the little artifacts and exclaiming now and again. The hawker knew her, knew she was too poor to

buy, did not even press her to buy. Shamim's oldest daughter. Malti, waited for her mother by the bottom step.

Malti and her mother were watched from the top of the steps.

A light burned at the top of the steps. It had burned there for twenty-five years, safe from breakage behind a strong mesh. But dung and mud had recently been thrown at it, covering it almost entirely and so making the top of the stairway dark. A furtive man called Narayan Farhad crouched there and watched, a shadow in the shadows.

A month ago, Shamim had had an illegal operation in one of the pokey rooms off Grand Balcony on her deck. The effects of the operation were still with her; under her plain cotton sari, her thin dark old body was bent. Her share of life stood lower than it had been.

Malti was her second oldest daughter, a meek girl who had not been conceived when the Total Environment experiment began. Even meekness had its limits. Seeing her mother dawdle so needlessly, Malti muttered impatiently and went on ahead, climbing the infested steps, anxious to be home.

EXTRACTS FROM THOMAS DIXIT'S
REPORT TO SENATOR JACOB

GALAXY

BYRNES, BACK IN AMERICA: *To lend variety to the habitat, the Environment has been divided into ten decks, each deck five stories high, which allows for an occasional pocket-sized open space. The architecture has been varied somewhat on each deck. On one deck, a sort of blown-up Indian village is presented; on another, the houses are large and appear separate, although sandwiched between decks — I need not add they are hopelessly overcrowded now. On most decks, the available space is packed solid with flats. Despite this attempt at variety, a general bowdlerization of both Eastern and Western architectural styles, and the fact that everything has been constructed out of concrete or a parastyrene for economy's sake, has led to a dreadful sameness. I cannot imagine anywhere more hostile to the spiritual values of life.*

The shadow in the shadows moved. He glanced anxiously up at the light, which also housed a spy-eye; there would be a warning out, and sprays would soon squirt away the muck he had thrown at the fitting; but, for the moment, he could work unobserved.

Narayan bared his old teeth as Malti came up the steps towards him, treading among the spraw-

ling children. She was too old to fetch a really good price on the slave market, but she was still strong; there would be no trouble in getting rid of her at once. Of course he knew something of her history, even though she lived on a different deck from him. Malti! He called her name at the last moment as he jumped out on her. Old though he was, Narayan was quick. He wore only his dhoti, arms flashing, interlocking round hers, one good powerful wrench to get her off her feet — now running fast, fearful, up the rest of the steps, moving even as he clamped one hand over her mouth to cut off her cry of fear. Clever old Narayan!

The stairs mount up and up in the four corners of the Total Environment, linking deck with deck. They are now crude things of concrete and metal, since the plastic covers have long been stripped from them.

These stairways are the weak points of the tiny empires, transient and brutal, that form on every deck. They are always guarded, though guards can be bribed. Sometimes gangs or "unions" take over a stairway, either by agreement or bloodshed.

Shamim screamed, responding to her daughter's cry. She began

to hobble up the stairs as fast as she could, tripping over infant feet, drawing a dagger out from under her sari. It was a plastic dagger, shaped out of a piece of the Environment.

She called Malti, called for help, as she went. When she reached the landing, she was on the top floor of her deck, the Ninth, where she lived. Many people were here, standing, squatting, thronging together. They looked away from Shamim, people with blind faces. She had so often acted similarly herself when others were in trouble.

Gasping, she stopped and stared up at the roof of the deck, blue-dyed to simulate sky, cracks running irregularly across it. The steps went on up there, up to Top Deck. She saw legs, yellow soles of feet disappearing, faces staring down at her, hostile. As she ran toward the bottom of the stairs, the watchers above threw things at her. A shard hit Shamim's cheek and cut it open. With blood running down her face, she began to wail. Then she turned and ran through the crowds to her family room.

I've been a month just reading through the microfiles. Sometimes a whole deck becomes unified under a strong leader. On Deck Nine, for instance, unification was achieved under a man

called Ullhas. He was a strong man, and a great show-off. That was a while ago, when conditions were not so desperate as they are now. Ullhas could never last the course today. Leaders become more despotic as Environment decays.

The dynamics of unity are such that it is always insufficient for a deck simply to stay unified; the young men always need to have their aggressions directed outwards. So the leader of a strong deck always sets out to tyrannize the deck below or above, whichever seems to be the weaker. It is a miserable state of affairs. The time generally comes when, in the midst of a raid, a counter-raid is launched by one of the other decks. Then the raiders return to carnage and defeat. And another paltry empire tumbles.

It is up to me to stop this continual degradation of human life.

As usual, the family room was crowded. Although none of Shamim's own children were here, there were grandchildren — including the lame granddaughter, Shirin — and six great-grandchildren, none of them more than three years old. Shamim's third husband, Gita, was not in. Safe in the homely squalor of the room, Shamim burst into tears, while Shirin comforted her and

endeavored to keep the little ones off.

"Gita is getting food. I will go and fetch him," Shirin said.

When UHDRE — Ultra-High Density Research Establishment — became operative, twenty-five years ago, all the couples selected for living in the Total Environment had to be under twenty years of age. Before being sealed in, they were inoculated against all diseases. There was plenty of room for each couple then; they had whole suites to themselves, and the best of food; plus no means of birth control. That's always been the main pivot of the UHDRE experiment. Now, that first generation has aged severely. They are old people pushing forty-five. The whole life cycle has speeded up — early puberty, early senescence. The second and third generations have shown remarkable powers of adaptation; a fourth generation is already toddling. Those toddlers will be reproducing before their years attain double figures, if present trends continue. Are allowed to continue.

Gita was younger than Shamim, a small wiry man who knew his way around. No hero, he nevertheless had a certain style about him. His life-object hung boldly round his neck on a chain,

TOTAL ENVIRONMENT

instead of being hidden, as were most people's life-objects. He stood in the line for food, chattering with friends. Gita was good at making alliances. With a bunch of his friends, he had formed a little union to see that they got their food back safely to their homes; so they generally met with no incident in the crowded walkways of Deck Nine.

The balance of power on the deck was very complex at the moment. As a result, comparative peace reigned, and might continue for several weeks if the strong man on Top Deck did not interfere.

Food delivery grills are fixed in the walls of every floor of every deck. Two gongs sound before each delivery. After the second one, hatches open and steaming food pours from the grills. Hills of rice tumble forward, flavored with meat and spices. Chapattis fall from a separate slot. As the men run forward with their containers, holy men are generally there to sanctify the food.

Great supply elevators roar up and down in the heart of the vast tower, tumbling out rations at all levels. Alcohol also was supplied in the early years. It was discontinued when it led to trouble; which is not to say that it is not secretly brewed inside the En-

vironment. The UHDRE food ration has been generous from the start and has always been maintained at the same level per head of population although, as you know, the food is now ninety-five per cent factory-made. Nobody would ever have starved, had it been shared out equably inside the tower. On some of the decks, some of the time, it is still shared out fairly.

One of Gita's sons, Jamsu, had seen the kidnapper Narayan making off to Top Deck with the struggling Malti. His eyes gleaming with excitement, he sidled his way into the queue where Gita stood and clasped his father's arm. Jamsu had something of his father in him, always lurked where numbers made him safe, rather than run off as his brothers and sisters had run off, to marry and struggle for a room of a space of their own.

He was telling his father what had happened when Shirin limped up and delivered her news.

Nodding grimly, Gita said, "Stay with us, Shirin, while I get the food."

He scooped his share into the family pail. Jamsu grabbed a handful of rice for himself.

"It was a dirty wizened man from Top Deck called Narayan Farhad," Jamsu said, gobbling. "He is one of the crooks who

hangs about the shirt tails of" He let his voice die.

"You did not go to Malti's rescue, shame on you!" Shirin said.

"Jamsu might have been killed," Gita said, as they pushed through the crowd and moved towards the family room.

"They're getting so strong on Top Deck," Jamsu said. "I hear all about it! We mustn't provoke them or they may attack. They say a regular army is forming round"

Shirin snorted impatiently. "You great babe! Go ahead and name the man! It's Prahlad Patel whose very name you dare not mention, isn't it? Is he a god or something, for Siva's sake? You're afraid of him even from this distance, eh, aren't you?"

"Don't bully the lad," Gita said. Keeping the peace in his huge mixed family was a great responsibility, almost more than he could manage. As he turned into the family room, he said quietly to Jamsu and Shirin, "Malti was a favorite daughter of Shamim's, and now is gone from her. We will get our revenge against this Narayan Farhad. You and I will go this evening, Jamsu, to the holy man Vazifdar. He will even up matters for us, and then perhaps the great Patel will also be warned."

He looked thoughtfully down at his life-object. Tonight, he told

himself, I must venture forth alone and put my life in jeopardy for Shamin's sake.

Prahlad Patel's union has flourished and grown until now he rules all the Top Deck. His name is known and dreaded, we believe, three or four decks down. He is the strongest — yet in some ways curiously the most moderate — ruler in Total Environment at present.

Although he can be brutal, Patel seems inclined for peace. Of course, the bugging does not reveal everything; he may have plans which he keeps secret, since he is fully aware that the bugging exists. But we believe his interests lie in other directions than conquest. He is only about nineteen, as we reckon years, but already gray-haired, and the sight of him is said to freeze the muscles to silence in the lips of his followers. I have watched him over the bugging for many hours since I agreed to undertake this task.

Patel has one great advantage in Total Environment. He lives on the Tenth Deck, at the top of the building. He can therefore be invaded only from below and the Ninth Deck offers no strong threats at present, being mainly oriented round an influential body of holy men, of whom the most illustrious is one Vazifdar.

TOTAL ENVIRONMENT

The staircases between decks are always trouble spots. No deck-ruler was ever strong enough to withstand attack from above and below. The staircases are also used by single trouble-makers, thieves, political fugitives, prostitutes, escaping slaves, hostages. Guards can always be bribed, or favor their multitudinous relations, or join the enemy for one reason or another. Patel, being on the Top Deck, has only four weak points to watch for, rather than eight.

Vazifdar was amazingly holy and amazingly influential. It was whispered that his life-object was the most intricate in all Environment, but there was nobody who would lay claim to having set eyes upon it. Because of his reputation, many people on Gita's deck — yes, and from farther away — sought Vazifdar's help. A stream of men and women moved always through his room, even when he was locked in private meditation and far away from this world.

The holy man had a flat with a balcony that looked out onto mid-deck. Many relations and disciples lived there with him, so that the rooms had been elaborately and flimsily divided by screens. All day, the youngest disciples twittered like birds upon the balconies as Vazifdar held

court, discussing among themselves the immense wisdom of his sayings.

All the disciples, all the relations, loved Vazifdar. There had been relations who did not love Vazifdar, but they had passed away in their sleep. Gita himself was a distant relation of Vazifdar's and came into the holy man's presence now with gifts of fresh water and a long piece of synthetic cloth, enough to make a robe.

Vazifdar's brow and cheeks were painted with white to denote his high caste. He received the gifts of cloth and water graciously, smiling at Gita in such a way that Gita — and, behind him, Jamsu — took heart.

Vazifdar was thirteen years old as the outside measured years. He was sleekly fat, from eating much and moving little. His brown body shone with oils; every morning, young women massaged and manipulated him.

He spoke very softly, husbanding his voice, so that he could scarcely be heard for the noise in the room.

"It is a sorrow to me that this woe has befallen your stepchild Malti," he said. "She was a good woman, although infertile."

"She was raped at a very early age, disrupting her womb, dear Vazifdar. You will know of the event. Her parents feared she

would die. She could never bear issue. The evil shadowed her life. Now this second woe befalls her."

"I perceive that Malti's role in the world was merely to be a companion to her mother. Not all can afford to purchase who visit the bazaar."

There are bazaars on every floor, crowding down the corridors and balconies, and a chief one on every deck. The menfolk chose such places to meet and chatter even when they have nothing to trade. Like everywhere else, the bazaars are crowded with humanity, down to the smallest who can walk — and sometimes even those carry naked smaller brothers clamped tight to their backs.

The bazaars are great centers for scandal. Here also are our largest screens. They glow behind their safety grills, beaming in special programs from outside; our outside world that must seem to have but faint reality as it dashes against the thick securing walls of Environment and percolates through to the screens. Below the screens, uncheckable and fecund life goes teeming on, with all its injury.

Humbly, Gita on his knees said, "If you could restore Malti to her mother Shamim, who mourns her, you would reap all

our gratitude, dear Vazifdar. Malti is too old for a man's bed, and on Top Deck all sorts of humiliations must await her."

Vazifdar shook his head with great dignity. "You know I cannot restore Malti, my kinsman. How many deeds can be ever undone. As long as we have slavery, so long must we bear to have the ones we love enslaved. You must cultivate a mystical and resigned view of life and beseech Shamim always to do the same."

"Shamim is more mystical in her ways than I, never asking much, always working, working, praying, praying. That is why she deserves better than this misery."

Nodding in approval of Shamim's behavior as thus revealed, Vazifdar said, "That is well. I know she is a good woman. In the future lie other events which may recompense her for this sad event."

Jamsu, who had managed to keep quiet behind his father until now, suddenly burst out, "Uncle Vazifdar, can you not punish Narayan Farhad for his sin in stealing poor Malti on the steps? Is he to be allowed to escape to Patel's deck, there to live with Malti and enjoy?"

"Sssh, son!" Gita looked in agitation to see if Jamsu's outburst had annoyed Vazifdar; but Vazifdar was smiling blandly.

"You must know, Jamsu, that we are all creatures of the Lord Siva, and without power. No, no, do not pout! I also am without power in his hands. To own one room is not to possess the whole mansion. But . . ."

It was a long and heavy *but*. When Vazifdar's thick eyelids closed over his eyes, Gita trembled, for he recalled how, on previous occasions when he had visited his powerful kinsman, Vazifdar's eyelids had descended in this fashion while he deigned to think on a problem, as if he shut out all the external world with his own potent flesh.

"Narayan Farhad shall be troubled by more than his conscience." As he spoke, the pupils of his eyes appeared again, violet and black. They were looking beyond Gita, beyond the confines of his immediate surroundings. "Tonight he shall be troubled by evil dreams."

"The night-visions!" Gita and Jamsu exclaimed, in fear and excitement.

Now Vazifdar swiveled his magnificent head and looked directly at Gita, looked deep into his eyes. Gita was a small man; he saw himself as a small man within. He shrank still further under that irresistible scrutiny.

"Yes, the night-visions," the holy man said. "You know what

that entails, Gita. You must go up to Top Deck and procure Narayan's life-object. Bring it back to me, and I promise Narayan shall suffer the night-visions to-night. Though he is sick, he shall be cured."

III

The women never cease their chatter as the lines of supplicants come and go before the holy men. Their marvelous resignation in that hateful prison! If they ever complain about more than the small circumstances of their lives, if they ever complain about the monstrous evil that has overtaken them all, I never heard of it. There is always the harmless talk, talk that relieves petty nervous anxieties, talk that relieves the almost noticed pressures on the brain. The women's talk practically drowns the noise of their children. But most of the time it is clear that Total Environment consists mainly of children. That's why I want to see the experiment closed down; the children would adapt to our world.

It is mainly on this fourth generation that the effects of the population glut show. Whoever rules the decks, it is the babes, the endless babes, tottering, laughing, staring, piddling, tumbling, running, the endless babes

to whom the Environment really belongs. And their mothers, for the most part, are women who — at the same age and in a more favored part of the globe — would still be virginally at school, many only just entering their teens.

Narayan Farhad wrapped a blanket round himself and huddled in his corner of the crowded room. Since it was almost time to sleep, he had to take up his hired space before one of the loathed Dasguptas stole it. Narayan hated the Dasgupta family, its lickspittle men, its shrill women, its turbulent children — the endless babes who crawled, the bigger ones with nervous diseases who thieved and ran and jeered at him. It was the vilest family on Top Deck, according to Narayan's oft-repeated claims; he tolerated it only because he felt himself to be vile.

He succeeded at nothing to which he turned his hand. Only an hour ago, pushing through the crowds, he had lost his life-object from his pocket — or else it had been stolen; but he dared not even consider that possibility!

Even his desultory kidnapping business was a failure. This bitch he had caught this morning — Malti. He had intended to rape

her before selling her, but had become too nervous once he had dragged her in here, with a pair of young Dasguptas laughing at him. Nor had he sold the woman well. Patel had beaten down his price, and Narayan had not the guts to argue. Maybe he should leave this deck and move down to one of the more chaotic ones. The middle decks were always more chaotic. Six was having a slow three-sided war even now, which should make Five a fruitful place, with hordes of refugees to batten on.

. . . . And what a fool to snatch so old a girl — practically an old woman!

Through narrowed eyes, Narayan squatted in his corner, acid flavors burning his mouth. Even if his mind would rest and allow him to sleep, the Dasgupta mob was still too lively for any real relaxation. That old Dasgupta, now — he was like a rat, totally without self-restraint, not a proper Hindu at all, doing the act openly with his own daughters. There were many men like that in Total Environment, men who had nothing else in life. Dirty swine! Lucky dogs! Narayan's daughters had thrown him out many months ago when he tried it!

Over and over, his mind ran on his grievances. But he sat collectedly, prodding off with one
TOTAL ENVIRONMENT

bare foot the nasty little brats who crawled at him, and staring at the screen flickering on the wall behind its protective mesh.

He liked the screens, enjoyed viewing the madness of outside. What a world it was out there! All that heat, and the necessity for work, and the complication of life! The sheer bigness of the world — he couldn't stand that, would not want it under any circumstances.

He did not understand half he saw. After all, he was born here. His father might have been born outside, whoever his father was; but no legends from outside had come down to him: only the distortions in the general gossip, and the stuff on the screens. Now that he came to reflect, people didn't pay much attention to the screens any more. Even he didn't.

But he could not sleep. Blearily, he looked at images of cattle ploughing fields, fields cut into dice by the dirty grills before the screens. He had already gathered vaguely that this feature was about changes in the world today.

“. . . . are giving way to this” said the commentator above the rumpus in the Dasgupta room. The children lived here like birds. Racks were stacked against the walls, and on these rickety contraptions the many, little Dasguptas roosted.

“. . . . food factories automated

against danger of infection”
Yak yak yak, then.

“Beef-tissue culture growing straight into plastic distribution packs” Shots of some great interior place somewhere, with meat growing out of pipes, extruding itself into square packs, dripping with liquid, looking rather ugly. Was that the shape of cows now or something? Outside must be a hell of a scaring place, then! “. . . . as new factory food at last spells hope for India’s future in the” Yak yak yak from the kids. Once, their sleep racks had been built across the screen; but one night the whole shaky edifice collapsed, and three children were injured. None killed, worse luck!

Patel should have paid more for that girl. Nothing was as good as it had been. Why, once on a time, they used to show sex films on the screens — really filthy stuff that got even Narayan excited. He was younger then. Really filthy stuff, he remembered, and pretty girls doing it. But it must be — oh, a long time since that was stopped. The screens were dull now. People gave up watching. Uneasily, Narayan slept, propped in the corner under his scruffy blanket. Eventually, the whole scruffy room slept.

The documentaries and other features piped into Environ-

ment are no longer specially made by UHDRE teams for internal consumption. When the U.N. made a major cut in UHDRE’s annual subsidy, eight years ago, the private TV studio was one of the frills that had to be axed. Now we pipe in old programs bought off major networks. The hope is that they will keep the wretched prisoners in Environment in touch with the outside world, but this is clearly not happening. The degree of comprehension between inside and outside grows markedly less on both sides, on an exponential curve. As I see it, a great gulf of isolation is widening between the two environments, just as if they were sailing away from each other into different space-time continua. I wish I could think that the people in charge here — Crawley especially — not only grasped this fact but understood that it should be rectified immediately.

Shamim could not sleep for grief.

Gita could not sleep for apprehension.

Jamsu could not sleep for excitement.

Vazifdar did not sleep.

Vazifdar shut his sacred self away in a cupboard, brought his lids down over his eyes and began to construct, within the vast spaces of his mind, a thought

pattern corresponding to the matrix represented by Narayan Farhad's stolen life-object. When it was fully conceived, Vazifdar began gently to inset a little evil into one edge of the thought-pattern

Narayan slept. What roused him was the silence. It was the first time total silence had ever come to Total Environment.

At first, he thought he would enjoy total silence. But it took on such weight and substance

Clutching his blanket, he sat up. The room was empty, the screen dark. Neither thing had ever happened before, could not happen! And the silence! Dear Siva, some terrible monkey god had hammered that silence out in darkness and thrown it out like a shield into the world, rolling over all things! There was a ringing quality in the silence — a gong! No, no, not a gong! Footsteps!

It was footsteps, O Lord Siva, do not let it be footsteps!

Total Environment was empty. The legend was fulfilled that said Total Environment would empty one day. All had departed except for poor Narayan. And this thing of the footsteps was coming to visit him in his defenceless corner

It was climbing up through the cellars of his existence. Soon it would emerge.

TOTAL ENVIRONMENT

Trembling convulsively, Narayan stood up, clutching the corner of the blanket to his throat. He did not wish to face the thing. Wildly, he thought, could he bear it best if it looked like a man or if it looking nothing like a man? It was Death for sure — but how would it look? Only Death — his heart fluttered! — only Death could arrive this way

His helplessness Nowhere to hide! He opened his mouth, could not scream, clutched the blanket, felt that he was wetting himself as if he were a child again. Swiftly came the image — the infantile, round-bellied, cringing, puny, his mother black with fury, her great white teeth gritting as she smacked his face with all her might, spitting It was gone, and he faced the gong-like death again, alone in the great dark tower. In the arid air, vibrations of its presence.

He was shouting to it, demanding that it did not come.

But it came. It came with majestic sloth, like the heartbeats of a foetid slumber, came in the door, pushing darkness before it. It was like a human, but too big to be human.

And it wore Malti's face, that sickeningly innocent smile with which she had run up the steps. No! No, that was not it — oh, he fell down onto the wet floor: it

was nothing like that woman, nothing at all. Cease, impossibilities! It was a man, his ebony skull shining, terrible and magnificent, stretching out, grasping, confident. Narayan struck out in his extremity and fell forward. Death was another indelible smack in the face.

One of the roosting Dasguptas blubbered and moaned as the man kicked him, woke for a moment, saw the screen still flickering meaninglessly and reassuringly, saw Narayan tremble under his blanket, tumbled back into sleep.

It was not till morning that they found it had been Narayan's last tremble.

I know I am supposed to be a detached observer. No emotions, no feelings. But scientific detachment is the attitude that has led to much of the inhumanity inherent in Environment. How do we, for all the bugging devices, hope to know what gastly secret nightmares they undergo in there? Anyhow, I am relieved to hear you are flying over.

It is tomorrow I am due to go into Environment myself.

IV

The central offices of UHDRE were large and repulsive. At the time when they and the Total

Environment tower had been built, the Indian Government would not have stood for anything else. Poured cement and rough edges was what they wanted to see and what they got.

From a window in the office building, Thomas Dixit could see the indeterminate land in one direction, and the gigantic TE tower in the other, together with the shantytown that had grown between the foot of the tower and the other UHDRE buildings.

For a moment, he chose to ignore the Project Organizer behind him and gaze out at what he could see of the table-flat lands of the great Ganges delta.

He thought, it's as good a place as any for man to project his power fantasies. But you are a fool to get mixed up in all this, Thomas!

Even to himself, he was never just Tom.

I am being paid, well paid, to do a specific job. Now I am letting wooly humanitarian ideas get in the way of action. Essentially, I am a very empty man. No center. Father Bengali, mother English, and live all my life in the States. I have excuses Other people accept them; why can't I?

Sighing, he dwelt on his own unsatisfactoriness. He did not really belong to the West, despite his long years there, and he cer-

tainly did not belong to India; in fact, he thought he rather disliked India. Maybe the best place for him was indeed the inside of the Environment tower.

He turned impatiently and said "I'm ready to get going now, Peter."

Peter Crawley, the Special Project Organizer of UHDRE was a rather austere Bostonian. He removed the horn-rimmed glasses from his nose and said "Right! Although we have been through the drill many times, Thomas, I have to tell you this once again before we move. The entire — "

"Yes, yes, I know, Peter! You don't have to cover yourself. This entire organization might be closed down if I make a wrong move. Please take it as read."

Without indignation, Crawley said, "I was going to say that we are all rooting for you. We appreciate the risks you are taking. We shall be checking you everywhere you go in there through the bugging system."

"And whatever you see, you can't do a thing."

"Be fair, we have made arrangements to help!"

"I'm sorry, Peter." He liked Crawley and Crawley's descent reserve.

Crawley folded his spectacles with a snap, inserted them in a leather slipcase and stood up.

"The U.N., not to mention sub-

sidary organizations like the WHO and the Indian government, have their knife into us, Thomas. They want to close us down and empty Environment. They will do so unless you can provide evidence that forms of extra-sensory perception are developing inside the Environment. Don't get yourself killed in there. The previous men we sent in behaved foolishly and never came out again." He raised an eyebrow and added dryly, "That sort of thing gets us a bad name, you know."

"Just as the blue movies did a while ago."

Crawley put his hands behind his back. "My predecessor here decided that immoral movies piped in to Environment would help boost the birth rate there. Whether he was right or wrong, world opinion has changed since then as the specter of world famine has faded. We stopped the movies eight years ago, but they have long memories at the U.N., I fear. They allow emotionalism to impede scientific research."

"Do you never feel any sympathy for the thousands of people doomed to live out their brief lives in the tower?"

They looked speculatively at each other.

"You aren't on our side any

more, Thomas, are you? You'd like your findings to be negative, wouldn't you, and have the U.N. close us down?"

Dixit uttered a laugh. "I'm not on anyone's *side*, Peter. I'm neutral. I'm going into Environment to look for the evidence of ESP that only direct contact may turn up. What else direct contact will turn up, neither of us can say as yet."

"But you think it will be misery. And you will emphasize that at the inquiry after your return."

"Peter — let's get on with it, shall we?" Momentarily, Dixit was granted a clear picture of the two of them standing in this room; he saw how their bodily attitudes contracted. His attitudes were rather slovenly; he held himself rather slump-shouldered, he gesticulated to some extent (too much?); he was dressed in threadbare tunic and shorts, ready to pass muster as an inhabitant of Environment. Crawley, on the other hand, was very upright, stiff and smart in his movements, hardly ever gestured as he spoke; his dress was faultless.

And there was no need to be awed by or envious of Crawley. Crawley was encased in inhibition, afraid to feel, signaling his aridity to anyone who cared to look out from their own self-pre-

occupation. Crawley, moreover, feared for his job.

"Let's get on with it, as you say." He came from behind his desk. "But I'd be grateful if you would remember, Thomas, that the people in the tower are volunteers, or the descendants of volunteers.

"When UHDRE began, a quarter-century ago, back in the mid-nineteen-seventies, only volunteers were admitted to the Total Environment. Five hundred young married Indian couples were admitted, plus whatever children they had. The tower was a refuge then, free from famine, immune from all disease. They were glad, heartily glad, to get in, glad of all that Environment provided and still provides. Those who didn't qualify rioted. We have to remember that.

"India was a different place in 1975. It had lost hope. One crisis after another, one famine after another, crops dying, people starving, and yet the population spiraling up by a million every month.

"But today, thank God, that picture has largely changed. Synthetic foods have licked the problem; we don't need the grudging land any more. And at last the Hindus and Muslims have got the birth control idea into their heads. It's only *now*, when a little hu-

manity is seeping back into this death-bowl of a sub-continent, that the UN dares complain about the inhumanity of UHDRE."

Dixit said nothing. He felt that this potted history was simply angled towards Crawley's self-justification; the ideas it represented were real enough, heaven knew, but they had meaning for Crawley only in terms of his own existence. Dixit felt pity and impatience as Crawley went on with his narration.

"Our aim here must be unswervingly the same as it was from the start. We have evidence that nervous disorders of a special kind produce extra-sensory perceptions — telepathy and the rest, and maybe kinds of ESP we do not yet recognize. High-density populations with reasonable nutritional standards develop particular nervous instabilities which may be akin to ESP spectra.

"The Ultra-High Density Research Establishment was set up to intensify the likelihood of ESP developing. Don't forget that. The people in Environment are supposed to have some ESP; that's the whole point of the operation, right? Sure, it is not humanitarian. We know that. But that is not your concern. You have to go in and find evi-

dence of ESP, something that doesn't show over the bugging. Then UHDRE will be able to continue."

Dixit prepared to leave. "If it hasn't shown up in quarter of a century — "

"It's in there! I know it's in there! The failure's in the bugging system. I feel it coming through the screens at me — some mystery we need to get our hands on! If only I could prove it! If only I could get in there myself!"

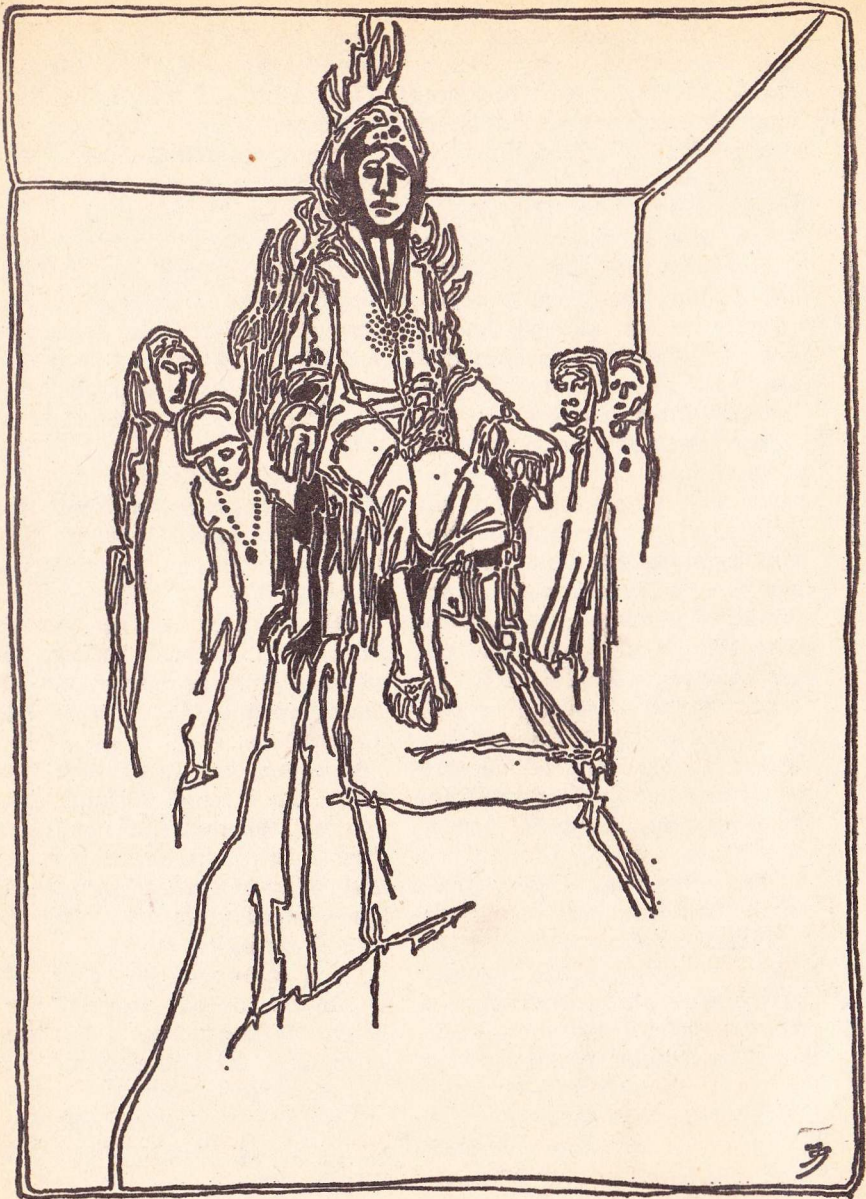
Interesting, Dixit thought. You'd have to be some sort of a voyeur to hold Crawley's job, forever spying on the wretched people.

"Too bad you have a white skin, eh?" he said lightly. He walked towards the door. It swung open, and he passed into the corridor.

Crawley ran after him and thrust out a hand. "I know how you feel, Thomas. I'm not just a stuffed shirt, you know, not entirely void of sympathy. Sorry if I was needling you. I didn't intend to do so."

Dixit dropped his gaze. "I should be the one to apologize, Peter. If there's anything unusual going on in the tower, I'll find it, never worry!"

They shook hands, without wholly being able to meet each other's eyes.



Leaving the office block, Dixit walked alone through the sunshine toward the looming tower that housed Total Environment. The concrete walk was hot and dusty underfoot. The sun was the one good thing that India had, he thought: that burning beautiful sun, the real ruler of India, whatever petty tyrants came and went.

The sun blazed down on the tower; only inside did it not shine.

The uncompromising outlines of the tower were blurred by pipes, ducts and shafts that ran up and down its exterior. It was a building built for looking into, not out of. Some time ago, in the bad years, the welter of visual records gleaned from Environment used to be edited and beamed out on global networks every evening; but all that had been stopped as conditions inside Environment deteriorated, and public opinion in the democracies, who were subsidizing the grandiose experiment, turned against the exploitation of human material.

A monitoring station stood by the tower walls. From here, a constant survey on the interior was kept. Facing the station were the jumbles of merchants' stalls, springing up to cater for tourists,

who persisted even now that the tourist trade was discouraged. Two security guards stepped forward and escorted Dixit to the base of the tower. With ceremony, he entered the shade of the entry elevator. As he closed the door, germicides sprayed him, insuring that he entered Environment without harboring dangerous micro-organisms.

The elevator carried him up to the top deck; this plan had been settled some while ago. The elevator was equipped with double steel doors. As it came to rest, a circuit opened, and a screen showed him what was happening on the other side of the doors. He emerged from a dummy air-conditioning unit, behind a wide pillar. He was in Patel's domain.

The awful weight of human overcrowding hit Dixit with its full stink and noise. He sat down at the base of the pillar and let his senses adjust. And he thought, I was the wrong one to send; I've always had this inner core of pity for the sufferings of humanity; I could never be impartial; I've got to see that this terrible experiment is stopped.

He was at one end of a long balcony on to which many doors opened; a ramp led down at the other end. All the doorways gaped, although some were covered by rugs. Most of the

doors had been taken off their hinges to serve as partitions along the balcony itself, partitioning off overspill families. Children ran everywhere, their tinkling voices and cries the dominant note in the hubbub. Glancing over the balcony, Dixit took in a dreadful scene of swarming multitudes, the anonymity of congestion; to sorrow for humanity was not to love its prodigality. Dixit had seen this panorama many times over the bugging system; he knew all the staggering figures — 1500 people in here to begin with, and by now some 75,000 people, a large proportion of them under four years of age. But pictures and figures were pale abstracts beside the reality they were intended to represent.

The kids drove him into action at last by playfully hurling dirt at him. Dixit moved slowly along, carrying himself tight and cringing in the manner of the crowd about him, features rigid, elbows tucked in to the ribs. *Mutatis mutandis*, it was Crawley's inhibited attitude. Even the children ran between the legs of their elders in that guarded way. As soon as he had left the shelter of his pillar, he was caught in a stream of chattering people, all jostling between the rooms and the stalls of the balcony. They moved very slowly.

Among the crowd were hawkers, and salesmen pressed their wares from the pitiful balcony hovels. Dixit tried to conceal his curiosity. Over the bugging he had not only distant views of the merchandise offered for sale. Here were the strange models that had caught his attention when he was first appointed to the UHDRE project. A man with orange goateyes, in fact probably no more than thirteen years of age, but here a hardened veteran, was at Dixit's elbow. As Dixit stared at him, momentarily suspicious he was being watched, the goat-eyed man merged into the crowd; and, to hide his face, Dixit turned to the nearest salesman.

In only a moment, he was eagerly examining the wares, forgetting how vulnerable was his situation.

All the strange models were extremely small. This Dixit attributed to shortage of materials — wrongly, as it later transpired. The biggest model the salesman possessed stood no more than two inches high. It was made, nevertheless, of a diversity of materials, in which many sorts of plastics featured. Some models were simple, and appeared to be little more than an elaborate *tughra* or monogram, which might have been intended for an elaborate piece of costume

jewelry; others, as one peered among their interstices, seemed to afford a glimpse of another dimension; all possessed eye-teasing properties.

The merchant was pressing Dixit to buy. He referred to the elaborate models as "life-objects." Noticing that one in particular attracted his potential customer, he lifted it delicately and held it up, a miracle of craftsmanship, perplexing, *outré*, giving Dixit somehow as much pain as pleasure. He named a price.

Although Dixit was primed with money, he automatically shook his head. "Too expensive."

"See, master, I show you how this life-object works!" The man fished beneath his scrap of loin-cloth and produced a small perforated silver box. Flipping it open, he produced a live woodlouse and slipped it under a hinged part of the model. The insect, in its struggles, activated a tiny wheel; the interior of the model began to rotate, some sets of minute planes turning in counterpoint to others.

"This life-object belonged to a very religious man, master."

In his fascination, Dixit said, "Are they all powered?"

"No, master, only special ones. This was perfect model from Dalcush Bancholi, last genera-

tion master all the way from Third Deck, very very fine and masterful workmanship of first quality. I have also still better one worked by a body louse, if you care to see."

By reflex, Dixit said, "Your prices are too high."

He absolved himself from the argument that brewed, slipping away through the crowd with the merchant calling after him. Other merchants shouted to him, sensing his interest in their wares. He saw some beautiful work, all on the tiniest scale and not only life-objects but amazing little watches with millisecond hands as well as second hands; in some cases, the millisecond was the largest hand; in some, the hour hand was missing or was supplemented by a day hand; and the watches took many extraordinary shapes, tetrakisshexahedrons and other elaborate forms, until their format merged with that of the life-objects.

Dixit thought approvingly: the clock and watch industry fulfills a human need for exercising elaborate skill and accuracy, while at the same time requiring a minimum of materials. These people of Total Environment are the world's greatest craftsmen. Bent over one curious watch that involved a color change, he became suddenly aware of danger. Glancing over his shoul-

der, he saw the man with the unpleasant orange eyes about to strike him. Dixit dodged without being able to avoid the blow. As it caught him on the side of his neck, he stumbled and fell under the milling feet.

VI

Afterwards, Dixit could hardly say that he had been totally unconscious. He was aware of hands dragging him, of being partly carried, of the sound of many voices, of the name "Patel" repeated And when he came fully to his senses, he was lying in a cramped room, with a guard in a scruffy turban standing by the door. His first hazy thought was that the room was no more than a small ship's cabin; then he realized that, by indigenous standards, this was a large room for only one person.

He was a prisoner in Total Environment.

A kind of self-mocking fear entered him; he had almost expected the blow, he realized; and he looked eagerly about for the bug-eye that would reassure him his UHDRE friends outside were aware of his predicament. There was no sign of the bug-eye. He was not long in working out why; this room had been partitioned out of a larger one, and the bugging system was evi-

dently shut in the other half — whether deliberately or accidentally, he had no way of knowing.

The guard had bobbed out of sight. Sounds of whispering came from beyond the doorway. Dixit felt the pressure of many people there. Then a woman came in and closed the door. She walked cringingly and carried a brass cup of water.

Although her face was lined, it was possible to see that she had once been beautiful and perhaps proud. Now her whole attitude expressed the defeat of her life. And this woman might be no more than eighteen! One of the terrifying features of Environment was the way, right from the start, confinement had speeded life-processes and abridged life.

Involuntarily, Dixit flinched away from the woman.

She almost smiled. "Do not fear me, sir. I am almost as much a prisoner as you are. Equally, do not think that by knocking me down you can escape. I promise you, there are fifty people outside the door, all eager to impress Prahlad Patel by catching you, should you try to get away."

So I'm in Patel's clutches, he thought. Aloud he said, "I will offer you no harm. I want to see Patel. If you are captive, tell me your name, and perhaps I can help you."

As she offered him the cup and he drank, she said, shyly, "I do not complain, for my fate might have been much worse than it is. Please do not agitate Patel about me, or he may throw me out of his household. My name is Malti, perhaps I may be able to help you, and all your tribe, soon. You are all in a form of captivity here, the great Patel included, and it is from that I hope to deliver you."

Then he saw fear in her eyes.

"You really are a spy from outside!" she breathed. "But we do not want our poor little world invaded! You have so much — leave us our little!" She shrank away and slipped through the door, leaving Dixit with a melancholy impression of her eyes, so burdened in their shrunken gaze.

The babel continued outside the door. Although he still felt sick, he propped himself up and let his thoughts run on. "You have so much — leave us our little . . ." All their values had been perverted. Poor things, they could know neither the smallness of their own world, nor the magnitude of the world outside. This — this dunghheap had become to them all there was of beauty and value.

Two guards came for him, mere boys. He could have

knocked their heads together, but compassion moved him. They led him through a room full of excited people; beyond their glaring faces, the screen flickered pallidly behind its mesh; Dixit saw how faint the image of outside was.

He was taken into another partitioned room. Two men were talking.

The scene struck Dixit with peculiar force, and not merely because he was at a disadvantage.

It was an alien scene. The impoverishment of even the richest furnishings, the clipped and bastardized variety of Hindi that was being talked, reinforced the impression of strangeness. And the charge of Patel's character filled the room.

There could be no doubt who was Patel. The plump cringing fellow, wringing his hands and protesting, was not Patel. Patel was the stocky white-haired man with the heavy lower lip and high forehead. Dixit had seen him in this very room over the bugging system. But to stand captive awaiting his attention was an experience of an entirely different order. Dixit tried to analyze the first fresh impact Patel had on him, but it was elusive.

It was difficult to realize that, as the outside measured years,

Patel could not be much more than nineteen or twenty years of age. Time was impacted here, jellified under the psychic pressures of Total Environment. Like the hieroglyphics of that new relativity, detailed plans of the Environment hung large on one wall of this room, while figures and names were chalked over the others. The room was the nerve center of Top Deck.

He knew something about Patel from the UHDRE records. Patel had come up here from the Seventh Deck. By guile as well as force, he had become ruler of Top Deck at an early age. He had surprised UHDRE observers by abstaining from the usual forays of conquest into other floors.

Patel was saying to the cringing man, "Be silent! You try to obscure the truth with argument. You have heard the witnesses against you. During your period of watch on the stairs, you were bribed by a man from Ninth Deck and you let him through here."

"Only for a mere seventeen minutes, Sir Patel!!"

"I am aware that such things happen every day, wretched Raital. But this fellow you let through stole the life-object belonging to Narayan Farhad and, in consequence, Narayan Farhad died in his sleep last night.

Narayan was no more important than you are, but he was useful to me, and it is in order that he be revenged."

"Anything that you say, Sir Patel!"

"Be silent, wretched Raital!" Patel watched Raital with interest as he spoke. And he spoke in a firm reflective voice that impressed Dixit more than shouting would have done.

"You shall revenge Narayan, Raital, because you caused his death. You will leave here now. You will not be punished. You will go, and you will steal the life-object belonging to that fellow from whom you accepted the bribe. You will bring that life-object to me. You have one day to do so. Otherwise, my assassins will find you out wherever you hide, be it even down on Deck One."

"Oh, yes, indeed, Sir Patel, all men know — " Raital was bent almost double as he uttered some face-saving formula. He turned and scurried away as Patel dismissed him.

Strength, thought Dixit. Strength, and also cunning. That is what Patel radiates. An elaborate and cutting subtlety. The phrase pleased him, seeming to represent something actual that he had detected in Patel's make-up. An elaborate and cutting subtlety.

Clearly, it was part of Patel's design that Dixit should witness this demonstration of his methods.

Patel turned away, folded his arms, and contemplated a blank piece of wall at close range. He stood motionless. The guards held Dixit still, but not so still as Patel held himself.

This tableau was maintained for several minutes. Dixit found himself losing track of the normal passage of time. Patel's habit of turning to stare at the wall — and it did not belong to Patel alone — was an uncanny one that Dixit had watched several times over the bugging system. It was that habit, he thought, which might have given Crawley the notion that ESP was rampant in the tower.

It was curious to think of Crawley here. Although Crawley might at this moment be surveying Dixit's face on a monitor, Crawley was now no more than an hypothesis.

Malti broke the tableau. She entered the room with a damp cloth on a tray, to stand waiting patiently for Patel to notice her. He broke away at last from his motionless survey of the wall, gesturing abruptly to the guards to leave. He took no notice of Dixit, sitting in a chair, letting Malti drape the damp cloth

round his neck; the cloth had a fragrant smell to it.

"The towel is not cool enough, Malti, or damp enough. You will attend to me properly at my morning session, or you will lose this easy job."

He swung his gaze, which was suddenly black and searching, on to Dixit to say, "Well, spy, you know I am Lord here. Do you wonder why I tolerate old women like this about me when I could have girls young and lovely to fawn on me?"

Dixit said nothing, and the self-styled Lord continued, "Young girls would merely remind me by contrast of my advanced years. But this old bag — whom I bought only yesterday — this old bag is only just my junior and makes me look good in contrast. You see, we are masters of philosophy in here, in this prison-universe; we cannot be masters of material wealth like you people outside!"

Again Dixit said nothing, disgusted by the man's implied attitude to women.

A swinging blow caught him unprepared in the stomach. He cried and dropped suddenly to the floor.

"Get up, spy!" Patel said. He had moved extraordinarily fast. He sat back again in his chair, letting Malti massage his neck muscles.

As Dixit staggered to his feet, Patel said, "You don't deny you are from outside?"

"I did not attempt to deny it. I came from outside to speak to you."

"You say nothing here until you are ordered to speak. Your people — you outsiders — you have sent in several spies to us in the last few months. Why?"

Still feeling sick from the blow, Dixit said, "You should realize that we are your friends rather than your enemies, and our men emissaries rather than spies."

"Pah! You are a breed of spies! Don't you sit and spy on us from every room? You live in a funny little dull world out there, don't you? So interested in us that you can think of nothing else! Keep working, Malti! Little spy, you know what happened to all the other spies your spying people sent in?"

"They died," Dixit said.

"Exactly. They died. But you are the first to be sent to Patel's deck. What different thing to death do you expect here?"

"Another death will make my superiors very tired, Patel. You may have the power of life and death over me; they have the same over you, and over all in this world of yours. Do you want a demonstration?"

Rising, flinging the towel off, Patel said, "Give me your demonstration!"

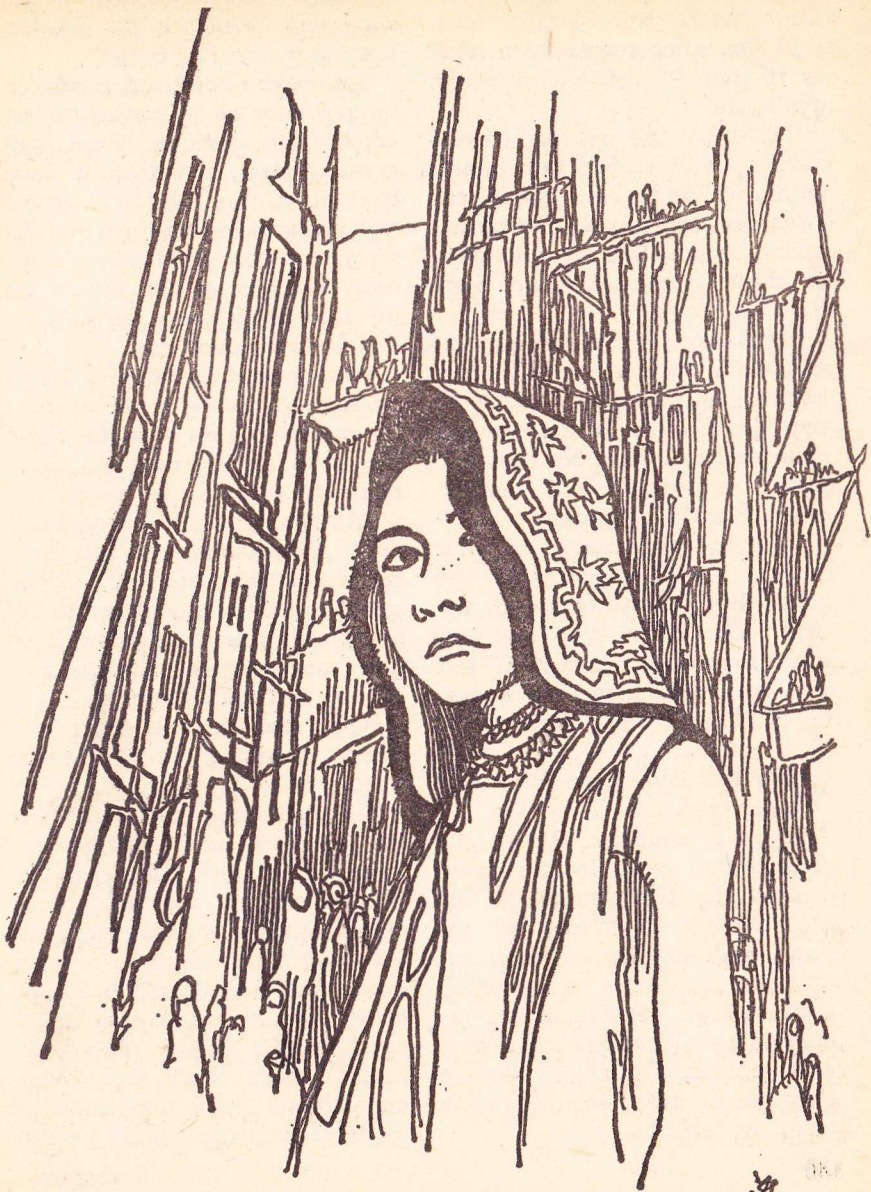
Must do, Dixit thought. Staring in Patel's eyes, he raised his right hand above his head and gestured with his thumb. Pray they are watching — and thank God this bit of partitioned room is the bit with the bugging system!

Tensely, Patel stared, balanced on his toes. Behind his shoulder, Malti also stared. Nothing happened.

Then a sort of shudder ran through Environment. It became slowly audible as a mixture of groan and cry. Its cause became apparent in this less crowded room when the air began to grow hot and foul. So Dixit's signal had got through; Crawley had him under survey, and the air-conditioning plant was pumping in hot carbon-dioxide through the respiratory system.

"You see? We control the very air you breathe!" Dixit said. He dropped his arm, and slowly the air returned to normal, although it was at least an hour before the fright died down in the passages.

Whatever the demonstration had done to Patel, he showed nothing. Instead, he said, "You control the air. Very well. But you do not control the will to turn it off permanently — and



so you do not control the air. Your threat is an empty one, spy! For some reason, you need us to live. We have a mystery, don't we?"

"There is no reason why I should be anything but honest with you, Patel. Your special environment must have bred special talents in you. We are interested in those talents; but no more than interested."

Patel came closer and inspected Dixit's face minutely, rather as he had recently inspected the blank wall. Strange angers churned inside him; his neck and throat turned a dark mottled color. Finally he spoke.

"We are the center of your outside world, aren't we? We know that you watch us all the time. We know that you are much more than 'interested!' For you, we here are somehow a matter of life and death, aren't we?"

This was more than Dixit had expected.

"Four generations, Patel, four generations have been incarcerated in Environment." His voice trembled. "Four generations, and, despite our best intentions, you are losing touch with reality. You live in one relatively small building on a sizeable planet. Clearly, you can only be of limited interest to the world at large."

"Malti!" Patel turned to the slave girl. "Which is the greater, the outer world or ours?"

She looked confused, hesitated by the door as if longing to escape. "The outside world was great, master, but then it gave birth to us, and we have grown and are growing and are gaining strength. The child now is almost the size of the father. So my step-father's son Jamsu says, and he is a clever one."

Patel turned to stare at Dixit, a haughty expression on his face. He made no comment, as if the words of an ignorant girl were sufficient to prove his point.

"All that you and the girl say only emphasizes to me how much you need help, Patel. The world outside is a great and thriving place; you must allow it to give you assistance through me. We are not your enemies."

Again the choleric anger was there, powering Patel's every word.

"What else are you, spy? Your life is so vile and pointless out there, is it not? You envy us because we are superseding you! Our people — we may be poor, you may think of us as in your power, but we rule our own universe. And that universe is expanding and falling under our control more every day. Why, our explorers have gone into the world of the ultra-small. We dis-

cover new environments, new ways of living. By your terms, we are scientific peasants, perhaps, but I fancy we have ways of knowing the trade routes of the blood and the eternities of cell-change that you cannot comprehend. You think of us all as captives, eh? Yet you are captive to the necessity of supplying our air and our food and water; we are free. We are poor, yet you covet our riches. We are spied on all the time, yet we are secret. You need to understand us, yet we have no need to understand you. You are in *our* power, spy!"

"Certainly not in one vital respect, Patel. Both you and we are ruled by historical necessity. This Environment was set up twenty-five of our years ago. Changes have taken place not only in here but outside as well. The nations of the world are no longer prepared to finance this project. It is going to be closed down entirely, and you are going to have to live outside. Or, if you don't want that, you'd better cooperate with us and persuade the leaders of the other decks to cooperate."

Would threats work with Patel? His hooded and oblique gaze bit into Dixit like a hook.

After a deadly pause, he clapped his hands once. Two guards immediately appeared.

"Take the spy away," said

Patel. Then he turned his back.

A clever man, Dixit thought. He sat alone in the cell and meditated.

It seemed as if a battle of wits might develop between him and Patel. Well, he was prepared. He trusted to his first impression, that Patel was a man of cutting subtlety. He could not be taken to mean all that he said.

Dixit's mind worked back over their conversation. The mystery of the life-objects had been dangled before him. And Patel had taken care to belittle the outside world: "funny dull little world," he had called it. He had made Malti advance her primitive view that Environment was growing, and that had fitted in very well with his brand of boasting. Which led to the deduction that he had known her views beforehand; yet he had bought her only yesterday. Why should a busy man, a leader, bother to question an ignorant slave about her views of the outside world unless he were starved for information of that world, obsessed with it?"

Yes, Dixit nodded to himself. Patel was obsessed with outside and tried to hide that obsession; but several small contradictions in his talk had revealed it.

Of course, it might be that Malti was so generally represen-

tative of the thousands in Environment that her misinformed ideas could be taken for granted. It was as well, as yet, not to be too certain that he was beginning to understand Patel.

Part of Patel's speech made sense even superficially. These poor devils were exploring the world of the ultra-small. It was the only landscape left for them to map. They were human, and still burning inside them was that unquenchable human urge to open new frontiers.

So they knew some inward things. Quite possibly, as Crawley anticipated, they possessed a system of ESP upon which some reliance might be placed, unlike the wildly fluctuating telepathic radiations which circulated in the outside world.

He felt confident, fully engaged. There was much to understand here. The bugging system, elaborate and over-used, was shown to be a complete failure; the watchers had stayed external to their problem; it remained their problem, not their life. What was needed was a whole team to come and live here, perhaps a team on every deck, anthropologists and so on. Since that was impossible, then clearly the people of Environment must be released from their captivity; those that were unwilling to go far afield should be settled in

new villages on the Ganges plain, under the wide sky. And there, as they adapted to the real world, observers could live among them, learning with humility of the gifts that had been acquired at such cost within the thick walls of the Total Environment tower.

As Dixit sat in meditation, a guard brought a meal in to him.

He ate thankfully and renewed his thinking.

From the little he had already experienced — the ghastly pressures on living space, the slavery, the aberrant modes of thought into which the people were being forced, the harshness of the petty rulers — he was confirmed in his view that this experiment in anything like its present form must be closed down at once. The U.N. needed the excuse of his adverse report before they moved; they should have it when he got out. And if he worded the report carefully, stressing that these people had many talents to offer, then he might also satisfy Crawley and his like. He had it in his power to satisfy all parties, when he got out. All he had to do was get out.

The guard came back to collect his empty bowl.

"When is Patel going to speak with me again?"

The guard said, "When he sends for you to have you silenced for ever."

Dixit stopped composing his report and thought about that instead.

VIII

Much time elapsed before Dixit was visited again, and then it was only the self-effacing Malti who appeared, bringing him a cup of water.

"I want to talk to you," Dixit said urgently.

"No, no, I cannot talk! He will beat me! It is the time when we sleep, when the old die. You should sleep now, and Patel will see you in the morning."

He tried to touch her hand, but she withdrew.

"You are a kind girl, Malti. You suffer in Patel's household."

"He has many women, many servants. I am not alone."

"Can you not escape back to your family?"

She looked at the floor evasively. "It would bring trouble to my family. Slavery is the lot of many women. It is the way of the world."

"It is not the way of the world I come from!"

Her eyes flashed. "Your world is of no interest to us!"

Dixit thought after she had gone, She is afraid of our world. Rightly.

He slept little during the night. Even barricaded inside Patel's

TOTAL ENVIRONMENT

fortress, he could still hear the noises of Environment: not only the voices, almost never silent, but the gurgle and sob of pipes in the walls. In the morning, he was taken into a larger room where Patel was issuing commands for the day to a succession of subordinates.

Confined to a corner, Dixit followed everything with interest. His interest grew when the unfortunate guard Raital appeared. He bounded in and waited for Patel to strike him. Instead, Patel kicked him.

"You have performed as I ordered yesterday?"

Raital began at once to cry and wring his hands. "Sir Patel, I have performed as well as and better than you demanded, incurring great suffering and having myself beaten downstairs where the people of Ninth Deck discovered me marauding. You must invade them, Sir, and teach them a lesson that in their insolence they so dare to mock your faithful guards who only do those things —"

"Silence, you dog-devourer! Do you bring back that item which I demanded of you yesterday?"

The wretched guard brought from the pocket of his tattered tunic a small object, which he held out to Patel.

"Of course I obey, Sir Patel.

To keep this object safe when the people caught me, I swallow it whole, sir, into the stomach for safe keeping, so that they would not know what I am about. Then my wife gives me sharp medicine so that I vomit it safely again to deliver to you."

"Put the filthy thing down on that shelf there! You think I wish to touch it when it has been in your worm-infested belly, slave?"

The guard did as he was bid and abased himself.

"You are sure it is the life-object of the man who stole Narayan Farhad's life-object, and nobody else's?"

"Oh, indeed, Sir Patel! It belongs to a man called Gita, the very very same who stole Narayan's life-object, and tonight you will see he will die of night-visions!!"

"Get out!" Patel managed to catch Raital's buttocks with a swift kick as the guard scampered from the room.

A queue of people stood waiting to speak with him, to supplicate and advise. Patel sat and interviewed them, in the main showing a better humor than he had shown his luckless guard. For Dixit, this scene had a curious interest; he had watched Patel's morning audience more than once, standing by Craw-

ley's side in the UHDRE monitoring station; now he was a prisoner waiting uncomfortably in the corner of the room, and the whole atmosphere was changed. He felt the extraordinary intensity of these people's lives, the emotions compressed, everything vivid. Patel himself wept several times as some tale of hardship was unfolded to him. There was no privacy. Everyone stood round him, listening to everything. Short the lives might be; but those annihilating spaces that stretch through ordinary lives, the spaces through which one glimpses uncomfortable glooms and larger poverties, if not presences more sour and sinister, seemed here to have been eradicated. The Total Environment had brought its peoples total involvement. Whatever befell them, they were united, as were bees in a hive.

Finally, a break was called. The unfortunates who had not gained Patel's ear were turned away; Malti was summoned and administered the damp-towel treatment to Patel. Later, he sent her off and ate a frugal meal. Only when he had finished it and sat momentarily in meditation, did he turn his brooding attention to Dixit.

He indicated that Dixit was to fetch down the object Raital had placed on a shelf. Dixit did so

and put the object before Patel. Staring at it with interest, he saw it was an elaborate little model, similar to the ones for sale on the balcony.

"Observe it well," Patel said. "It is the life-object of a man. You have these — " he gestured vaguely — "outside?"

"No."

"You know what they are?"

"No."

"In this world of ours, Mr. Dixit, we have many holy men. I have a holy man here under my protection. On the deck below is one very famous holy man, Vazifdariji. These men have many powers. Tonight, I shall give my holy man this life-object, and with it he will be able to enter the being of the man to whom it belongs, for good or ill, and in this case for ill, to revenge a death with a death."

Dixit stared at the little object, a three-dimensional maze constructed of silver and plastic strands, trying to comprehend what Patel was saying.

"This is a sort of key to its owner's mind?"

"No, no, not a key, and not to his mind. It is a — well, we do not have a scientific word for it, and our word would mean nothing to you, so I cannot say what. It is, let us say, a replica, a

substitute for the man's being. Not his mind, his being. In this case, a man called Gita. You are very interested, aren't you?"

"Everyone here has one of these?"

"Down to the very poorest and even the older children. A sage works in conjunction with a smith to produce each individual life-object."

"But they can be stolen and then an ill-intentioned holy man can use them to kill the owner. So why make them? I don't understand."

Smiling, Patel made a small movement of impatience. "What you discover of yourself, you record. That is how these things are made. They are not trinkets; they are a man's record of his discovery of himself."

Dixit shook his head. "If they are so personal, why are so many sold by street traders as trinkets?"

"Men die. Then their life-objects have no value, except as trinkets. They are also popularly believed to bestow . . . well, personality-value. There also exist large numbers of forgeries, which people buy because they like to have them, simply as decorations."

After a moment, Dixit said. "So they are innocent things, but you take them and use them for evil ends."

"I use them to keep a power balance. A man of mine called Narayan was silenced by Gita of Ninth Deck. Never mind why. So tonight I silence Gita to keep the balance."

He stopped and looked closely at Dixit, so that the latter received a blast of that enigmatic personality. He opened his hand and said, still observing Dixit, "Death sits in my palm, Mr. Dixit. Tonight I shall have you silenced also, by what you may consider more ordinary methods."

Clenching his hands tightly together, Dixit said, "You tell me about the life-objects, and yet you claim you are going to kill me."

Patel pointed up to one corner of his room. "There are eyes and ears there, while your ever-hungry spying friends suck up the facts of this world. You see, I can tell them — I can tell them so much and they can never comprehend our life. All the important things can never be said, so they can never learn. But they can see you die tonight, and that they will comprehend. Perhaps then they will cease to send spies in here."

He clipped his hands once for the guard. They came forward and led Dixit away. As he went back to his cell, he heard Patel shouting for Malti.

IX

The hours passed in steady gloom. The U.N., the UHDRE, would not rescue him; the Environment charter permitted intervention by only one outsider at a time. Dixit could hear, feel, the vast throbbing life of the place going on about him and was shaken by it.

He tried to think about the life-objects. Presumably Crawley had overheard the last conversation, and would know that the holy men, as Patel called them, had the power to kill at a distance. There was the ESP evidence Crawley sought: telecide, or whatever you called it. And the knowledge helped nobody, as Patel himself observed. It had long been known that African witch doctors possessed similar talents, to lay a spell on a man and kill him at a distance; but how they did it had never been established; nor, indeed, had the fact ever been properly assimilated by the west, eager though the west was for new methods of killing. There were things one civilization could not learn from another; the whole business of life-objects, Dixit perceived, was going to be such a matter: endlessly fascinating, entirely insoluble

He thought, returning to his cell, and told himself: Patel still

puzzles me. But it is no use hanging about here being puzzled. Here I sit, waiting for a knife in the guts. It must be night now. I've got to get out of here.

There was no way out of the room. He paced restlessly up and down. They brought him no meal, which was ominous.

A long while later, the door was unlocked and opened.

It was Malti. She lifted one finger as a caution to silence, and closed the door behind her.

"It's time for me . . .?" Dixit asked.

She came quickly over to him, not touching him, staring at him. Though she was an ugly and despondent woman, beauty lay in her time-haunted eyes.

"I can help you escape, Dixit. Patel sleeps now, and I have an understanding with the guards here. Understandings have been reached to smuggle you down to my own deck, where perhaps you can get back to the outside where you belong. This place is full of arrangements. But you must be quick. Are you ready?"

"He'll kill you when he finds out!"

She shrugged. "He may not. I think perhaps he likes me. Prah-lad Patel is not inhuman, whatever you think of him."

"No? But he plans to murder someone else tonight. He has ac-

quired some poor fellow's life-object and plans to have his holy man kill him with night-visions, whatever they are."

She said, "People have to die. You are going to be lucky. You will not die, not this night."

"If you take that fatalistic view, why help me?"

He saw a flash of defiance in her eyes. "Because you must take a message outside for me."

"Outside? To whom?"

"To everyone there, everyone who greedily spies on us here and would spoil this world. Tell them to go away and leave us and let us make our own world. Forget us! That is my message! Take it! Deliver it with all the strength you have! This is our world — not yours!"

Her vehemence, her ignorance, silenced him. She led him from the room. There were guards on the outer door. They stood rigid with their eyes closed, seeing no evil, and she slid between them, leading Dixit, and opening the door. They hurried outside, on to the balcony, which was still as crowded as ever, people sprawling everywhere in the disconsolate gestures of public sleep. With the noise and chaos and animation of day-time fled, Total Environment stood fully revealed for the echoing prison it was.

As Malti turned to go, Dixit grasped her wrist.

"I must return," she said. "Get quickly to the steps — down to Ninth Deck, the near steps. That's three flights to go down, the inter-deck flight guarded. They will let you through; they expect you."

"Malti, I must try to help this other man who is to die. Do you happen to know someone called Gita?"

She gasped and clung to him. "Gita?"

"Gita of the Ninth Deck. Patel has Gita's life-object, and he is to die tonight."

"Gita is my step-father, my mother's third husband. A good man! Oh, he must not die, for my mother's sake!"

"He's to die tonight. Malti, I can help you and Gita. I appreciate how you feel about outside, but you are mistaken. You would be free in a way you cannot understand! Take me to Gita, and we'll all three get out together."

Conflicting emotions chased all over her face. "You are sure Gita is to die?"

"Come and check with him to see if his life-object has gone!"

Without waiting for her to make a decision — in fact she looked as if she were just about to bolt back into Patel's quarters — Dixit took hold of her and

forced her along the balcony, picking his way through the piles of sleepers.

Ramps ran down from balcony to balcony in long zigzags. For all its multitudes of people — even the ramps had been taken up as dosses by whole swarms of urchins — Total Environment seemed much larger than it had when one looked in from the monitoring room. He kept peering back to see if they were being followed; it seemed to him unlikely that he would be able to get away.

But they had now reached the stairs leading down to Deck Nine. Oh, well, he thought, corruption he could believe in; it was the universal oriental system whereby the small man contrived to live under oppression. As soon as the guards saw him and Malti, they all stood and closed their eyes. Among them was the wretched Raital, who hurriedly clapped palms over eyes as they approached.

"I must go back to Patel," Malti gasped.

"Why? You know he will kill you," Dixit said. He kept tight hold of her thin wrist. "All these witnesses to the way you led me to safety — you can't believe he will not discover what you are doing. Let's get to Gita quickly."

He hustled her down the stairs. There were Deck Nine guards at

the bottom. They smiled and saluted Malti and let her by. As if resigned now to doing what Dixit wished, she led him forward, and they picked their way down a ramp to a lower floor. The squalor and confusion were greater here than they had been above, the slumbers more broken. This was a deck without a strong leader, and it showed.

He must have seen just such a picture as this over the bugging, in the air-conditioned comfort of the UHDRE offices, and remained comparatively unmoved. You had to be among it to feel it. Then you caught also the aroma of Environment. It was pungent in the extreme.

As they moved slowly down among the huddled figures abased by fatigue, he saw that a corpse burned slowly on a wood pile. It was the corpse of a child. Smoke rose from it in a leisurely coil until it was sucked into a wall vent. A mother squatted by the body, her face shielded by one skeletal hand. "It is the time when the old die," Malti had said of the previous night; and the young had to answer that same call.

This was the Indian way of facing the inhumanity of Environment: with their age-old acceptance of suffering. Had one of the white races been shut in

here to breed to intolerable numbers, they would have met the situation with a general massacre. Dixit, a half-caste, would not permit himself to judge which response he most respected.

Malti kept her gaze fixed on the worn concrete underfoot as they moved down the ramp past the corpse. At the bottom, she led him forward again without a word.

They pushed through the sleazy ways, arriving at last at a battered doorway. With a glance at Dixit, Malti slipped in and rejoined her family. Her mother, not sleeping, crouched over a wash bowl, gave a cry and fell into Malti's arms. Brothers and sisters and half-brothers and half-sisters and cousins and nephews woke up, squealing. Dixit was utterly brushed aside. He stood nervously, waiting, hoping, in the corridor.

It was many minutes before Malti came out and led him into the crowded little cabin. She introduced him to Shamim, her mother, who curtsied and rapidly disappeared, and to her stepfather, Gita.

The little wiry man shoed everyone out of one corner of the room and moved Dixit into it. A cup of wine was produced and offered politely to the visitor. As he sipped it, he said, "If

your step-daughter has explained the situation, Gita, I'd like to get you and Malti out of here, because otherwise your lives are worth very little. I can guarantee you will be extremely kindly treated outside."

With dignity, Gita said, "Sir, all this very unpleasant business has been explained to me by my step-daughter. You are most good to take this trouble, but we cannot help you."

"You, or rather Malti, have helped me. Now it is my turn to help you. I want to take you out of here to a safe place. You realize you are both under the threat of death? You hardly need telling that Prahlad Patel is a ruthless man."

"He is very very ruthless, sir," Gita said unhappily. "But we cannot leave here. I cannot leave here — look at all these little people who are dependent on me! Who would look after them if I left?"

"But if your hours are numbered?"

"If I have only one minute to go before I die, still I cannot desert those who depend on me."

Dixit turned to Malti. "You, Malti — you have less responsibility. Patel will have his revenge on you. Come with me and be safe!"

She shook her head. "If I came, I would sicken with worry

for what was happening here and so I would die that way."

He looked about him hopelessly. The blind interdependence bred by this crowded environment had beaten him — almost. He still had one card to play.

"When I go out of here, as go I must, I have to report to my superiors. They are the people who — the people who really order everything that happens here. They supply your light, your food, your air. They are like gods to you, with the power of death over every one on every deck — which perhaps is why you can hardly believe in them. They already feel that Total Environment is wrong, a crime against your humanity. I have to take my verdict to them. My verdict, I can tell you now, is that the lives of all you people are as precious as lives outside these walls. The experiment must be stopped; you all must go free.

"You may not understand entirely what I mean, but perhaps the wall screens have helped you grasp something. You will all be looked after and rehabilitated. Everyone will be released from the decks very soon. So, you can both come with me and save your lives; and then, in perhaps only a week, you will be reunited with your family. Patel



will have no power then. Now, think over your decision again, for the good of your dependents, and come with me to life and freedom."

Malti and Gita looked anxiously at each other and went into a huddle. Shamim joined in, and Jamsu, and lame Shirim, and more and more of the tribe, and a great jangle of excited talk swelled up. Dixit fretted nervously.

Finally, silence fell. Gita said, "Sir, your intentions are plainly kind. But you have forgotten that Malti charged you to take a message to outside. Her message was to tell the people there to go away and let us make our own world. Perhaps you do not understand such a message and so cannot deliver it. Then I will give you my message, and you can take it to your superiors."

Dixit bowed his head.

"Tell them, your superiors and everyone outside who insists on watching us and meddling in our affairs, tell them that we are shaping our own lives. We know what is to come, and the many problems of having such a plenty of young people. But we have faith in our next generation. We believe they will have many new talents we do not possess, as we have talents our fathers did not possess.

"We know you will continue

to send in food and air, because that is something you cannot escape from. We also know that in your hidden minds you wish to see us all fail and die. You wish to see us break, to see what will happen when we do. You do not have love for us. You have fear and puzzlement and hate. We shall not break. We are building a new sort of world, we are getting clever. We would die if you took us out of here. Go and tell that to your superiors and to everyone who spies on us. Please leave us to our own lives, over which we have our own commands."

There seemed nothing Dixit could say in answer. He looked at Malti, but could see she was unyielding, frail and pale and unyielding. This was what UHGRE had bred: complete lack of understanding. He turned and went.

He had his key. He knew the secret place on each deck where he could slip away into one of the escape elevators. As he pushed through the grimy crowds, he could hardly see his way for tears.

X

It was all very informal. Dixit made his report to a board of six members of the UHGRE administration, including the

Special Project Organizer, Peter Crawley. Two observers were allowed to sit in, a grand lady who represented the Indian Government, and Dixit's old friend, Senator Jacob Byrnes, representing the United Nations.

Dixit delivered his report on what he had found and added a recommendation that a rehabilitation village be set up immediately and the Environment wound down.

Crawley rose to his feet and stood rigid as he said, "By your own words, you admit that these people of Environment cling desperately to what little they have. However terrible, however miserable, that little may seem to you. They are acclimatized to what they have. They have turned their backs to the outside world and don't want to come out."

Dixit said, "We shall rehabilitate them, re-educate them, find them local homes where the intricate family patterns to which they are used can still be maintained, where they can be helped back to normality."

"But by what you say, they would receive a paralyzing shock if confronted with the outside world and its gigantic scale."

"Not if Patel still led them."

A mutter ran along the board; its members clearly thought this an absurd statement. Crawley

gestured despairingly, as if his case were made, and sat down saying, "He's the sort of tyrant who causes the misery in Environment."

"The one thing they need when they emerge to freedom is a strong leader they know. Gentlemen, Patel is our good hope. His great asset is that he is oriented towards outside already."

"Just what does that mean?" one of the board asked.

"It means this. Patel is a clever man. My belief is that he arranged that Malti should help me escape from his cell. He never had any intention of killing me; that was a bluff to get me on my way. Little, oppressed Malti was just not the woman to take any initiative. What Patel probably did not bargain for was that I should mention Gita by name to her, or that Gita should be closely related to her. But because of their fatalism, his plan was in no way upset."

"Why should Patel want you to escape?"

"Implicit in much that he did and said, though he tried to hide it, was a burning curiosity about outside. He exhibited facets of his culture to me to ascertain my reactions — testing for approval or disapproval, I'd guess, like a child. Nor does he attempt to attack other decks — the time-

honored sport of Environment tyrants; his attention is directed inwardly on us.

"Patel is intelligent enough to know that we have real power. He has never lost the true picture of reality, unlike his minions. So he wants to get out.

"He calculated that if I got back to you, seemingly having escaped death, I would report strongly enough to persuade you to start demolishing Total Environment immediately."

"Which you are doing," Crawley said.

"Which I am doing. Not for Patel's reasons, but for human reasons. And for utilitarian reasons also — which will perhaps appeal more to Mr. Crawley. Gentlemen, you were right. There are mental disciplines in Environment the world could use, of which perhaps the least attractive is telecide. UHDRE has cost the public millions on millions of dollars. We have to recoup by these new advances. We can only use these new advances by studying them in an atmosphere not laden with hatred and envy of us — in other words, by opening that black tower.

The meeting broke up. Of course, he could not expect anything more decisive than that for a day or two.

Senator Byrnes came over.

"Not only did you make out a good case, Thomas; history is with you. The world's emerging from a bad period and that dark tower, as you call it, is a symbol of the bad times, and so it has to go."

Inwardly, Dixit had his qualifications to that remark. But they walked together to the window of the boardroom and looked across at the great rough bulk of the Environment building.

"It's more than a symbol. It's as full of suffering and hope as our own world. But it's a man-made monster — it must go."

Byrnes nodded. "Don't worry. It'll go. I feel sure that the historical process, that blind evolutionary thing, has already decided that UHDRE's day is done. Stick around. In a few weeks, you'll be able to help Malti's family rehabilitate. And now I'm off to put in my two cents' worth with the chairman of that board."

He clapped Dixit on the back and walked off. Inside he knew lights would be burning and those thronging feet padding across the only world they knew. Inside there, babies would be born this night and men die of old age and night-visions

Outside, monsoon rain began to fall on the wide Indian land.

— BRIAN W. ALDISS
GALAXY



Galaxy Bookshelf

by ALGIS BUDRYS

Yes, fans, it's time for the Third Annual Galaxy Awards for impressing Algis Budrys with fiction in book form during the past year. This annual effrontery offers the lucky recipient nothing but the sight of his name in print an additional time, and an empty promise of a drink. Arrangements are being

contemplated to add a grand prize of a month in Philadelphia; consult this space in the February, 1969, *Galaxy* for further developments on that score.

The best novel of the past year was Samuel R. Delany's *The Einstein Intersection*. Why did this bad book win? Because it is chockful of excellent inventions, of outrageous inventions such as a musical machete, of self-confidence and joy; because it conveys a sense that the author groped around until he found Kid Death to put in it. He does not do much with him, having him, but these are days in which a damned good grope is often the best you can do, and better than what romances they used to sell. So go buy this Ace book.

The best publishing idea of the year was either Putnam's *The Past Through Tomorrow*, collecting the major portion of Robert A. Heinlein's Future History series (\$5.95), or Doubleday's *Three Stories* (by Murray Leinster, Jack Williamson and John Wyndham), edited by Sam Moskowitz and priced at \$3.95. We solve the dilemma by giving Putnam the cup for Publishing Idea and Sam the accolade for Editor.

(Ah, by the way, when a publishing company wins the Budrys Benison, one officially designated representative may approach the

Benefactor for one drink. He must carry a letter of introduction from Mr. Putnam.)

The Best Thing All Year was by Fritz Leiber. It was *The Big Time*, which I say is a play and *Galaxy* (and the 17th World SF Convention) said was a prize-winning novel. Would somebody care to produce it, so I can be proven stupid?

I envy you all.

It was time, I thought, to return to those days of yesteryear when I could barely wait for the next issue of *The Avon Fantasy Reader* and the next Conan story reprint. Much had intervened, including the emergence of a positive antipathy to the Ass of Aquilonia. So when Lancer Books sent me a copy of *King Kull*, by Robert E. Howard and Lin Carter edited by Glenn Lord with a teeming Roy Krenkel cover, I fell to.

Kull, as you have to know, was a prototype Conan, a trial creation by Robert Howard, picked up and dropped, dropped and picked up, while the modern master of mythic mishmash was tuning up for apotheosis. Some of the bobbles and incompleteness have been worked over by Lin Carter, and rather well; I ran right through *Black Abyss* without realizing it was a posthumous collaboration, and only in hind-

sight did it occur to me the kind of pathos in it was not in accord with Howard as he was.

This is, to sober up momentarily, a collection of stories about Kull, whom we meet briefly as a mysterious stranger in Atlantis before he turns up as king of equally foreign Valusia after one paragraph of summary. That paragraph would have contained a hundred thousand words about Conan. There are other hiati as well; you cannot get to know Kull as well as you know and can trace Conan's development, simply because if you could, Howard would not have had to go through a similar process with his better-known protagonist. If it weren't for Carter's skill at pastiche, you would know Kull even less than you do.

If you like cut-and-thrust pre-diluvian adventure stories, combining a masochistic megalomania with a strong streak of horror writing, you will find here a pretty good dose thereof. If you would like to know more about Kull, then you are just going to have to join with my own feeling of faint exasperation at being pretty much forever barred from sharing in some of the most interesting portions of Kull's life. A feeling of exasperation which, I might add, does not extend to Lancer Books; it was a good idea to do this book, however sketchy.

Nebula Award Stories Two (Doubleday, \$4.95), edited by Brian W. Aldiss and Harry Harrison, is the very opposite end of the stick. Self-conscious, saddled with primerous blurbs and introductory matter, it is so sophisticated, so scrupulous in crediting even the supplier who manufactures the Science Fiction Writers of America's Nebula Award tokens, that it resembles some kind of grotesque attempt to literatize a corporate statement. Fortunately, it is filled with good stories, or it would have been the most unctuous eulogy in years.

These stories are winners and runners-up for the 1966 Nebula Awards. The volume understandably omits Delany's *Babel-17* and Daniel Keyes's *Flowers For Algernon*, the books which tied for the Best Novel award. It does include Jack Vance's excellent novella, *The Last Castle*, and Gordon Dickson's good *Call Him Lord*, the novelette category winner.

The best short story of the year award went, posthumously, to Richard McKenna, for *The Secret Place*, which is included here, as are some very good runners-up such as Frederik Pohl's *Day Million*, Bob Shaw's *Light of Other Days* and Sonya Dorman's *When I Was Miss Dow*, any one of which is technically

and conceptually a better and more original story, more economically told. There is usually a reason why the unpublished stories found in dead men's desks were unpublished, and that reason is very rarely one which justifies this kind of over-reaction. Especially by professionals.

Good stories in this book are *Among the Hairy Earthmen* by R.A. Lafferty, *We Can Remember It for You Wholesale* by Philip K. Dick, *In the Imagination* by George H. Smith, and *Man in His Time* by Brian Aldiss. A strikingly plonky story is Robin Scott's *Who Needs Insurance?*, which, although a Campbell pipeline story like *Call Him Lord*, has not the virtue of clear thought.

This is not a bad crop, and certainly worth having, if one has five bucks to spend on a book of this unextraordinary length. But I can see little more logic and reasoned judgment reflected in this selection (and the designation of *Babel-17* as equal to *Flowers for Algernon*) than there is in, for instance, the Hugo popularity poll. For years, we writers sat around vowing that when we had our award, by God, it would be impeccable. It ain't.

It is not the province of this column to review science books — though I do wish someone

would. Nevertheless, Doubleday has sent me *Is Anyone There?*, a collection of essays by Isaac Asimov, originally published in a great variety of places, at \$5.95. And while I cannot review the factual content, perhaps we can reason together for a moment.

Viz.:

The essays cover ground in a variety of sciences. Isaac cannot possibly know all of them as well as he knows biochemistry. Therefore, this is primarily an exercise in science writing — in studying up enough on a given discipline to be able to give a coherent account of it to laymen. The range of this book is such that it is a potential leg up for almost anyone who wants to get an idea of "science says" about almost any of the larger categories of life. Does it do this well?

Compiled from a diversity of original publications for a variety of sometimes markedly disparate audiences, it has a tendency to trip from elementary textbook style: "We all know that food intake is regulated by the appetite. You eat when you are hungry and stop eating when you are full," to something rather different: "The unstable intermediate compound requires the input of a comparatively large amount of energy, but until it is formed, no final products will be formed, although the pro-

ducts themselves are not particularly high-energy. The entire reaction will proceed no more quickly than the unstable intermediate can be formed." The potential reader will find himself bouncing between the simplified and the underextended. How annoying or how mystifying this will be to him depends on his present understanding of these various subjects. But it doesn't seem likely any one reader will get uniform information and enjoyment out of the book.

While we're at this, let me recommend *This New Ocean* (Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, \$5.50 in cloth), which is NASA's story of Project Mercury. Written on a NASA grant by three historians, it may be full of lies and sloppy research, but I don't think so; in any event, it's a long, narrative account of the original U.S. astronaut project, full of human sidelights, some rather interesting facts which I don't think trickled into your daily paper at the time, and a fine ability to convey what flying a Mercury capsule might have felt like to you.

There is also what seems to me to be a terrific set of appendices and indexing, as well as a great many excellent photographs and diagrams. A straight

publisher could easily bring out a successful popular paperback version. Meanwhile, I believe there is also a less expensive version of this book in cardboard covers from the G.P.O.; I suggest you write to the Superintendent of Documents and inquire, if you're not interested in a permanent copy.

Finally, this issue's crop of books includes *The Amsirs and the Iron Thorn*, by Algis Budrys, from Gold Medal Books, which calls me a classic master of science fiction. In which case, where did they get the chutzpah to mess with my title?

The Iron Thorn ran as a four-part serial in *If*, not vanishingly long ago. The present version is somewhat longer, and with new material including a nursery rhyme, and a fair amount of new work done on the ending. The additions and revisions go in the direction of refining what was already there, so the chances are that if you didn't understand the ending of the serial, you won't understand the ending of the book. I will take the blame; I should remove the marbles from my mouth.

The story is of a young man raised by apes on Mars. He hunts, he rebels, he slays foe and friend, and periodically, he creates. He gets into deathly

trouble, and gets out of it. He does not always get out of it by being very strong or very smart, though he is strong and on some subjects is no dope, and about at the point where a self-willed spaceship carries him off to Earth, any attraction he may have had as a physical hero begins to get drained out of him.

He bumps into some clearly unusual characters, including Ahmuls the halfbaked gingerbread man. Ahmuls at times seems to be taking over the physical role, but he gets sidetracked toward the end of the story, in a scene stolen from the last line of a poem by Stephen Vincent Benet.

My hero — who also has a confusing set of names — seems to be an artist at some times, but

shows flashes of being an actor, a hummer, and, toward the end, a writer or at least a narrator of some kind . . . perhaps he is a standup comic.

Now, we all know people like that. Based on my long-standing interest in processes . . . in the step-by-step and perhaps boring developments that transform a likely or unlikely lad into a werewolf, for instance . . . I messed around with this idea for a very long time, finally got it out at the last possible moment, and may not have had anything there for you in the first place, after all.

But I thought I knew what I was doing, and I enjoyed myself.

— ALGIS BUDRYS

THIS MONTH IN IF —

*Science-Fiction's Newest Hugo Winner
Brings Us a Thrilling New Novel*

SLOWBOAT CARGO

*A World at the End of the Universe
Receives a Deadly Gift from Earth!*

by **LARRY NIVEN**

* * *

*New Novelette by One of Science-Fiction's
Favorite Writers of All Time — Now Back!*

THE PETRIFIED WORLD

by **ROBERT SHECKLEY**

* * *

*Plus many other headline stories of science fiction!
Don't miss this month's IF — on sale now!*

How They Gave It Back

by R. A. LAFFERTY

It was the most fun they had ever had, in Fun City, U.S.A.!



GRAP MORGAN



He was the Mayor of Big Island. Giuseppe Juan Sch-lome O'Hanlon was his name, John the Mayor, a shining black man. He was born into a political family and was given the names to please as many groups as possible. He had once been of imposing appearance and quiet dignity. He was not now. He shrilled and keened and moaned, and sometimes he was irrational.

It was his leg that hurt him, and his soul.

His leg hurt him because of the pin clear through it, the pin that was part of the shackle. This shackle could not be unlocked mechanically. It was a psychic-coded lock on the shackle, and it could only be released when John had somehow fulfilled his job and obtained his own release. The shackle bound his leg not only to his desk but also

to a steel stanchion that was part of the steel frame of the building.

John's soul hurt him because Big Island was no longer the great thing to which he had been devoted. It had never been so in his lifetime. It was neo-jungle now, probably the most savage of them all. Even now there were fires burning on the floor above him and on the floor below him. There were always fires burning somewhere in the building, in every building that still had anything that would burn. There were rats in the room, in every room, but perhaps John saw more of them than were there. He lived in perpetual delirium.

There were (he knew, though he could no longer go out and see) people unburied in the streets, people knifed down hourly, people crazy and empty-

eyed or glitter-eyed. There was horrible horn music and git-fiddle music and jangle shouting; and he was a prisoner for life in his own office. This was not how to be a great administrator of a great city. The emphasis had somehow shifted. But he had loved the City and the Island, or the memory of them. And this hurt his soul.

"You have to stay on the job and run the place for the rest of your life," Commissioner Kreger had told John the Mayor just before the commissioner had cut and run for it, "There will, of course, be no more elections. The burlesque that brought you in was enough to end the process. It was fiasco."

"It was *not*," John the Mayor moaned in pain. "It was high triumph, the man of the people called to head the people, a noble thing, the climax and sole goal of my life. I won it finally. They can't take that away from me."

"How does it taste, John?"

"I'm dying, do not taunt me. What went wrong?"

"It went wrong a hundred years before you were born, John. You lived all your life in a dream, and you had better try to re-enter it. You're here for good. You're the ultimate patsy, John."

"I'll kill myself."

"No, you will not. You were

allowed to have this job because by temperament and religion, the residue of your dream, you were incapable of suicide. So many of our mayors have taken that easy way out! It was a nuisance, John."

"I'll go crazy then," John the Mayor moaned.

"No, you likely will not do that either, though it would not matter if you did. You are already psychotic, of course, but you will not go off much further. Stay and suffer, kid. You have no choice."

"Kreger, isn't there some way we can get rid of this whole Island? Sell it, transfer title to it, give it back to someone? Can't we get out from under?"

"You find a way, John. Those things that we once thought of as abstractions have taken a direct hand now: Final Responsibility, Ultimate Justice, things like that. They must be satisfied. Whatever you do will have to satisfy the psychic-coded lock on your shackles to give you release. Sell the Island legal, if you can find someone to sell it to. Transfer it, if you can find someone to accept the transfer. But it must be for Fair Value or Value Justified or Original Value from Original Entailment. The psychic-code thing will know. It's governed by the Equity Factor."

Then Commissioner Kreger left

John the Mayor, left the Island and went to rich fishing in other troubled (but not completely polluted) waters. There was no more profit for that smart man to shake out of the Island.

That had been two years ago, and John the Mayor had been the only official on the Island since that time. His only contacts with the world were the sharp noises and smells that came in through his broken windows and the visits of five feudal or wrangle leaders, the Duke, the Sky, the Wideman, the Cloud and the Lolo.

Duke Durango was as smooth a gutter-fighter as ever came to the top of his heap, a happy fellow. Lawrence Sky was a fair white man named for the color of his big sky-blue eyes, a shambling giant, a giggling killer. Wideman Wyle was a wide man indeed, a cheerful sadist who told really funny stories and was the most pleasant person in the group. Cloud Clinkenbeard was a dour and stormy fellow, mean and relentless, and always in search of dirty novelty. Lolo Loudermilk was a girl, sort of a girl, a flaming mixed creature full of vitality and noise.

They were the Mayor's only contacts. They were the leaders of one of the gangs that had endured, when the ten thousand

HOW THEY GAVE IT BACK

gangs had eaten each other up and declined to a hundred.

All five of them came into the Mayor's office, eating noisily.

"Food train in!" announced the Duke. "We killed just one of the drivers. They say there'll never be another train in if we kill more than one driver at a time. And we had to give up four hostages for it. Isn't four too many, John?"

"Numbers have no meaning in this evil thing," said John the Mayor. "How many hostages have you left?"

"Twenty, and a few more, I think. We don't all count the same when we get to the big numbers. But I think four is too many to give for a food train. What will happen when we run out of hostages? Who'll give the big damn to subscribe a train for us then, when we have no more important people to trade to the important people off-island? Here, sign this, limp-leg John, and the Cloud will take it back to them."

The mayor read the release and signed it. Each of the five feudal leaders looked it over in turn then. Several of them could read a little (it was for this reason that they were the Mayor's contacts), and it would be hard for Mayor John to write anything phoney on that release and slip it past them. The Mayor had to

sign these releases every time a food train came, and he knew what would happen when they ran out of hostages. The black-mail would be over when the last hostage of value or affection to someone off-Island had been turned over for a food train. The off-Island people would let the Island rot. The trains had been the only food source for the Island for years.

The Cloud took the release and went out through the smouldering corridor and into the broken streets to the food train that came once a month through the last not-completely-broken tunnel.

"Something else came on the food trail, gimpy John," the Duke said uneasily.

"Well, what, what was it? Duke, Duke, you didn't get hold of a saw so I could saw my leg off, did you?"

"Nah. You're not supposed to saw your leg off. You're supposed to stay here just like you are. Who's going to sign for the food trains and hostage transfers if our mayor saws his leg off and runs away?"

"John Mayor, there's three other men came on that food train. These are funny men. They might even be important enough men that we can hold them for hostages. They brought some heavy kegs and boxes with

them, John, and they even con-
ned some of the colts into carry-
ing them over here for them.
We can't figure out what kind of
men they are, Mayor. They look
at us, and we look at them, and
we both got sparks in our eyes.
They are in the building now,
Mayor, and want to see you."

"Show them in, spook Duke,
the mayor is always available to
his constituents."

"Constituents these are not,"
said the Lolo. "They are washed-
out pale fellows, but they are
solid."

"And one of those kegs of
theirs got a smell I like, Mayor,"
said the Sky. "I believe I re-
member that smell like it was
born in me. You get that keg,
Mayor."

"And those long crates got a
heft I like," said the Wideman.
"I almost know what will be in
those crates. You get those
crates, Mayor."

"Those square boxes got a feel
I like," said the Lolo. "I almost
know what short-handled things
will be in those square boxes.
And the smallest package has a
brass glint through a rip in it.
You get those square boxes and
that smallest package, Mayor."

"I don't understand this at all,"
said John the Mayor, rolling his
red-rimmed eyes in his constant
pain. "Let the men and their
baggage come in."

The three new men who came in had a certain animal power about them, and a certain human authority. Possibly they might be important enough to hold for hostages, but who was going to take the lead in holding them? Men, they moved like big cats. But they were dressed like businessmen of an earlier decade, an anomaly on the Island, and they were lighter than any of the Islanders there except Lawrence Sky.

"You are the Mayor John-John?" asked one of the new men. "And you have authority to deal?"

"I am the mayor," said John, "and I have such authority as a shackled prisoner may have. For what do we deal?"

"Oh, for the Island. We've come to buy it. You'd like that, wouldn't you?"

"What, what, who are you?"

"I am Adrian Sweetsong," said the first of the new men. "I'm a petroleum geologist by profession, which has nothing to do with the matter. And I'm an official of the Midlands Gun and Rod Club."

"I'm Dennis Halftown," said the second of the new men. "I'm an electronic engineer by profession, which has nothing to do with the matter either. And I'm also an official of the Midlands Gun and Rod Club."

HOW THEY GAVE IT BACK

"I'm Freddy Flatfish," said the third of the new men. "I'm a lawyer, which *does* have something to do with this matter. I am also an official of the Midlands Gun and Rod Club, and I have studied the legal aspects of this thing pretty thoroughly."

"Is it the Midlands Gun and Rod Club that is dealing for the Island?" Mayor John asked.

"That's right," said Adrian Sweetsong, the first of the new men. "First installment! Set 'em right there, boys."

Several of the colts, the strong rough Island boys, set down two heavy square boxes, and Dennis Halftown (the second of the new men) broke them open with a pry-bar.

"Man-eating Millie! Those things are for me!" the Lolo gasped, and she had a couple of them out in her hands.

"Sweet little choppies!" the Sky drooled. "What's a knife alongside of one of those?"

"Hackberry pudding!" cried the Cloud as he returned from his errand. "Here, here, they look good, let's get them tested. I'll just pass a dozen of those out the windows to some of the boys. Let them try them out! Let them fall in love with them!"

"Fifty hatchets," announced Adrian Sweetsong, "delivered and accepted. We record them."

"Wait! Wait!" howled Mayor

John, jangling his shackles. "What have fifty hatchets to do with dealing for the Island? Who has used hatchets for a century?"

"One-leg John," the Duke crooned, "too bad your shackles won't let you get as far as the window. Some of the boys are using them now. Believe me, John, they're using them now!"

"Mr. Sweetsong," Mayor John explained patiently, "the last valuation of Island property ever made set it at over a hundred billion dollars. Due to certain developments it may be down a little now, but not that far. Hatchets will not get it. I can sell it only for fair value or value justified. My own shackling is governed by the Equity Factor."

"We know that, Mr. Mayor," said Freddy Flatfish, the lawyer for the Midlands Gun and Rod Club. Freddy Flatfish was a tow-headed twinkling man. "But the Island has reverted. It's really worthless since it was left to the ten thousand gangs, which have since devoured themselves down to a hundred. Perhaps its reverted value is now its original value. Anyhow, the first approach was yours."

"Mine? Mine? I made no approach. I never heard of you fellows," the Mayor said.

"But we have monitored you, Mayor John. Two years you said to the Commissioner 'Can't we

give it back to someone?' And you are also recorded as saying 'We ought to sell it back to —'"

"Second installment!" announced Adrian Sweetsong. "Set them right there, boys."

Several of the colts set down the long crates, and Dennis Halftown broke them open with his pry-bar.

"Oh, those long sweet songs!" the Wideman slavered. "Smooth bores! You can jam them with any kind of soup at all and panlight them. You can shoot broken glass with them. You can shoot anything. Here, we'll just hand a few of them out the windows and let the fellows try them out. Get the heft of those things! Even as clubs your hands would fall in love with them! Blunderbusses!" And the Wideman handed half a dozen of them out the windows.

"Twenty guns," announced Adrian Sweetsong. "Delivered and accepted. We record them."

"Even if it were possible for me to deal the Island for things of no value," John the Mayor began — and there was deep-throated roaring and death-screaming in the streets.

"No value, Mayor?" the Duke Durango asked with deep irony. "Mayor, you should be able to watch them. They jam them with

soup, and then ram in glass and nails for a load. They spark them off, and it's wonderful. Cuts people right in two. Don't talk no value about those things!"

"Even if it were possible for me to deal the Island for such things, what could the Midlands Gun and Rod Club possibly do with the Island?" Mayor John asked.

"Set up a hunting preserve," Adrian Sweetsong said. "It's a nicely stocked jungle island seventeen miles by four. We'll hunt. We'll hunt."

"Hunt? What would you hunt?" the mayor wanted to know.

"Big game, big game," said Dennis Halftown lovingly.

"But there is no big game, no game at all on the Island," the mayor insisted.

"Remember what ancient Hemingway wrote," said Freddy Flatfish. "There is no sport equal to the hunting of an armed man. Ah, we'll hunt them here, as will many of our well-heeled members."

"Third installment! Set it right there, boys," Adrian Sweetsong ordered.

The ragged Island boys set down the keg, and Dennis Halftown broke it open with his pry-bar.

"Boys, boys, that's the smell like was born in me!" the Sky

chortled, and he had his arms up to the elbows in the dark grainy powder. "Sure it hasn't the power of soup. Sure it's clumsy and crude. But it's the grandpa of them all! The smell of it, the smell of it! Men, men, bust your noses on that smell!"

"Twenty-five kilograms of gunpowder," announced Adrian Sweetsong. "That's as close as we could figure it. Twenty-five kilos delivered and accepted."

"When you going to start, fellows, when you going to start?" the Duke asked the three new men in excitement, getting the idea. "How soon you be ready to start?" asked the Duke and the Sky and the Wide-man and the Cloud and the Lolo, all going for it avidly.

"Should be the first bunch of hunters here in the morning," said Adrian Sweetsong.

"Too long to wait," the Lolo protested. "You three? How about you?"

"We three will begin stalking and pot-shooting in a very few minutes," said the Adrian, "just as soon as we can get title to this place from the reluctant mayor. We suggest you deploy your forces outside in the corridors. When we come out of this room we will come out rough, and it's rough animals we want to meet with."

"Rough it will be," said the Cloud. "Colts, colts, you carry this stuff out to our place again just as soon as they have recorded it. Men, we will have some sport! We will show these sports some sport!"

"But this cannot be, even in a nightmare," Major John protested. "You three pale-browns are not Wappingers or Manhattas, and we are not Dutch."

"I'm a Choctaw," said Freddy Flatfish. "Dennis Halftown is a Shawnee. Adrian Sweetsong is an Osage. But we inherit. I have drawn up a legal brief to prove it. And you are double-Dutch if you don't accept. Awk, blew half my shoulder off! Those animals are jumping the gun. Now I know how the expression started. They really know how to handle those blunderbusses."

Freddy Flatfish had been shot by a blunderbuss blast from the corridor and was bleeding badly. So they hurried it along, anxious to close the bargain and get the hunting season started.

"Bring them in fast, boys. Set them down till they are accepted and recorded. Then take them out again to your place," Adrian Sweetsong ordered. And the rough colts brought in a variety of boxes and packages.

"Ten shirts, accepted and recorded," Adrian Sweetsong announced, hurriedly now. "Thirty

pair socks, accepted and recorded. One hundred bullets, accepted and recorded. Forty kettles, accepted and recorded. One brass frying-pan, accepted and recorded."

And at the recording of the brass frying-pan, the leg-piercing pin was withdrawn from the leg of Mayor John and all his shackles fell off. The psychic-coded lock of his shackles had opened. He had finished his job and was released. He had disposed of the Island in equity. He had gotten Fair Value for it, or Value Justified, or at least Original Value from Original Entailment. And it sufficed.

Mayor John was free. He started to run from the room, fell down on his crippled leg and arose and ran once more. And was caught in a blunderbuss blast.

And then the great hunt began. The three members of the Midlands Gun and Rod Club had most sophisticated weapons. They were canny and smooth. This was the dangerous big-game hunt they had always dreamed of. And their prey were armed and wild and truculent and joyous.

It would be good.

Out between the orbs, several tentacles of Ultimate Justice came near together.

"Was there not somewhere the mention of twenty-four or twenty-six dollars paid?" one tentacle asked the other. "I thought I rememberd some such figure."

"No, no," said the other tentacle. "That was only the estimated value placed on the material. There was no specie paid. The list is correct as rendered, and the repayment has been accepted and certified."

In a forgotten and half-filled

basement on the Island, two of the remaining old-folk people were still in hiding. They were startled by the new sort of noise.

"What is it, papa? What have they done?" the old woman asked.

"Sold it back to the Indians, mama," the old man said.

"Huh," said the old woman. "Why didn't they think of that a long time ago?"

— R. A. LAFFERTY



FORECAST

Next issue in *Galaxy* we'll be bringing back some old friends, always an occasion for pleasure. This time more pleasurable than ever, we think, considering that one of the old friends is Clifford D. Simak, and what he has for us is what we firmly believe to be the best story he's written since *Here Gather the Stars*. The name of it is *Goblin Reservation*. That's what it's about, too — a future world in which goblins and banshees are scientifically recognized entities, in which a ghost is one of the leading characters . . . and where aliens of a particularly disturbing variety are trying a spot of divide-and-rule among Earth's diverse human and spectral inhabitants. . . .

Then Damon Knight has a fine new novelette for us, *The World and Thorinn*. Knight spends so much of his time on editorial, critical and translation assignments — and until recently, ever more in his capacity as president of the Science Fiction Writers of America — that it's a real triumph to get a new story from him. Especially when it's the first of half a dozen or so.

And the other old friend we know will be around is a fellow named Ross Rocklynne. New readers may never have heard of him; it's been that long since he's written a science-fiction story. (Fifteen years, anyway.) But old-timers who remember the likes of *Into the Darkness*, *The Men and the Mirror* and other Rocklynne classics of a couple decades ago will know that *Touch of the Moon* will be worth reading! See you then. . . .

THE BIG SHOW

by KEITH LAUMER

Illustrated by WOOD

*This is the day the networks stopped
— and what could ten billion viewers
now find to do with their little lives?*

I

Lew Jantry awoke with soft feminine arms around him, a warm body snuggled against his, perfumed hair tickling his chin.

He didn't open his eyes at once; he was too old a trouper for that. Instead, he rapidly sorted through his recollections, orienting himself before making a

move. He was in a bed; that was a starting point; and the quality of the light shining through his closed lids indicated it was full daylight — or its equivalent. That was no help; both the Jantry and Osgood bedrooms featured large east-exposure windows with fluffy curtains. He'd have to speak to Sol about that: a fellow needed a little sharper de-

marcation of environmental detail to avoid role-fatigue.

Lew opened one eye half a millimeter, made out the smooth curve of a shoulder, the sleek line of a bare back. Still no clue that would answer the burning question: was he in bed with his real wife, or his TV wife?

The seconds were ticking past. Jantry thought furiously, trying to summon up the memory of those particular circumstances under which he had turned in. Had he slept an hour, a minute, or all night? Had he been at home, in the class A Banshire Towers Apartment of a medium-rated actor, with Marta, his lawful-wedded spouse? Or had he dropped off on the set, in the cardboard and plastic mock-up where he spent twelve of every twenty-four hours, with Carla, his co-star on *The Osgoods*? Damn! He remembered cocktails, the Bateses dropping in, late talk; but that had been a scene in Rabinowitz's latest script of the blab-blab school — or had it? Was he thinking of the Harrises, the bores in the next apartment at the Banshire? Uh-huh, that was it. Al Harris had rattled on and on about his new two hundred channel set, with the twenty screen monitor attachment, where a sharp viewer with a good wrist could keep in touch with practically every top show simul-

THE BIG SHOW

taneously, at least well enough to hold up his end of a cultured conversation

Satisfied, Lew relaxed, slid his hand casually down toward the curved hip beside him. The woman moved, twisted her head back to impale him with a sharp black eye.

"*You're ten seconds off-cue, Buster!*" Carla's subvocalized voice rasped in the pick-up set in the bone back of his right ear. "*And let's watch those hands! This is a family-type show, and my husband Bruno is a dedicated viewer!*"

Lew's face snapped in a Smile, lazy, marital, degree one, a stylized grimace that would instantly dispel all implications of lust from the minds of well-conditioned viewers. Meanwhile, he was stalling, groping for his line. Where the hell was the prompter?

"*Hi, darling,*" the dubber's voice sounded in the pick-up set in the bone back of Lew's left ear, just as the audience would hear it. "*Today's the day of the big event. Excited?*" In the background, he could hear the hundred piece orchestra sliding into *Camptown Races*. He grabbed at the clue.

"Sure — but, uh, with you in the stands, rooting for him, who could lose?" he improvised,

mouthed the words distinctly for the vocal stand-in to mime later.

"*What who, you boob?*" Carla's voice hissed in his right ear. "*I'm having a baby at two o'clock!*"

"*Oh, Freddy Osgood — sometimes I think I'm the luckiest girl in the world, having you all to myself!*" the canned line crackled in his left ear.

"A baby?" Lew blurted, struggling to pick up the thread.

"*What do you think, you schlock — a litter of kitties?*" Carla snarled in his right ear.

"I didn't know you were — I mean, that you'd — that we'd —" Lew caught himself. "Congratulations," he ad libbed desperately.

"*We'd better hurry and get ready; we're going water-skiing with the Poppins before we're due at the Vitabort Center,*" his left ear cooed.

"Sure," Lew agreed, glad of the chance of escape. He threw back the blanket, caught just a glimpse of a saucy derriere before Carla squalled and yanked the sheets back up.

"Cut!" A godlike bellow rattled Lew's occipital sutures. The wall with the window slid aside to admit the charging bulk of Hugo Fleischpultzer himself. "Jantry, you just set the industry back fifty years!" the director howled. "Whattaya mean, insult-

ing five hundred million cleaning Americans with the sight of a bare behind first thing in the morning! It'll take the psych-an channels two weeks of intensive primetime therapy to clear out the damage you done! You're fired! Or you would be if it wasn't for the lousy Guild! Not that I mean anything by the word 'lousy'!"

Carla Montez sat up, holding the covers to her chin, pointed a scarlet-nailed finger at Lew.

"I want a divorce!" she screamed. "Tell Oscar to write this louse out of the script for screening no later than Friday in the late early mid-afternoon segment!"

"Now, Carla baby, you know that's impossible," Abe Katz, the makeup man soothed, reaching past Fleischpultzer's bulk to adjust the star's eyelashes.

"I'm sorry, Hugo," Lew said. "I just got a little mixed up for a second. You know how it's been since we went to non-stop sitcom: a three-hour shift at home, three on the set, half my meals here, half there, barely time to scan the scripts —"

"See?" Carla shrilled. "He practically admits he prefers being with that blowsy dame he's supposedly married to!"

"I do not — I mean Marta's no blowsier than you are!" Lew

flared. "I mean, neither one of you is blowsy! And I love being cooped up with you in this make-believe egg-crate for half my life!"

"The kids!" Carla sobbed. "What will become of the kids? Joey, and little Suzie, and that new one, Irving or whatever, that we hired last week for the cousin!"

"Rusty, his air name is," Hugo boomed. "Carla's right, we got to think of the little ones. We don't want to go making a broken home out of a fine American family, which it's the favorite escape of millions, just over a little misunderstanding like this. Lew, I'll give you one more chance—"

"Oh, no you won't!" a furious contralto cut across the conversation. All eyes turned to the pert, green-eyed woman who had just burst onto the set. "I've watched my husband crawl into bed with that harpie for the last time! I'm here to scratch her eyes out!"

"Marta! No!" Lew, leaping from the bed, collided with Carla, leaping in the opposite direction. They struck the floor together, a confused mass of flailing limbs, complicated by the actress' efforts to simultaneously escape, attack and observe the conventions of modesty.

"Look at them — right in front of me!" Marta keened.

"Carla baby — watch the hair-do!" Abe Katz called.

"Quiet on the set!" Hugo's bass roar dominated the scene. Carla came to her feet, swathed in the sheet, as Lew struggled to arrange a blanket, Navaho style, about himself.

"Now, Marta honey," he said hastily. "Don't leap to conclusions! It's just that I was tuckered out from staying up late worrying about little Egbert. How is Eggie? Did he pull through the crisis okay?"

"You fiend!" Marta wailed. "Our son's name is Augustus!"

"Ah — I was thinking of Augustus, of course." Max scrambled for verbal footing. "Today's the day of the Little League try-outs, right? And —"

"Monster! You don't know your real family from that horrible TV family of yours! It's that nasty little midget that plays Sammy Osgood that's the ball player! Our Augustus plays the violin!"

"Sure — I remember perfectly! And his sister, Cluster, is a whiz on the glockenspiel!"

"Murderer! Our daughter's name is Finette! And she hates German food! I'm through with you, you . . . you Bluebeard!" She turned to flee. As Lew jumped after her, Carla aimed a roundhouse slap that connected with a loud report.

"Keep away from me, you deviate!" she yelled.

"Look at that hair-do," Abe mourned.

"Mr. Fleischpultzer!" a penetrating voice sounded. A small, pouty-faced man in an expensive gray Gooberlon executive cover-all had appeared.

"Why — if it isn't the sponsor, Mr. Harlowe Goober of Goober Industries," Hugo babbled. "Welcome to the set, Mr. Goober, which we were just horsing around a little, you know, high spirits and all that —"

"I'm canceling the show," Goober barked. "I've noticed for some time the gradual disintegration of the moral tone of this network. This orgy is the final straw. I'm taking my trade to NABAC!"

"But — Mr. Goober —"

"UNLESS — that person is replaced at once!" Goober pointed dramatically at Lew Jantry.

"But ... but ... but ... his contract!" Hugo blurted. "And what about the script? They're about to have a baby!"

"Let him die in childbirth," Goober proposed, and stamped off the set.

"My lawyer will call you, bum!" Marta shrilled. "Married to an actor is bad enough — but an out-of-work actor . . . !"

"But the Guild," Lew rallied weakly. "Hugo, say something!"

"Half the Guild's working on Goober-sponsored accounts," Fleischpultzer shrugged. "They won't buck him."

"We'll have him suicide when it comes out he's an embezzler," Carla's voice sounded above the hubbub. "And I'll meet that handsome obstetrician"

"You mean —" Lew swallowed hard, watching the set empty as all personnel moved to disassociate themselves from failure. "You mean I'm washed up in TV? But what will I do? All those hours of leisure time."

"View TV," Hugo said. "Or maybe get a job in a factory."

"And stand by an automated machine two hours a day, watching telly? You don't understand, Hugo! I'm an artist, not a . . . a drone!"

"Well . . . there is just one remote possibility," Hugo said reluctantly. "But no — you wouldn't go for it."

"Anything!" Lew said hastily. "Anything at all, Hugo!"

"Well — if I work it right, I think I can get you a spot in a new documentary."

"I'll take it!"

"Sign here!" Hugo whipped out a thick bundle of contract documents. Lew grabbed the pen.

"I'll be in a star slot, of course?"

"Natcherally. Would I do you that way?"

Lew signed. "Thanks a million, Hugo." He sighed, gathering his blanket about him. "What set do I report to?"

Hugo shook his head. "No set, Lew. The pic ain't being shot here."

"You don't mean — not — not on location?"

"You guessed it."

"Omigod. Where?"

"A place called Byrdland."

"Birdland?" Lew brightened.

"Byrdland. It's in Antarctica."

II

"It's the biggest, finest Eskimo reservation on the globe!" Hugo's parting words rang in Lew Jantry's ears as he peered out through the bubble canopy of the automatic one-passenger flitter that was ferrying him on the last stage of the journey south. Across the blue-black sheen of the South Polar Sea, a line of dazzling white cliffs loomed ahead. Dropping rapidly, the machine skimmed low over the peaks, settling toward a rugged terrain resembling nothing so much as a vast frosted cake, a jumble of glassy blocks and smooth-drifted whiteness. Now he could make out the porous texture of the surface below, the network of wind-scoured ridges

rushing up at him with surprising swiftness —

At the last possible instant, Lew realized that the robot voice of the autopilot, over the rushing of the wind, was squawking "MAYDAY! MAYDAY!" He grabbed the safety-frame lever, yanked it hard in the same moment that the craft struck with an impact that turned the universe into a whirling pinwheel of stars.

It seemed like a long time before pieces stopped raining down around him. Lew kicked free of the frame, dropped to the hard ground. The crash had burst the pod of the copter like a pumpkin, but he himself seemed to be intact. The weather suit was keeping him warm, in spite of the stiff wind that whipped the floury snow against his legs. Lew shaded his eyes and stared out across the desolate landscape. No sign of the Eskimo agent's office, or even of the tribal structures of the aborigines. Lew snorted. He'd invoke Section Nine, Paragraph Three of his contract on this one, all right — the part that provided bonuses for inconvenience occasioned by inadequate travel and housing accommodations for artists on field assignment. And the hardship clause would come in, too. Oh, boy, wait till he got hold of Hugo, he'd make that shrewdie

regret the day he fast-talked Lew Jantry into a fiasco like this one.

He flipped back the cover of his wristphone and snapped an order to the operator. There was no reply. He raised his voice, then held the tiny transceiver to his ear. The reassuring carrier tone was conspicuously lacking.

“Damn!” Lew yelled, then swallowed hard as the true seriousness of his plight struck him. Marooned — God knew how far from the nearest food, shelter and TV. And no one would know precisely where he was. The malfunctioning copter could have wandered a hundred miles off course since Tierra, for all he knew. In fact, he was lucky to have hit land at all, with all that ocean out there.

Lew shuddered and checked his pockets, found nothing but the regulation ration capsules and a book of matches. The copter yielded a road map of Chilocoth County, Kansas, and a package of welfare-issue contraceptive devices. He tried the panel TV, caught a much-distorted snatch of *Marty Snell, Triggamist*, but the picture rippled into static. Too bad: it was one of the few shows he enjoyed, a wild sitcom that he liked to view while on-camera, listening to Carla make chit-chat to bring late tuners-in up to date.

But he had more important things than Marty Snell to worry about now. The reservation was only a couple of miles inland. Maybe he could see it from the ridge ahead. It wouldn't hurt to walk that far. He faced into the Antarctic wind and started across the treacherous footing.

He had gone a hundred yards when a sound behind him made him look back. A large polar bear had appeared beside the heli. The monster circled the downed machine, his mouth open like an awe-struck yokel. The fanged head turned toward Lew, affording him a horrifying view down the creature's throat. It stared at him for a long beat, then started toward him at an easy lope. Lew stifled a yell and sprinted for the ridge with a speed that would have astonished his fans.

Heavy pads thudded close behind as he bounded across a rough stretch, hit a glass-smooth patch and went down, skidded twenty yards on his back, came to his feet scrambling for footing among the tumbled slabs at the base of the rise. He hauled himself upslope on all fours, spurred by the buzzing sound of ursine breath behind him, reached the crest — and a squat, fur-clad figure rose up before him, raising a short-hafted harpoon with a murderous hooked blade. For an instant the Eskimo poised,

arm back, his teeth bared in a ferocious grin. Then he hurled the spear.

As the weapon shot forward, Lew dived under it. He hit the smaller man amidships, carried him with him in a wild tumble down the opposite slope. At the bottom, Lew crawled clear, looked up dazedly just in time to see the yellow-white bulk of the bear hurtling down directly on him, jaws agape.

Lew awoke, staring up at the glossy white curve of a ceiling only three feet above his face, through which pale sunlight filtered. He turned his head, saw a grinning, brown-faced man in a Gooberplast playsuit sitting cross-legged on a synthetic bear-skin rug, laying out a hand of solitaire. It was cool, Lew thought confusedly, but not as cold as he'd have expected in a building made of ice. He reached up and touched the ceiling. It was pleasantly warm to the touch, and dry. At that moment, he noticed a low hum in the background.

"No," he said, shaking his head. "It can't be an . . . an . . ."

"An air-conditioned igloo?" the card-player inquired in a deep voice. "Why not? You Gringos think us 'Skimos got no rights?"

"It's not that," Lew stuttered, sitting up. His head ached abominably. "It's just that . . . well

THE BIG SHOW



... it's hardly what I expected. Say — " he broke off, remembering the encounter on the ridge — "are you the fellow with the spear?"

"Right. Charlie Urukukaluku-ku's the name. Charlie Kuku for short. TVVAG, Local 3498. I'm not really an actor, I'm a cameraman. I just do the occasional walk-on when we're short of extras." He held out a well manicured hand.

"You're a member of the Guild?" Lew blurted, taking the proffered member.

"Sure. You don't think we're letting scabs work down here in Byrdland, I hope."

"You mean the business with the bear — and the spear — the whole thing was just a skit?"

"Hardly a skit, Jantry. An important human document, delineating the plight of the haughty Kabloona when plummeted into the harsh Antarctic environment to which he has driven the patient Eskimo."

"That sounds like Hugo Fleischpultzer. And when did the white man ever drive the Eskimo into a harsh environment?"

"About fifty thousand years ago. Didn't you ever view any anthropology on educational TV?"

"Is that why you tried to stick me with that bloody great harpoon?"

"Stick you? Are you kidding? I tossed it a good quarter inch wild."

"And what about the bear? He wasn't kidding!"

"Yeah — too bad about that. Busted wide open. One of Hugo's ideas. It was a mech, you know. We got no live ones around, except a couple in the zoo. Too hot for 'em, since the big melt."

"Hot? Out there in all that ice?"

"What ice? Project Defrost cleared all that away years ago. But tourists come all this way to see Eskimos in their native habitat, they want to see snow. So — snow they get. Plastic snow, like this igloo."

"A plastic igloo?"

"Sure. It's part of the Native Village. A big grosser."

"But — why a mechanical bear?"

"The bear houses the number two aux camera. It shoots through the mouth. I was remot-ing it from the ridge. Got some swell shots of the clobber-in, then tried to dolly in for some CU's of you encountering the savage natives — that's me —"

"How did you know where I was going to crash?"

"Think I can't read a script? I was out there a good hour early, picking my camera angles."

I got to hand it to you. You made it look good, Jantry. I was surprised to see you walk away from it."

"I made it look good?" Lew yelped. "Are you kidding? That thing was on full automatic the whole time — " He broke off. "Hugo planned it that way! He programmed the heli to crash — with me in it!"

"So? It figures. But it worked out okay. I got the death scene in the can. Great footage."

"Death scene?"

"Sure, I try to save you with my trusty spear, but the bear gets the both of us. It's the Noble Savage Gives Life for Paleface bit; wows 'em in the sticks."

"But — I came here to make a ninety-hour documentary on the colorful natives! Why kill me off in the opening sequence?" Lew broke off as a man in a gray coverall appeared on all fours in the entry tunnel, pushing a briefcase ahead of him.

"Thanks for sitting in for me, Charlie," he said to the Eskimo. "If you'll excuse us now, I'd like a word in private with Mr. Jantry."

"Sure." Charlie left. The newcomer rose, dusted his knees, showed Lew a small gold badge pinned inside his lapel.

"I'm Clabbing, CIA," he said. "I can understand your confusion, Jantry. Of course the busi-

ness of a role was merely a cover story enabling us to spirit you out of the States without attracting attention."

"Huh?" Lew said.

"Your true destination is the South Pacific Nature Reserve; place called the Cannibal Islands," the CIA man said crisply. "And it's not a play, Jantry. It's for real."

III

Lew stood on the deck of the LSP, shivering.

"The whole thing is illegal," he complained for the seventy-third time to Clabbing, who stood impassively beside him, looking out through the pre-dawn mist toward the distant sound of surf. "I see now it was a putup job from the beginning: me getting fired, the phoney documentary — and now this! Threatening to blackball me in the industry if I don't sign a paper saying I volunteered!"

"It's your patriotic duty," the CIA man said calmly. "We know something's going on inside the reserve. Naturally, we can't just blunder in and demand to search the entire archipelago."

"Why not?"

"Policy," Clabbing said tersely. "Now, as I said, someone — no doubt in the service of a Certain Power — "

"You mean Russia, don't you?"

"Please, let's keep it impersonal. Now, these Russians — I mean this Certain Power has infiltrated the Reserve in defiance of solemn international commitments and has set up some sort of secret installation —"

"How do we know that?"

"Our intrepid undercover men on the island reported it. Now, just what they're up to, we don't know. That's your job, Jantry: to tell us."

"Why do they want to make a reserve out of these Godforsaken islands anyway?" Lew burst out. "If it wasn't for that, there wouldn't be any place for the, uh, Certain Power to set up secret installations in!"

"Opening the islands would destroy a cultural museum that can never be duplicated," Clabbinger said indignantly. "This is the only spot on earth where cannibalism and head-hunting still flourish, uncontaminated by automation. And the diseases — why, if we let antibiotics in, hundreds of unique organisms would be rendered extinct overnight!"

"Why don't you send a regular agent into this pest-hole?" Lew demanded. "Why me?"

"We need an accomplished actor to carry this off, Jantry. An ordinary agent would be incapable of passing himself off as a long-lost tribe member returning

home after having been carried out to sea at the age of four in a paddleless canoe. He'd be caught and tortured to death in a most gruesome fashion."

"Swell," Lew groaned. "I either go and get roasted in my sarong, or refuse and never work again."

"Still — if you survive, I personally assure you you'll find your contract at Void Productions renewed for a long term at a substantial increase."

"What good's a substantial increase, with ninety-five per cent going for taxes?" Lew inquired gloomily.

"Prestige," Clabbinger pointed out. "And if it weren't for the tax level, corporations wouldn't allocate the large tax-exempt advertising budgets needed to support over three hundred major TV networks with round-the-clock programming, nor would we enjoy the enlightened legislation that provides every citizen with a subsistence allowance, plus leisure time to view — and thus you'd be out of work."

"All right," Lew snarled. "I guess you've got me boxed — but these damned shark's-teeth earplugs hurt like hell!"

"Ah, that sounds a little more like Daredevil Jack, star of the show of the same name!" Clabbinger clapped Lew heartily on

the back. "I'll confide that I always admired you in that one."

"I hated it," Lew said. "I was always afraid of the rest of the cast, they talked so tough."

A man had come up beside the G-man. "Half a mile off shore," he muttered. "This is as far as I can go without tripping the detectors."

"Well, Lew, this is it," Clabbinger said sternly, shaking the actor's hand. "Remember: as soon as you've located the site and beamed me the coordinates, get out fast! We'll drop a megatonner right down their stack six minutes later, and let them complain to the UN!"

"Just don't forget to have that sub standing by in case I come paddling out from shore in a hell of a hurry," Lew said bitterly.

Three minutes later, squatting in the outrigger canoe, he was gliding toward the palm-fringed shoreline ahead. The surf, though noisy, was not excessively high. He rode a long swell in, grounded on a sandy beach. He sprang from the boat listening alertly for any indication that his approach had been observed. Stealthily, he moved toward the shelter of the trees. Ten feet from his goal, a beam of dazzling white light speared out from the darkness to catch him full in the eyes. Blinded, he stumbled back, heard the quick rasp of feet —

THE BIG SHOW

A bomb exploded in his skull. He was dimly aware of falling, of being roughly rolled on his back.

"Nuts," a hoarse voice grated. "It's just another lousy native. Shoot the bum and let's get back to work."

"Wait!" another, more guttural voice spoke up. "Don't shoot dog of native. Noise might bring unwelcome attention. Instead, tie up and dump out of way someplace."

Lew struggled feebly as hard hands threw multiple loops of hemp around his wrists and ankles, jammed a wad of oily cloth in his mouth. A man caught his shoulders, another his feet; they carried him well up into the jungle and dropped him into a clump of palmetto. Feet crashed through the underbrush, receding. Silence fell.

The night breeze stirred the fronds above Lew. Mosquitoes whined about his ears. He struggled onto his back, spitting leaf mould past the crude gag. Abruptly, something buzzed sharply, back of his right ear. Lew stiffened, waiting the bite of the deadly snake —

"Hello?" a tinny voice said. "Clabbinger to special agent LJ. Good work Boy! My instruments indicate you've penetrated the beach and are now behind the enemy lines! However, I note

183

you're lying doggo. Let's not be too cautious. Remember Daredevil Jack! Play this one the way he would! Go get 'em, tiger! We're rooting for you! Clabbinger out."

"Hello?" Lew whispered. "Hello? Clabbinger?"

There was no answer. Lew groaned. Why hadn't they included a two-way connection? But who would have thought there'd be any need, with the tight-beam signaler tucked in his sarong to pinpoint the target for the missile strike? And anyway, Clabbinger wouldn't move a foot to help him; he'd told him that.

Lew took a deep breath and concentrated, the way he always did when slipping into a demanding role.

"All right, Russkis," Daredevil Jack breathed. "You started it. Now get ready for a counter-attack by the Free Enterprise system!"

IV

Ten minutes later, Daredevil Jack, free of his amateurishly tied bonds, raised his head and peered past the fronds at the half-dozen figures grouped before a small tent from which the yellow glow of a lantern shone on a map table where a brightly colored eighteen-inch disk lay. If he could get a little closer, make out the markings

Flat on his stomach, Jack inched nearer. The men around the table seemed to be engaged in a heated argument, although keeping their voices low. One shook his fist under another's nose. A third man stepped between them. No doubt a dispute over the details of their treachery. Jack studied the palm trees just ahead. From the top of one, it might be possible to make out the details of the chart, using the small 'tronscope Clabbinger had supplied.

It was the work of another sweaty five minutes to reach the trees, shin up the curving trunk, and take up a position among the coconuts. Swiftly, Jack unclipped the scope, fine-focused the UV beam, adjusted the aperture. There! The red-orange coloring of the target leaped into clarity, a maze of complex markings. It was obviously a detailed relief map, the roughly circular shape indicating the island's outline, with mountains, valleys, rivers all delineated in vivid pigments. And there — that was doubtless the location of the illegal site. Jack studied the black circle, nestled between a sardine-shaped lake and what appeared to be a sliver of salami. The circle itself showed a remarkable resemblance to a slice of ripe olive.

"I told you, I can't eat pizza!"

A vagrant breeze wafted a scrap of conversation to Jack. "I hate Mexican food!"

"Damn!" Lew Jantry muttered. He scanned past the disputants, surveyed the remains of a camp fire, a heap of empty TV dinner cartons, settled on a huddled figure lying in the shadows of a flowering bush. He made out a vividly colored sarong, a mass of dark, wavy hair, a pair of slender ankles, bound with rope.

"It's a native girl," Lew muttered. "They've got her tied up, the rats!" He lowered the scope, frowning thoughtfully.

Maybe, Daredevil Jack thought, she's been in the camp long enough to have heard something. And even if she hasn't her people will be grateful enough for her release to give me a hand in finding that Russian installation . . .

Silently, smiling a grim smile, Daredevil Jack descended to the ground, began a circuitous approach to the spot where the captive girl lay.

She watched him with wide eyes as he sawed at her ropes with a bit of sharp-edged sea-shell.

"Shhh!" he admonished as he pulled away the gag to reveal a remarkably pretty face, olive brown, pert-nosed, red-lipped. She looked around fearfully, then at Jack.

THE BIG SHOW

"Aholui thanks you," she breathed.

"Time for thanks later," Jack said kindly but firmly. "We're not out of this yet." He took her hand, helped her to her knees. "The coast is clear this way."

They had gone approximately ten feet when a bush parted just ahead, and a man appeared, buttoning his clothes. For an instant, his eyes and Jack's locked.

"What th — " he started as Jack's head rammed him squarely in the belt buckle. He went down hard as Lew Jantry staggered to his feet, rubbing his neck and uttering small cries.

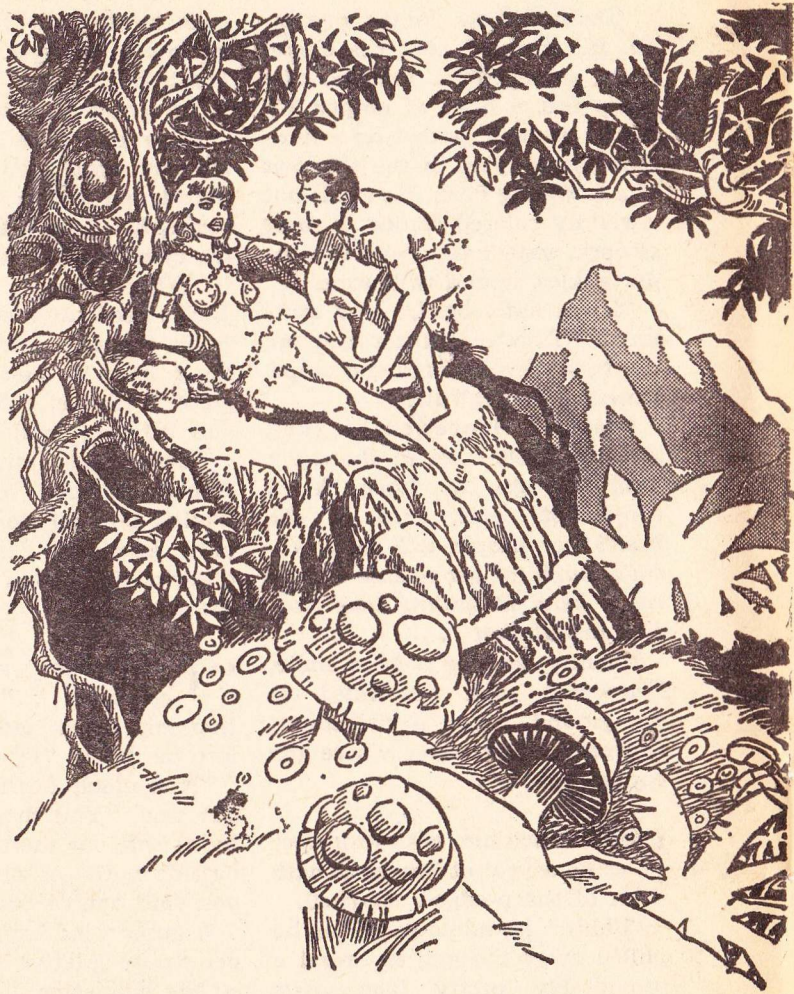
"Let's get out of here!" Aholui grabbed his hand and hauled him off down a winding path into the deep jungle as questioning shouts rose behind them.

"I don't care . . . if they do catch us . . ." Lew gasped, flopping down and sucking air into his lungs. "I'm all in!"

"Not much farther now," the girl said. "You must have been living soft out there in the great outside world, or wherever it was you said you've been."

A gusty wind had risen; a sudden heavy splatter of rain rattled on the palmettos. Lew got to his feet, rubbing at the gooseflesh on his arms.

"What a place," he carped.



GALAXY



"One minute you're broiling, the next you're freezing. Where are we going, anyway?"

"To a place where we'll be safe from the white-eyes," Aholui said. "Up there." She pointed. In the sudden vivid glare of a flash of lightning, Lew saw a rugged volcanic peak thrusting up above the wind-lashed palm trees. The rain struck then, like a battery of fire hoses. Stumbling, colliding with trees in the dark, his hide rasped by sharp-edged tropical shrubbery, Lew followed as the girl led the way toward the high ground.

It might have been half an hour later — or half of eternity — before Lew dragged himself over a rocky ledge and lay flat, breathing heavily. Before him, the dark mouth of a cave opened. With his last strength, he crawled to it, and inside. With the girl tugging at his arm, he managed to negotiate a sharp turn, and was in a low-ceilinged chamber twelve feet on a side. He propped himself against the wall and wiped the water from his eyes. Aholui seated herself beside him.

"Now, tell me again," she said. "What were you doing down there in the outlanders' camp?"

"You remember — about the plot they're hatching. You never have told me why they had you tied up."

"They caught me snooping around."

Lew put a sympathetic arm around the girl's shoulders. "The rotters!" he said. "Just because you were curious about a bunch of foreign devils invading the place."

Alohui shrugged his arm off. "Can't blame them," she said. "I really was way outside the tribal turf."

"Nonsense! The whole island belongs to you. Now —" he reinsinuated his arm — "if you'll just take me to your leader" He leaned over, zeroing in on the girl's half-parted lips.

A light-bulb exploded in his ear, accompanied by a ringing sound.

"Carla," Lew mumbled dazedly. "I just had the craziest dream"

The girl was standing by the wall, fumbling with a bump on the stone. With a soft whine of well oiled machinery, a panel slid back to reveal a well equipped laboratory.

A rather broad-shouldered young man in a white coat and a white-haired oldster looked up in surprise.

"Grab this cluck, George," Aholui said, jerking a thumb at Lew.

"He's some kind of Interpol fink, or I'll eat a bunch of bananas, insides and all!"

V

Strapped to a chair, with a lump on his head that throbbed in time with his pulse, Lew Jantry stared from the grim-eyed girl to the square-jawed young man to the elderly one, who returned the look through a set of half-inch thick trifocals.

"You think you can kidnap a federal agent and get away with it?" he demanded in a tone that quavered only slightly.

No one bothered to answer the question.

"It was pretty slick, the way he handled it," the girl said. "He pretended to be rescuing me — as if anyone could really sneak into that campful of Feds, with guards posted every ten feet, and cut somebody loose. Then, as soon as he thought I thought I was in the clear, he started pouring on the oil and pumping me for information."

"I did not!" Lew cut in. "I only wanted to kiss you. I thought *they* were the crooks." He broke off, staring at the old man. "Say, don't I know you?"

"Maybe." The white head nodded. "Lots of people used to, before I decided to Get Away From it All."

"Rex Googooian, the Armenian Valentino!" Lew gasped. "You used to be the biggest draw on the whole early mid-morning

sector! Every middle-aged housewife in America was in love with you! And then you dropped out of sight a few years ago, blip, just like that!"

"Yes indeed," Googooian nodded. "It dawned on me one day that I had only a few years left in which to expiate the crimes I'd been practicing for thirty years."

"Crimes?"

"Did you ever notice the dialogue on the early mid-morning sector?" the aged actor inquired succinctly. "So I came here — secretly, of course — bringing with me my daughter, Baby Lou." He nodded toward Aholui, who was vigorously scrubbing away her tan make-up.

"— and my assistant, George. And a considerable stock of equipment, of course."

"But that must have cost a fortune!"

"I had one. And what better way to employ it than in putting an end to the pernicious plague that for the better part of eighty years had been rising like a flood of materialistic mediocrity, drowning our culture in its infancy?"

"Plague? You mean you're doing dandruff research?" Lew groped.

"I refer," Googooian said in implacable tones, "to the greatest menace in the world today!"

"What menace? Cuba? Nepal? Lebanon?"

"Think of it!" Googooian's eyes lit with a messianic fervor. "No more commercials, no more sitcoms, no quizzes, no panels, no more pomaded heads huddled together, staring with vacuous, counterfeit smiles from flickering screens, no more idiotic dialogue, no more cardboard characterizations, no more creaking plots, no more moronic villains and sweep-stake-winning heroes, no more mummified sex appeal, no more relatives of producers posing as Thespians —"

"Are you trying to say — no more television?" Lew choked the words out.

"In approximately seven hours," Googooian stated firmly, "TV broadcasting will come to a halt. Worldwide! Forever!"

"You're out of your mind!" Lew blurted. "That's impossible!"

"Is it!" Googooian smiled sardonically. "I believe otherwise. You've heard of the Van Allen Radiation belts?"

"Is that like those suspenders that glow in the dark?" Lew hazarded.

"Not quite. They are layers of high-energy charged particles two thousand and twelve thousand miles above the earth, respectively. They are of interest

here only in that the Googooian Belt will in some ways resemble them. I have prepared a rocket, sir, housed here in the volcano's crater, which, when fired, will ascend to an altitude of 1500 miles, and there assume an orbit which will carry it over every point on the planet in the first fifty revolutions — about seventy-two hours. As it travels, it will release a steady stream of very specially charged particles — particles which will emit electromagnetic impulses creating a powerful static interference across the entire broadcast band! Every station on the planet will be drowned in a pure noise signal. TV, sir, is dead!"

"You can't!" Lew protested. "What will all those people do, left with twenty-two hours a day of leisure time on their hands? What will the sponsors do with all that ad money? Society as we know it will collapse!"

"You've been brainwashed," George spoke up coldly. "You and the rest of those FBI smarties down there. If you know so much, why have you been poking around the island for six months without finding us?"

"We haven't — I mean, I did — I mean — oh, what's the use?" Lew buried his face in his hands. "I'm a failure," his muffled voice stated mournfully. "And Clabbingger was counting on me!"

Googooian came over to pat him consolingly on the shoulder. "Why not lend a hand with the gear?" he suggested in a fatherly tone. "Afterwards you'll feel better, knowing you played a part in the liberation of man from electronic tyranny."

"Never!" Lew yelled. "First, I'll — " he broke off as a chirping voice rasped in his left ear:

"Operative LJ, Clabbingger here. I see you've moved inland to a point at the approximate center of the island. I'm expecting to pick up a pulse from that signaler any time now, pinpointing that target. Keep up the good work! Over and out."

Lew Jantry's heart took a great leap, then settled down to a steady thudding. He'd totally forgotten the signaler, but his course was plain. All he had to do was reach the button with his fingertips and send out the pulse that would bring a megatonner screaming in on the hidden launch pad. Googooian's mad scheme would go up in radioactive gas.

And Lew Jantry along with it.

"You knew," he whispered. "Clabbingger, you monster, you knew all along it was a suicide mission!"

"Ah, beginning to have some second thoughts, eh?" Googooian

said cheerfully. "Beginning to see that you're a mere dupe of the vested interests that are reducing the nation to a common level of imbecility, eliminating literacy, callousing esthetic sensibilities, and imposing a shabby standard of mercantile expediency and conformity to a false and superficial ideal of synthetic glamour!"

"Something like that," Lew muttered. His fingers inched their way toward the concealed signal-er.

"If you'll give me your parole, I'll untie you," the ex-actor proposed. "George and I could really use some help with the last-minute details."

"Well" Lew stalled. His finger touched the button. He gritted his teeth — and stiffened as the pickup behind his left ear clicked suddenly.

"Hello?" a brisk voice chirped. "Oh, it's you Simenov . . . uh-huh, in about six hours . . . Of course it'll work! Why do you lousy Commies hire American technicians if you don't have confidence?" There was a length pause. "Look, you have your programming ready, that's all! I'll guarantee we'll blanket every channel of television on the planet. The Commie line will be coming out of every TV set on the North and South American continents! And there's no possi-

THE BIG SHOW

ble way they can stop it! Not with a transmitter sunk below the Mohorovicic Discontinuity in an insulated vault, powered by the core heat! Not when you're using the whole planet's fluid interior as an antenna! It's all set! Stop worrying and synchronize watches! We throw the switches at six AM on the dot!"

There was a sharp click! followed by silence.

"Ye Gods!" Lew mumbled. "Two targets — and only one bomb!" He swallowed hard, his thoughts racing.

"Googooian," he barked. "Are you sure this invention of yours will blanket all television, not just part of it?"

"Absolutely!"

"What about a super-powerful station?"

Googooian chuckled. "All the better. The particles will absorb and re-radiate as noise any impinging electra-magnetic radiation. The more energetic, the better."

"Sold!" Lew said. "I'll help you! Get these ropes off and let's get going!"

VI

The eastern sky was heralding dawn with a glory of purple and crimson when Lew, Googooian, George and Baby Lou retired to the blockhouse carved

deep in the flank of the mountain, and grouped themselves around the rocket control console. Solemnly, the aging actor-turned-researcher depressed the firing button. A low rumble passed through the solid rock.

On the closed-circuit screen, the crater mouth erupted in smoke, through which a needle prow emerged, rising slowly at first, then more swiftly, mounting toward the cloud-dotted sky, trailing fire and thunder.

"She's off!" Googooian chortled as the others clapped him on the back, laughing merrily — all but Lew Jantry. Glumly, he watched the ship disappear into the high haze.

"Cheer up, lad," Googooian called. "It's all for the best! You'll see!"

"Look what we'll be missing!" George called cheerfully as he switched on the 48-inch, full-color three-D set. The screen blinked, flickered, firmed into an image of a woman with a face like an oversized Pekinese.

". . . Dear Sally Sweetbreads, this viewer writes," a high-pitched nasal intoned. "I never miss your show, which is the cause of the trouble between my husband and me. He says it breaks his scene when you give some of that clinical-type advice just at the most romantic moment. Signed, Perplexed. Well, Per-

plexed, assuming you don't want to change husbands — " the plump features compressed into a leer — "I'd suggest you rearrange the bedroom. And now —"

"That's not all we'll be missing," Lew snarled. "When the depression this thing causes hits, we'll miss everything from meals to martinis! There'll be millions out of work! Tax revenue will drop to zero! The government may collapse — and we'll be stuck here, on this infernal island!"

"Tsk," Googooian said. "My analysis suggests that the creative energies released from thrall-dom to television mania will produce an upsurge in every facet of our culture. There'll be a flowering of science and the arts to rival the Renaissance! Of course, there may be a short period of readjustment — say a decade. But no matter. We'll be quite happy here. The entire interior of the mountain is honeycombed with facilities: luxurious quarters, a nuclear power plant, well shielded, a ten year stockpile of gourmet food to supplement the native diet, a vast library of books and music!"

On the screen, a loose-lipped young man with intent eyes leaned toward a jawless woman in a grotesque hat.

"Mrs. Wiltoff, would you just

tell us in your own words how it feels to be the wife of the man scheduled to be gassed tomorrow on a nationwide hook-up for the brutal slaying of the nine chorus girls whose pictures you are now admiring?"

"Well, Bob," the interviewee started; abruptly, the image flickered, turned to a flapping pattern of diagonal lines. A new picture burned into focus over it. A thick-necked man with small eyes looked out of the screen.

"Capitalist swine," he began in a glutinous voice — and was drowned under a deluge of white blips which danced across the tube face, swiftly coalescing into a solid rectangle of glare. A roar like Niagara swelled to blot out the sound.

"Hooray!" Googooian capered madly, embracing his teammates, while Lew wandered disconsolately to the blockhouse door. From the tiny balcony overhanging the interior of the volcano, he looked down into the fire-blackened silo from which the rocket had emerged minutes before. There was a step beside him.

"Thanks for helping Pop," Baby Lou said. "I expected you to try something, but you didn't. Maybe I was wrong about you being a CIA man."

"Well . . ." Lew moved closer to the girl, slid an arm around

her waist. "Inasmuch as we're stuck here," he said, "we may as well make the best of it."

"What's *that*?" Baby Lou felt over Lew's side, plucked something from his sarong. "It was sticking me," she said and pushed the button.

"No!" Lew grabbed the signaler and hurled it into the pit — far too late. Already its tell-tale pulse had raced to the ship waiting hull-down over the horizon.

"Well — I never!" Baby Lou snapped and marched away.

"Everybody to the beach!" Lew yelled, plunging after her. "We've got six minutes before the island goes up in smoke!"

It was a balmy evening six months later. Lew, Googooian and Simenov sat under the thatched shelter they had constructed above high tide line, playing a game of homemade dominoes by lantern light. In the background, a native electric guitar band played *Aloha Oe* in time to the chugging of a portable generator.

"Tomorrow comes maybe supply ship," the Russian said, eyeing the empty horizon.

"I doubt it," Googooian said.

Baby Lou came up, trailed by George. No, I do *not* believe in sharing the wealth," she was saying tartly. "Father, make George stop bothering me!"

"Ah — perhaps if Lew chap-
eroned you — "

"I'd like to see him try, the
lousy actor," George snarled.

"Oh, yeah?" Daredevil Jack
half-rose, then sank back. "It's
too hot," Lew Jantry said.

Baby Lou sniffed and stalked
away. George wandered off.
Simenon glowered at the check-
ers.

"Now, now," Googooian said
in tones of forced heartiness.
"Here we are, living in paradise,
plenty of fruit and fresh seafood,
sunshine every day, cool breezes
at night, no responsibilities, no
problems! We should all be per-
fectly delighted!"

"Then why aren't we?" Lew
demanded.

"I tell you why," Simenon
stated. "Is no damned thing to
do! Are not building socialism!
Not even building capitalism! Is
building only sand castles, and is
getting pretty damn boring!"

"Say," Googooian said sudden-
ly.

What?" Lew said.

"I was just wondering — not
that I regret anything I've done,
you understand"

"Go on," Simenon said.

"If we used the stuff you fel-

lows had left over — " he eyed
the Russian — "and if we could
salvage a few items from the
mountain — "

"Yes?" Lew and Simenon said
in chorus.

"We might just be able to
tinker up a little line-of-sight rig.
Nothing elaborate, mind you.
Just straight black and white,
two-D — at least at first"

"Hmmm. Is possibility." The
Russian pulled at his
lower lip. Together, the two
technical men strolled off deep in
conversation. Lew Jantry sat
where he was, staring after them,
a thoughtful look on his face.
Then he rose, hurried toward the
slight figure wandering lonely
along the beach.

"Oh, Baby Lou," he called.
"I've been meaning to ask you:
have you ever thought of taking
up acting as a profession?"

"Why, Lew! Do you really
think I might have talent?"

"I'm sure of it. It's just a
matter of finding an outlet for
it."

Together they strolled along
the shore of the lagoon toward
the silvery path of the rising
moon. — KEITH LAUMER



volume 1 NUMBER 1

A new science-fiction magazine
with a new concept in publishing

Each issue will be filled with
stories by Foreign Authors



INTERNATIONAL

SCIENCE-FICTION

Will give American readers a chance to read the science-fiction stories by Authors popular in the rest of the world. Written and translated by the top writers throughout the world.

We hope you will like it.

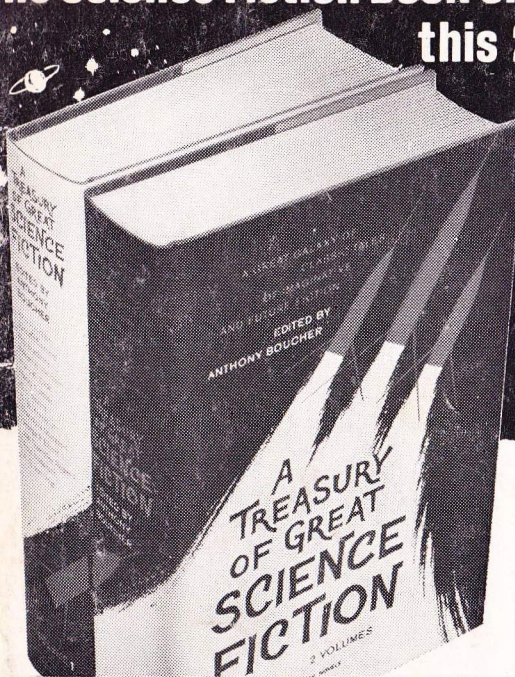
PLEASE LET US KNOW!

NEWSSTAND ONLY

The Science Fiction Book Club invites you to take this 2-volume Treasury of Great Science Fiction for only

10¢

when you join the Science Fiction Book Club and agree to accept only 4 books during the coming year.



TAKE this 2-volume Treasury of Great Science Fiction — a “must” for any S-F fan — for only 10¢ . . . with a short trial membership in the Science Fiction Book Club.

How to Get This Unusual Value

Because you enjoy Science thrillers, the Science Fiction Book Club would like to acquaint you with the most imaginative, informative, entertaining new science fiction books as they are written. That is why we have arranged to send you this 1000-page Treasury of Great Science Fiction for only 10¢, to help cover shipping and handling, with a Trial Membership in the Club.

Here's how the Club works: each month it offers a really superb new science fact or fiction book at a fraction of its regular price. Even though these books sell for \$4.95, \$5.95 and more in their original editions, Club members get them **FOR ONLY- \$1.49 EACH** — in special full-length, hard-cover editions. Extra-value books cost more. And the Club tells you in advance what each monthly selection will be. During your Trial Subscription you agree to take as few as four books in the next twelve months.

After that you may take as few or as many books as you want, and you may cancel at any time.

No Risk Guarantee

Send for your big introductory package today. After ten days, if you are NOT delighted, return the books and your membership will be canceled. Otherwise you will be enrolled in the Club as a Trial Member, and you need take only four books in the next twelve months. Mail the coupon today to: Science Fiction Book Club, Garden City, New York 11530.

A TREASURY OF GREAT SCIENCE FICTION

Edited by Anthony Boucher

Two giant volumes. Over 1000 pages of exciting fiction. A handsome addition to your library. Includes John Wyndham's classic **Re-Birth** . . . Heinlein's **Waldo** . . . Anderson's **Brain Wave** . . . a total of 4 full-length novels, 12 novèlets, 3 short stories by such masters as Bradbury, Arthur Clarke, Judith Merril, Alfred Bester, A. E. Van Vogt, C. M. Kornbluth, Theodore Sturgeon — and more.

SCIENCE FICTION BOOK CLUB
Dept. 82-GXX, Garden City, N.Y. 11530

Please enroll me* as a trial member in the Science Fiction Book Club and rush me The Treasury of Great Science Fiction. I enclose 10¢ to help cover shipping and handling. Then, every month, send me the Club's free bulletin, "Things to Come," which describes coming selections. For each book I accept, I will pay only \$1.49, plus shipping and handling, unless I take an extra-value selection at a higher price. I need take only four books within a year and may resign at any time thereafter.

NO-RISK GUARANTEE: If not delighted with my introductory package, I may return it in 10 days, pay nothing, owe nothing, and my membership will be canceled.

Name _____

Address _____

City _____ State _____ Zip _____

If under 18, parent must sign here (Offer good in U.S.A. only.)

*Membership applications are subject to acceptance by the Club. 23-573A