WINTER 1977
$1.00

Isaac Asimov's™

SCIENCE FICTION MAGAZINE

K 48141 UK55p

L. Sprague de Camp

Isaac Asimov

Randall Garrett

F. M. Busby

A DAVIS PUBLICATION

ISAAC ASIMOV'S SCIENCE FICTION MAGAZINE™ WINTER 1977 $1.00

NEW!

BASIC SET

DUNGEONS & DRAGONS

Swords & Sorcery Role Playing Game

EVERYTHING YOU NEED TO BEGIN PLAYING D&D*

full set of dungeon geomorphs

•

for levels 1-3

•

monster & treasure assortments

set of five polyhedra dice

revised D & D* rules book

*T.M. Reg. App. For

All in a beautifully illustrated full color box

$9.95 plus $1.00 postage and handling

AT BETTER HOBBY AND BOOK STORES EVERYWHERE OR DIRECT

- ☐ **DUNGEONS & DRAGONS,** Game of wizards, superheroes, orcs, dragons and more!For 3 or more adult players. $9.95 + 1.00
- ☐ **THE DRAGON,** Magazine of swords & sorcery, fantasy, and science fiction gaming and fiction.Six issue subscription. $9.00
- ☐ **COMPLETE GAMING CATALOG** Role playing and battle games, rules, miniature figures and wargaming accessories. Price refundable with first $10.00 or more miniature figures order. $2.00

Enclose check or money order:
TSR HOBBIES, INC.
Dept. A3
P.O.B. 756
Lake Geneva, WI 53147

Name _____

Address _____

City _____

State _____ Zip _____

Overseas: Write for address of local distributor

Isaac Asimov's™ SCIENCE FICTION MAGAZINE

Vol. 1, No. 4, Winter 1977

NEXT ISSUE
ON SALE
15 DECEMBER 1977

COVER: Frank Kelly Freas. INTERIOR ART: Frank Kelly Freas, Vincent Di Fate, Don Simpson, Alex Schomburg, Don R. Bensen, Roy G. Krenkel, Jack Bozzi, & Marc Schirmeister.

Joel Davis: President & Publisher — **Isaac Asimov:** Editorial Director
George H. Scithers: Editor

Published quarterly by Davis Publications, Inc., at $1.00 a copy; annual subscription of four issues $4.00 in the United States and U.S. possessions; in Canada and all other countries, $5.00. Address for subscriptions and all correspondence about them: Box 1855 GPO, New York NY 10001. Address for all editorial matters: Box 13116, Philadelphia PA 19101. Isaac Asimov's Science Fiction Magazine (TM) is the registered trademark of Isaac Asimov. Application to mail at second-class postage rates is pending at New York NY and additional offices.

EDITORIAL

Over a six-week period in early 1975, the city of New York was the site of not one, but three, *Star Trek* conventions. Each was attended by thousands of fans—a large number of whom attended all three, in whole or in part.

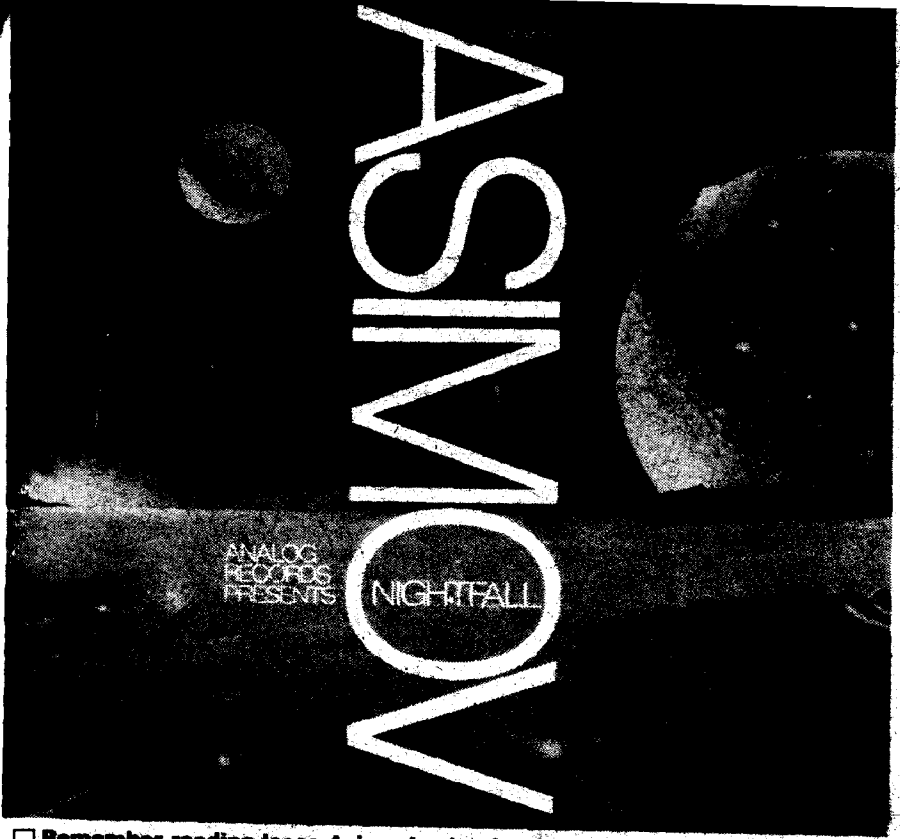
I myself attended all three, and I could not help but think of the very first science fiction convention that was more than a gathering of local club members.

It took place in 1939 and was the brainchild of a big-name fan, Sam Moskowitz. Fans from all over the nation were in correspondence, but surely that was not enough, thought Sam. Why not a *world* gathering at which all the fans could get together and view each other with wide-eyed wonder. With grit and determination Sam, barely twenty, turned that brainstorm into actuality.

On July 2, 1939, I was one of those who actually attended the First World Science Fiction Convention at a hall on 59th Street between Park and Madison Avenues. Nor was I merely a fan. I had published two stories in *Amazing Stories;* and my third published story, "Trends," appeared in the July 1939 *Astounding Science Fiction,* which was actually on the stands at the time of the convention. I attended as a *pro.* The fact that I was a pro, however, lent me no feeling of self-possession whatever, any more than did my attainment of the status of college graduate three weeks before. The fact was that I was still in my teens and was incredibly unsophisticated.

But if it was unsophistication to be excited and deliriously happy, then worldly-wisdom would have been folly. My diary for July 2 (a Sunday, by the way) details the lengths to which I went to appear civilized. I was "all dressed up in new suit, tie, stiff shirt, etc.—and it was hot." Not only that but I had gone to the utter extreme: "I shaved just before going, too."

I didn't go directly to the convention, however, but met with a number of cronies at an Automat across the street. It seems that Sam Moskowitz, who was running the convention of course, was



☐ **Remember reading Isaac Asimov's classic *Nightfall*? Hear it done now as a full-length dramatic presentation, in this new recording. Included is a dialogue between Isaac Asimov and Ben Bova, Editor of Analog Science Fiction/Science Fact Magazine. *Nightfall* is an exclusive offer from the publishers of Analog.** ☐ **For your copy of this 33⅓ LP stereo record, use the coupon below.**

ANALOG RECORDS • 350 Madison Avenue • New York, N.Y. 10017

Yes, I want to enjoy NIGHTFALL by ISAAC ASIMOV. Please send me _____ records at $6.95 each.

Name _____

(please print)

Address _____ Apt. No. _____

City _____ State _____ Zip _____

☐ My check/money order for $_____ is enclosed (payable to ANALOG RECORDS) (Add 55¢ per record to cover postage and handling)

Please charge my ☐ American Express ☐ BankAmericard

No. _____

Exp. Date _____ Signature _____

(together with his friends) locked in a Homeric struggle with six rebels—three of whom have since become giants in the field. These were Cyril Kornbluth (who died, alas, in 1958), Donald A. Wollheim, and Frederik Pohl.

I didn't know what the roots of the struggle had been; but I had met Pohl and the others not long before and I didn't know Sam (who has since become a dear friend), so naturally I sided with the known against the unknown. Fred Pohl was the only one not present since he had had a doctor's appointment which had delayed him, and the group finally made its move without him. Up the steps we went and there stood Sam and his cronies barring the way. I was expecting a mighty battle and was convinced that the dead and wounded would soon be clogging 59th Street, so I hung back a little in order to play the part of strategic reserve.

There was no battle, however. The rebels simply stopped and turned back. As for me, Sam didn't know me, didn't recognize me as an enemy, and ignored me. Rather confused, I found myself inside the hall.

I ought to have placed principle above desire. I ought to have said, "If you refuse entrance to my friends, you refuse entrance to me," and I should then have stalked out. I should have—but I didn't. I wanted to attend the conference.

Once inside, along with a hundred others, I was goggle-eyed with happiness.

I met fans, giants in the field, whose letters had littered the magazines—Forrest J. Ackerman, Jack Darrow, Milton A. Rothman. I met god-like writers, with whom I could now hobnob on terms of only slightly tongue-tied familiarity. Some I had already met: John Campbell, Jack Williamson, L. Sprague de Camp. Some I met for the first time and kept forever after as friends, John D. Clark, for instance. Some I met for the first and, alas, only time: Nelson Bond, Harl Vincent, Manly Wade Wellman.

After a while, the world called and I had to leave High Olympus for a while. I went out and had lunch with my friends in exile. They didn't hold my treason against me. They knew that I was not really part of the Great Fan War and that I wanted to be at the convention. My diary records that for lunch I bought "sliced chicken sandwiches and hot coffee" and that "it cost me 30¢." (It would cost more like 300¢ now.)

In the afternoon, we saw the motion picture "Metropolis," a silent movie that had been produced in Germany thirteen years

previously. It struck me as having been produced during the Dark Ages, and I hooted all through it. I never saw it again until about half a year ago. By then it was fifty years old, and it seemed to have matured considerably in the interval. (Well, either it or I.)

Frank Paul, the illustrator and guest of honor, delivered his speech, and various editors rose to say a few words. Mort Weisinger of *Thrilling Wonder Stories* said to the audience of fans, "I didn't know you were so darned sincere," and was quoted in the next issue of *Time*.

Then notables were introduced from the audience, and I clapped madly as literary giant after literary giant rose to accept homage. Finally, John D. Clark, who was sitting next to me, shouted, "How about Asimov?" and I was called up to the platform.

It was the first time in my whole life that I had been a notable, and I went up the aisle very shakily. I passed John Campbell (good heavens, he had only just turned 29) and he helped me good-naturedly along with a push that nearly sent me sprawling. I made it to the microphone, announced myself as "the worst science fiction writer unlynched," and sat down, with my face a charming vermilion. It was my first time facing an audience and my last time embarrassed about it.

I spent a total of nine hours at the convention, 10 AM to 7 PM; and they were pretty nearly the most delirious nine hours of my life up till then.

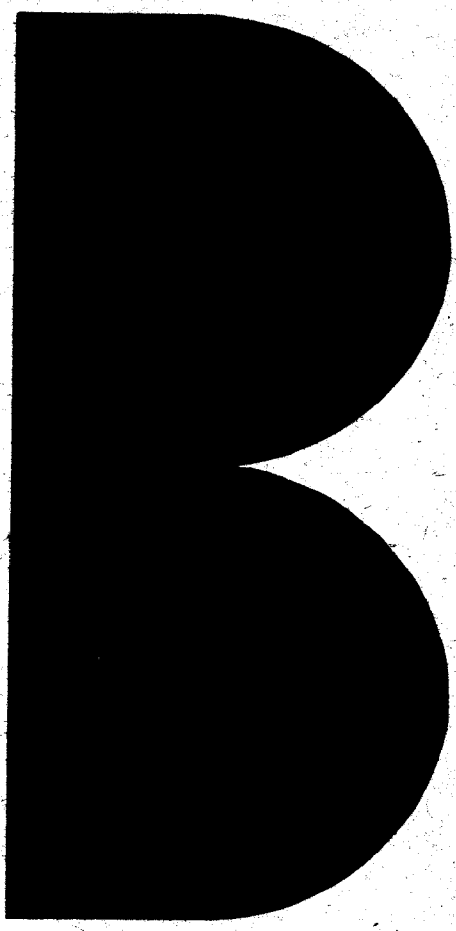
There have been thirty-two World Science Fiction Conventions since then (the World War II years were skipped) and numerous regional conventions. Thousands now attend given conventions. The delirium continues and, if anything, is intensified—even for me, though I have been out of my teens for a few years.

It is because we don't want you to miss any convention out of mere ignorance of its existence, therefore, that you will find, in every issue of the magazine, appropriate information concerning the wheres and whens of conventions to come.

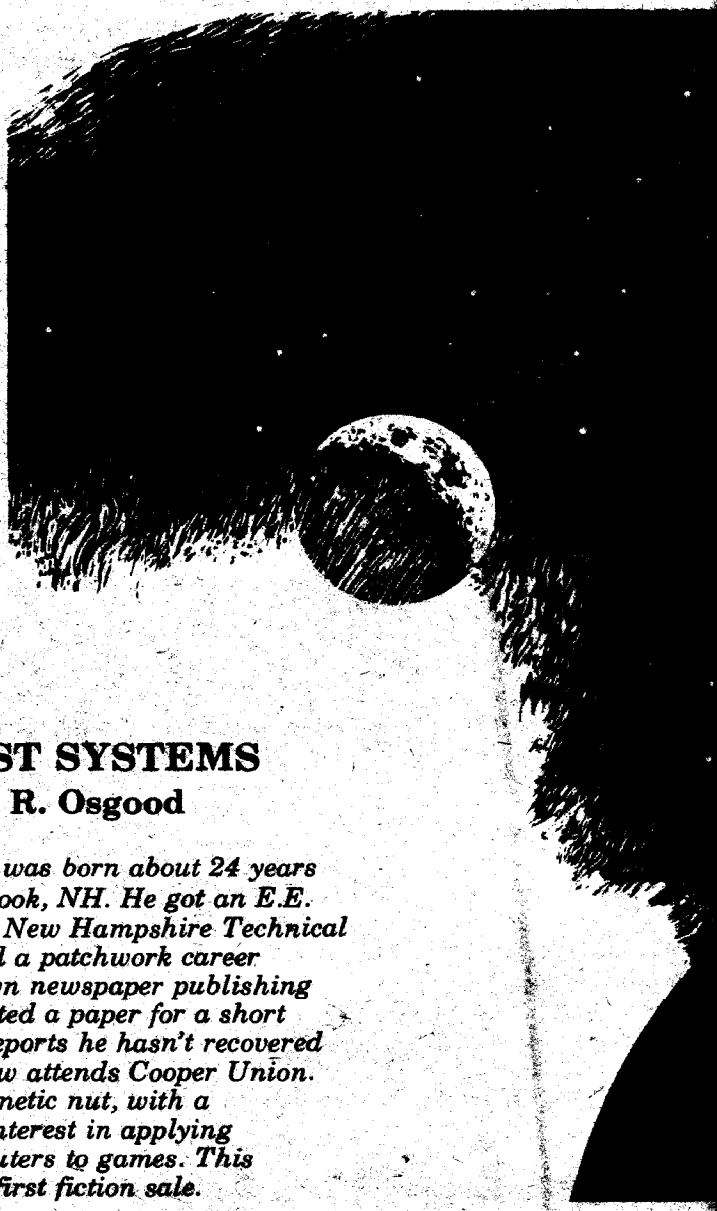
—Isaac Asimov

Joel Davis: President & Publisher **Isaac Asimov:** Editorial Director
George H. Scithers: Editor
Gardner Dozois: Associate Editor, **L.M. & D.S. Breed & Meg Phillips:** Assistant Editors
Victor C. Stabile: Vice Pres. & Treas., **Leonard F. Pinto:** Vice Pres. & General Mgr.
Robert B. Enlow: Sub. Cir. & Mktg. Dir., **Don L. Gabree:** Newsstand Cir. Dir.
Jim Cappello: Advertising Mgr., **Constance DiRienzo:** Rights & Permissions Mgr.
Eugene S. Slawson: Sub. Cir. Mgr., **Carl Bartee:** Prod. Dir. **Irving Bernstein:** Art Dir.

POUL ANDERSON
LIN CARTER
PHILIP JOSÉ FARMER
HARRY HARRISON
ROBERT A. HEINLEIN
FRANK HERBERT
KEITH ROBERTS
CLIFFORD D. SIMAK
A.E. VAN VOGT
ROGER ZELAZNY



BERKLEY



TO SIN AGAINST SYSTEMS

by Garry R. Osgood

Mr. Osgood was born about 24 years ago in Suncook, NH. He got an E.E. degree from New Hampshire Technical Institute, led a patchwork career in small-town newspaper publishing (he even edited a paper for a short while and reports he hasn't recovered yet), and now attends Cooper Union. He's a cybernetic nut, with a particular interest in applying micro-computers to games. This story is his first fiction sale.

With a defiant squeak, the chalk finished its last block diagram for the year while I concluded to the blackboard, "So the classical tube amplifier can be represented by the block μ times the load resistor, R_L, divided by R_L plus plate resistance r_p. This transfer function represents the ideal gain of the system and relates the time varying function at the block's input port to the output function."

I turned to the young faces of the class and pitched the chalk stub in the wastepaper basket. The classroom was hot. My shirt was sticking to my back, and I had beads of perspiration growing on my forehead. There was one last hurdle between these kids and the summer vacation.

"The final for this course will be held in the lecture hall L-212, I guess." I peered at the assignment sheet posted on the bulletin board, to keep up the appearance that I was myopic. "On Friday, first period—nice and early in the morning." Nobody laughed. I sat down on the desk and mulled over the various bits of wisdom that a professor should pass on to his departing students. There were damn few items that weren't already stale. I rubbed my chin, peered out the window, and decided on a few classics.

"Everybody should bring a pencil, I guess. A school that can't afford individual terminals probably can't afford pencils—or a sharpener, so bring a spare." That was classic enough, so I left them with some personal philosophy: "I think if you go into this thing with the idea of memorizing a lot of equations, you'll run into a great deal of trouble. Remember the underlying concepts, the reasons why the equations are written the way they are. We are dealing with integrated and inter-related systems here, and not discrete pieces. Nowhere in the exam are you given equations. You are given a system. Take the overview approach and look at the system as a whole, and the proper relations will suggest themselves if you don't bury yourself in minute and unimportant aspects."

Well, that's what all engineering profs say anyway, so I guess I didn't add anything new to student lore.

"See you next year—some of you. Get lost." And away they went. Some were intent and some were asleep; I wondered if teachers were ever any use. Chances were I wouldn't be seeing them again next year, anyway. I was feeling the weather in my joints, and I didn't like getting up in the morning anymore. Both were signs that soon I would have to hole up somewhere and go through a metamorphosis. I didn't think that I could leave it for

another year; and after it was done I would have to be someone else—two lifetimes of Professor Gilbert Fenton were more than I could take. It had been fun for a while, teaching these kids; but the subject matter was getting stale of late. I had taught it too many times. I'd be doing myself and these kids a favor if I became somebody else.

I walked out of the old ivy-covered brick building into the heat of a midwestern day in May. I found myself wandering down a shady, sleepy walk of American academe. It was one of those late spring days that whisper, like the wind through the trees, "Summer is here." The students who had doubts about their futures were hitting the books and typewriters for their final papers and whatnots. Those who were in no doubt—the 'smart' and the otherwise—were infesting the beer halls and hangouts of the college town.

It had been my pleasure to have for the last few days a companion, of sorts, though I knew neither who he was nor where he came from. I hadn't even spoken with him. He was a slender youth, dressed in the standard uniform of T-shirt and jeans. He didn't amount to anything save for those eyes of his. He had first caught my attention, then my curiosity. As I turned the corner of the lane on that sleepy summer day, my companion of sorts saw me; upon seeing me, he propelled himself down the street like the boy who had made the acquaintance of the preacher's daughter and the sheriff; the latter being an unplanned circumstance. Seeing him struck me as a very curious thing, for apparently I had gone through most of the year without noticing him; and when I finally did I couldn't avoid him. This sometimes happens with me: to be aware of people is to see them; but I don't think I would have noticed this particular youth in the first place if it had not been for those eyes. He reminded me of a friend; Sheridan had eyes like that youth: steel grey eyes that penetrated and calculated, windows to a sharp intellect. Sheridan was a living embodiment of von Neumann's ideal game player: perfectly intelligent and perfectly ruthless. In all my years he has been the only one to really guess who I am.

Damn him.

While I have laid low in life, Sheridan always grabbed the limelight, always wanted still more; though age was slowing him down at last. He and I first met in a rooming house on Fulton Street in New York City, in the year 1912. He was a lad of twenty and I . . . well I was passing through, in need of folding

money or a man who was handy with a printing press. Sheridan had both. But he was also a most perceptive lad, and he picked up something that had kept him on my trail ever since. I considered the memory. It has been ninety years since I made that acquaintance. Sheridan was now very old, and very rich—and very persistent. I decided that I might just put old Gilbert Fenton to rest that night; Sheridan's grey eyes might run in the family. After I metamorphose I generally make myself quite different and turn up quite far from where I start, and Sheridan usually loses me for a spell. If I pulled the dodge one more time, I probably wouldn't have to worry again. I set off with decision in my step, lighthearted, in a way; I was about to begin again.

Perhaps I shouldn't be harsh on Sheridan, though. For all that I abhor his fascination with wealth and power, I haven't come one iota closer to the Universal Why than he has; which is to say, not at all. I have been looking for some time, too. I recalled, as I walked down the lane, That Woman—metamorphosing always makes me nostalgic—she had had an insight that impressed me deeply. She was old—mentally old—for an ephemeral. I had thought that with two of us on the job, the Universal Why wouldn't be too hard to find, so on her eightieth birthday I gave her the insight I have been able to exercise on myself as a gift to celebrate our fifty-five-year-old friendship. Afterwards, she was very quiet; and some time later she found the Universal Why at the bottom of a mine shaft. I was very thoughtful about the matter of self-annihilation after that, and I swore that I would understand a human being *thoroughly* before I tried the stunt again. I started the new policy with myself, and I'm still working with the first candidate.

You can understand how thoughtful a man becomes when considering such terribly human matters. That day I should have been careful. I am not immortal: I am a well-tuned mechanism, granted, but I can break. I should have paid attention to the crunch of gravel on the road as the car coasted along in neutral, the engine off. The car came alongside me (lost as I was in fond reverie), and a door opened.

"Hey, Bill! Wanna ride?"

Well, it wasn't my name but I looked up anyway. The youth with steel grey eyes was adding sounds of plausibility to what amounted to a kidnapping—though I was far too old to be a kid. I felt a little twinge of pain and a mild feeling of regret. A quick investigation of my chemical systems told me that the sedative

was fast-acting and already rooted in too many places for me to whip up an effective counter-agent.

Shucks. Can't win 'em all.

They were gentle with me. I suspect they all had hospital experience; Sheridan knew how to pick his staff. I was sure I was going to see him again. I can't call him friend, but it's people like him who make the world go round the way it does: sadly.

§ § §

The ride up to the Polar Orbital Station, administrative offices of The Sheridan Group Industries, was uneventful. I'd have been drugged to the gills if I had any.

It was a peaceful awakening, considering the abruptness of my abduction. I found myself in a nice, soft bed in a room of pastel colors. In the background there was the rustle of pink noise, which at one moment suggested the wind through tree branches, at another, the dance of water through rocks. I had the warm feeling that follows a good long sleep, but I was not at all sure how this next meeting with Sheridan would go. I looked for a clock but couldn't find one. I sat back on my pillows with the vague disquiet that comes when I'm completely disoriented in time. I don't think the temporal displacement would have been all that bad, if I hadn't found that I had company.

A male steward. A large male steward. Rather larger than four of me in fact.

I gave him what I imagined was a glower but it didn't seem to scare him.

"Hey, Shorty. How about telling your Boss that I'm awake?" I said.

He looked over his shoulder at me, uncrossed his arms from behind his back, turned, bowed curtly. From anyone else, the gesture would have looked ridiculous, but he gave it an air of poetry; and besides, he was bigger than I, so I didn't laugh. Through his smile he said,

"Mr. Sheridan will be with you presently. In the meantime, if there is anything that I can do—"

"Leave," I suggested.

"That would not be possible, I'm afraid." A smile, a bow. I rapped out a few drum rolls with my fingers and thought a few thoughts.

"Hmm. Can you dance? Do magic tricks? How about some clothes? Sure as taxes your Boss man is going to chew the fat with me eventually." Why else would he go to all this trouble?

"Certainly." He snapped his fingers, and another version of him, somewhat smaller perhaps, appeared. This didn't help, I thought. It wasn't that I wanted privacy so I could escape—where could I escape to, on Sheridan's own orbital satellite? I didn't think they'd lend me a shuttle; assuming I could find a shuttle, assuming I could run a shuttle, or assuming that I could go through the bang, bang, shoot-'em-up heroics that would be required to get one. I haven't lived since A.D. 900 by giving people excuses to shoot at me. I wanted privacy because I was prudish, and if I asked for anything else, I'd probably get a brass band to watch me dress.

"How 'bout some privacy? You expect me to dress to an audience?" They both complied. In unison they turned their backs. The choreography was superb.

I knew Sheridan was well off, but I began to wonder if even that could adequately describe a man who owned his own space station. When I first met him he was just another two-bit waterfront chiseler with an accommodating smile and a printing press that spit out sawbucks and fins. On the side he could do magic with a piece of paper. He could match stock certificates to inks and to presses. He could take a document from any institution and turn out a very reasonable facsimile lickety-split.

At the time, the various patrons I served in the booking industry were tossing those significant glances my way that told me that it was time to move on, and like Tammany Hall, I did. I picked Sheridan because I needed the various bits of paper naming an individual to be crisp and well done. Sheridan was just a kid, but he was beginning to get the reputation of being a phenomenally skilled kid. True to form, he was thorough with his patrons and kept an eye on me even after I thought I had finished doing business with him. My thirteenth metamorphosis had had a cheering section.

The togs fit perfectly. One of the goons brought me a mirror, and I saw that I liked the cut and style of the clothes. Warm color, simple, with no baroque frills. Sheridan remembered my tastes and had gained some skill on the soft pedal. It was very different from the techniques that he had used on me before; the last time we met, Sheridan caressed me with an india rubber hose.

He has had a long time to learn, I reflected. Sheridan must be at least a hundred and ten, and still a captain of industry. He should have become an honorary member of the Board of the

Sheridan Group Industries forty years ago, but he didn't retire. He still had enough energy to secure his position in the business and chase me all over India, when he got wind of me there. I looked around the compartment. It was well appointed. I could have been on the Terran surface. Sheridan was a scoundrel who would sell his mother down the river; but he was a capable, intelligent, and gifted scoundrel. One of the goons cleared the ceiling and I amused myself by watching the activity on the Station's Hub.

In a short while I heard the door mechanism. The two goons got up to go as the compartment door slid quietly into the bulkhead.

It was Sheridan.

Oh, he was old, and very thin, but I couldn't make the word 'frail' hang on him. His was the distinguished kind of old that one associates with the occupants of stone castles, who cultivate very fine wines. His back was straight. He was neat as a pin, and though his cheeks were sunken he still had the hawk nose and the penetrating, steel grey eyes. I had the urge to stand up in his presence, to forget about the abduction and the rubber hose: he had an atmosphere of command just like that. I almost got up—but I didn't.

"Good afternoon—Gilbert, is it?" he asked, and held out a hand that I didn't take. He had a nice, rich voice, with just a slight trace of a piping waver. Ordinarily, I would like a man with a voice like that.

I scratched my head, still sprawled out on the bed, looked up at the Hub, and said it was as good a name as any. "Is it afternoon? Heck, Pappy, I should be hungry now. Got anything to eat in this oversized bicycle wheel?"

" 'Afternoon' by Greenwich Mean. I suspect it would be early in the morning in Midwestern America. You either will, or already have notified the college that you have been taken ill."

"Thanks, Pappy, I guess. You always were thorough." The last time we had met he had been a near youngster, and I'd been apparently in my late seventies. I wasn't a youngster at the moment, but the apparent age-spread between us was the same, only the sign had been changed.

"Chester," he addressed one of the goons by the door, "attend to dinner for Mr. Fenton and myself. Have it served in the Observatory. After that, you and the staff shall retire from my living quarters until 0800 tomorrow."

"Very good, Mr. Sheridan." Chester and the other goon left in a

butlerish sort of way.

Sheridan turned his attention back to me, saying, "To the Observatory, sir? The view of the Earth is magnificent—Olympian, even."

"As beheld by an Olympian god, perhaps?" I asked.

Sheridan smiled, ignored my sally and asked: "Have you ever seen the Earth from this vantage point?"

"Naw," I replied. "This is a first. First time in orbit, too. Can't say that it's much different from any Terran flophouse—purtier, maybe."

Sheridan allowed a calculated degree of surprise. "The first time? I thought that you had the time to try everything." Sheridan arched his eyebrows just so.

"What? Impossible. Sir, I have just begun!" I replied.

"... And at an age when most men have long retired from their affairs," Sheridan added. Then he cocked his eyebrow and fixed me with a steely sidelong glance. "Except that it's 'all men' in your case, Gilbert?"

"Speak for yourself, Chief," I retorted. "You aren't doing too badly either. Banging around in orbit. Hell, you got your start out of the backside of a horse-drawn wagon. Are you telling me that you've finally figured it out for yourself and you don't need my services?"

"Business after lunch, Fenton. We old fellows shouldn't rush about. Let us say I have changed my mind on certain fundamental points in our century-old cat-and-mouse game."

"You've decided to be the mouse?" I asked with staged surprise.

"Maybe, Fenton, I have been the mouse all along. Quiet, now." We had been riding in a slidevator that ran along the rim of the Station. It had reached its last stop, and the doors slid open. Sheridan guided me to another set of double doors. With his finger poised over the opening plate, he turned to me and whispered: "Hold on; this view will take your breath away. I've had people faint here."

The doors opened into an oval room with dark walls and unobtrusive lights scattered about the ceiling. Save for small islands and threadlike catwalks, the floor opened out into parsecs of inky black space, scattershot with points of light. The Milky Way was drifting with stately dignity beneath our feet.

"Walk out onto it. The floor is quite an engineering feat itself."

And I saw Earthrise at the Polar Orbital Station.

Moving with a graceful pace, Northern Europe hove into view,

dressed in the satin white lace of a fair-weather system. To my left, protracted, was the North American continent, glowing under a late morning sun. White and sapphire, russet and green, Terra spun slowly against a velvet backdrop; and behind her, the Milky Way drifted in the vastness of the expanding Universe. I was awestruck, thunderstruck, and struck by a million items so vanishingly small, yet so brilliantly resolved: the sun's highlight on the Atlantic, individual textures of clouds, the incredibly involved texture of the land. If ever I had a feel for the comprehension of the Universal Whole, it was in that Observatory.

I wasn't going to fall . . . but I wasn't going to let go of Sheridan, either.

"Sher—Sheridan?"

"Sir."

"I'm impressed. Where can I sit down?"

Sheridan helped me along the walk, over the Mid-Atlantic, and sat me down at a table somewhere above the Ural Mountains. For some time I had forgotten to breathe. I checked my pulse, spent some minutes doing something about all the adrenalin my glands had so thoughtlessly dumped into my bloodstream, and soothed senses that *swore* I was going to fall out of the place. There were a number of body-keeping chores that I had to attend to right there.

"Do you have a fear of heights?" Sheridan asked pleasantly.

"Only—recently, Sheridan. I didn't think they could make a transparent shield of such dimensions."

"Anything can be done with money, Gilbert. The costs of developing the Observatory were indeed high, but you should see the effect it has on the stockholders. Between you and me and the Board, the principal stockholders require little additional conditioning after they've been in this room. They respond to this place as they would to a religious experience; indeed, for some it's the only religious experience they ever have."

Conditioned stockholders. A typical Sheridan scheme. But, I had to admit to myself, I hadn't been moved like this since I was sixteen and inside my first cathedral. Life was more carefree then; I didn't have to trouble myself with the schemings of old men—or escaping from their space stations to protect the secret of longevity. For all its faults, the world didn't deserve an immortal Sheridan.

I think Sheridan felt embarrassed in the silence that followed

his remark, I peered at him in the green and blue earthlight, and he fumbled with his fingers and then burst out: "Oh, the conditioning isn't that severe! We have no use for a bunch of Pavlov dogs! The conditioning is very subtle, and actually falls into that never-never land between conditioning, convincing, and educating. They aren't even aware of it. The only form it takes is the inclination to invest in one kind of a scheme, every now and then, rather than another; and to keep re-electing the present Board of Directors and myself. That's hardly dictating their every movement! And we're only dealing with one-thousandth of one percent of the world's population."

"The ones with money," I said, levelly.

"Well, that is hardly an abuse of power," he said, forcing conviction into his voice.

"Did I sound like I was objecting?" I asked.

"Oh . . ." Sheridan seemed surprised. Poor fella; he was warming up to a justification speech that he found out he didn't need. He didn't know what to do with his mouth—and I felt good. At least for that instant he wasn't in the driver's seat.

"I rather thought you would," he said, a little lamely. "You always were a liberal moralist, Gilbert. You objected to the printing of bogus money even as you were accepting your degree from—'Matheus University'? I think that was the place I gave you." I got a thin smile as soft sounds from the ramp announced Chester's arrival with the chow.

Chester was unimpressed by the spectacle beneath his feet. The green-blue light from the floor lit him up like an apparition from the Ektachrome of a bad horror movie.

I replied to Sheridan's comment, "Times change; so do the opinions of cantankerous old men."

Sheridan nodded thoughtfully. He began to cut carefully into the steak. Since my background lacked grace and form, I attacked my portion in the spirit of an Apache raid on an intruding wagon train.

In time I asked through the music of utensils on porcelain, "So, Pappy; how's the printing business?"

Sheridan stopped the elegant business of eating. He looked at me and tried to gauge any hidden meaning in my question.

"I sold it to someone who could appreciate it. I purchased a bakery and sold it as a bread company. I bought into Rockwell International and recommenced the manufacture of the Shuttle when the energy depletion scare finally blew away. It was

difficult, but men aren't all that difficult to control, if they are ambitious. You figure out what they want, and then you make them think you've delivered it to them—all for a price, mind you."

"Hmm," I said. He had suggested something to me . . . but what was it? A plan, a whole brazen plan flashed in front of me and—I lost it. My glimmer didn't reach the gleam stage.

Sheridan, asked, between bites, "And how are you proceeding, sir?"

As if he didn't know. "I've been trying my hand as an engineering prof in a diploma mill," I replied. "I have no illusions about the sanctity of the learning process. There are people who learn—and people who look for the instructions on things."

"Education, a personal process, what?"

"Yep." I launched my last piece of steak on its next phase of existence and said around the bite, "Maybe the process is easier in defined atmospheres, with research material and someone to help you who knows the ropes; but it's still a personal process. Maybe the word 'teacher' is meaningless. Maybe 'learning assistant' is better."

Chester was gone. We were alone now.

"I am going to make a proposition, Gilbert."

"Anything like the last one? As I recall, you presented it with a great deal of persistent vigor."

Sheridan laughed a polite laugh, which revealed a row of perfect teeth. The floor was opaquing in response to a local sunrise. "And I would have continued to do so if you hadn't found a door I didn't know existed."

That wasn't how I had gotten out; but if that was what he wanted to think, then I wasn't going to disillusion him.

Sheridan continued: "But you must admit that I have developed a great deal of sophistication since those days. Here we are in an orbital station, amid the offices and laboratories of the Sheridan Group Industries. A thousand office workers and technicians and their families reside here. No one knows you are here but you and I."

"What about Chester?"

"Chester? He thinks you're someone who has to be persuaded to do a little business. He has no idea that you are a millennium old or what you are here for. He rather hopes to help out in a little accident that will occur in your local area if you can't be persuaded. But he shall be disappointed this time, fortunately."

"You mean you'd let me go if I didn't tell you how I do what I

do?" I asked.

"I haven't planned what I'd do with you if you refused me," replied Sheridan, easily. I couldn't imagine a situation where Sheridan hadn't laid a plan for each detail. Sheridan was meticulous.

"You see," he said after a pause to consider his last piece of steak, "I am rather confident that we have come to an agreement, shall we say." Sheridan carefully arranged his silverware on his plate. "I considered that I might have to demonstrate to the authorities that you were never here, of course. Let us say that it comes to unpleasantness. Several people might swear that you were uncommonly careless in the traffic lanes near Des Moines, Iowa, say. But I don't intend to harm you. We are life-long companions, of sorts, equal gentlemen, you and I; and I have a proposition." He neatly swiped at his mouth with his napkin.

"Sheridan," I said warily, "I do not use the term 'gentleman' for someone who uses rubber hose diplomacy."

Sheridan winced and with a waving hand cleared the air of my ungentlemanly observation. "Oh, please don't say that. I've grown up, Fenton. At a hundred and ten I can see myself in perspective. I've come to realise that I am dependent on you for just a little flow of information. I can't beat you to death, you'd die with the secret and a smirk on your lips, I know. I'd be as badly off as I was before I brought you up here, worse because you'd be dead; and there isn't another man on the face of the Earth that knows what you know."

"Maybe. Folks like us are mighty particular with our identities."

"You mean there are *others* . . .?" Sheridan's expression told me I'd better can that line, or my life wouldn't be worth one of Sheridan's funny-money sawbucks.

"How the hell do I know? You've been looking around, have you found any?"

Sheridan looked bitter. "No, but I have you. A bird in hand. No, Gil, I was wrong to try to beat it out of you, though I wouldn't admit it at the time. I was extraordinarily lucky that I didn't kill you; for I was strong as an ox, and I had all the passion of youth. But then you were out that extra door, Gil, and I swore that someday I would be in a position to buy you, if I had to. In a way, you are responsible for Sheridan Group Industries; you are its prime mover. I merely gathered the resources to track you down."

"And now you've got all that dough and I'm not the least

interested in it," I said tiredly. "I generally outlive the local currency standards. What is wealth then? If that's the basis of your proposition, to trade your future for your empire... You've bored me, Sheridan."

Sheridan pushed his empty plate back and rose from his chair. He began to pace the floor, now fully occluded and pearly white from the attenuated sunlight.

"No, Gil. I could offer you lifelong wealth as a part of the commission, which for you would be quite a pile, but that is not my intention. Gil, my proposition is that I won't pay you a red cent. I'll pay Humanity."

I smiled. Deathbed morality catches up with the richest man in the world. "Do tell, I say."

"Gil, I know you want a better Humanity. Beneath your cynicism you want every person to live better and far longer. Maybe you want them to live indefinitely. Am I right?"

I shrugged, suppressing a thrill of wonder. "Has he changed?" I asked myself, then a mental chuckle re-aligned the errant neurons.

"That what all right-thinking people on the globe want—for the record. Have you got something concrete to back up those pleasant words?" I smiled and watched him pace to my side of the table.

"I have been amassing wealth, Gil; but more important, I have been amassing *control.*

"Fact:" announced Sheridan. "Since the depression that preceded World War II, and in a larger sense since the Industrial Revolution, the gross economic trend has been the concentration of wealth into the hands of a smaller and smaller circle of people and institutions. At first it was direct personal wealth. Personal wealth purchases goods and services—and money is purchasable, like beer and pickles. Hence we have people who sell money, for profit; they rent out a commodity that won't wear out and is guaranteed by the governments of the world. Since the members of the service class are wealthy to start with, they become wealthier—"

"Positive feedback," I said.

"Eh?"

"Positive feedback. Like a feedback circuit where the linkage is multiplicative with a positive sign at the circuit's summation point. The output shows an exponential change in magnitude to the limits of the supply, or it steals wind from other supplies."

Sheridan seemed to like the engineering. He beamed, "An essentially similar viewpoint, Gil. I didn't think you had it in you.

"Anyway, there is a tendency for wealth to concentrate. To control the concentrations of wealth is to have that wealth, and the power it represents, in your hands. My strategy for the last sixty years has been to allow other people's wealth to accumulate, so I can then take control of it. I have not been troubled by the politics of the masses.

"Now, what to do with that power? One can purchase or develop technological means to control people who control wealth. Right hemisphere implants—a crude method—chemotherapy via food doping, non-volitional conditioning. . ." He paused. "Anyway, we've developed many techniques here at the Station. Fact. Sheridan Group Industries can now control the purchasing and investment habits of twenty-five percent of the pivotal individuals and institutions."

I shrugged. Sheridan was getting excited in the pearly sunlight. "So? You've dedicated a century of living to get control, but you're dying just the same. Tell me, Sheridan, what's the point? I'd really like to know—I've got a hunch that civilization is a circus we've all put on to keep our minds off the main question: 'What happens after I shoot through . . ?' "

"That doesn't have to be the point. I represent a potential that has never existed before. I represent the apex of economic control. I can devastate the world economy by changing the value of paper tokens, simply by launching a series of booms, which trigger the busts. I can make the system oscillate wildly; I can destroy the links between the economic communities: people will go back to direct barter. Or, I can make the system work better because I can control enough of the system to reroute it—to improve it. That's a much harder trick; for it takes knowledge, experience, control—and *time*. There have been people like me before, but they gained the first three elements at the expense of the fourth, and whatever potential they had was cut off by the vanishingly small time they had left to use it in.

"Gil, you represent that fourth element, and I represent the other three. All four elements in one man, Gil; it would be tremendous." Sheridan waited, hesitant, expecting a reaction.

"Who gets the four elements?"

"I do, Gil. You give me the fourth element."

"And what's in it for me?"

"Nothing, Gil. There's nothing in it for you. I can't buy you a

whore or bribe you with money, and at one time that annoyed me. But I've learned that I can rely on your higher principles. Trust me and give me longevity, and I'll use the time, control, knowledge and experience to pass that longevity on to humanity. I have the tools to do it.

"I'm not Pappy the Printer anymore. Diligence and unorthodox financial techniques have brought me to the brink of economic domination of the world. As I've watched this globe wheel beneath my feet, Gil, I've gained an understanding of what could be done. It'll take several years to re-tune the global economy to tolerate longevity, of course. I know what needs to be done. But I'll be dead before I can do it. I have the vision; give me the *time*."

The opalescent half-light sharpened to needle points as the floor cleared to reveal again the timeless Milky Way. Sheridan waited. He had spoken his piece.

Three seconds brought me almost—but not quite—to the conclusion that Sheridan was full of that elegant stuff that fills a soul while the body is on Death Row and that he would revert to his old foolishness if he got a pardon. Let us say that I was ninety percent sure of this. But as I am damned to see every side to a circular question, I was ten percent in doubt now and would be

more than ten percent doubtful later and—*damn!*—I would most assuredly have to kill Sheridan if I didn't join him. What an awesome decision. My killing Sheridan, my being his executioner, could result only from an act of judgment. I have fundamental reservations about executing a man I haven't properly judged; to do so is to send him to that state that I have not yet had the courage to face myself.

Troubled, I tabled the thought. I said into the utter silence of that room, "Thank you."

"Eh?" was Sheridan's response.

"You are the first man who has tried to appeal to me with neither a sexy kitten nor a pile of gold. Instead, you've appealed to my morals. I thank you for the compliment."

Sheridan nodded tiredly. "I need what you have but there is nothing in the world that I can give you in trade. So I'll tell you of my purpose and I ask you to judge if it's a worthy one. I am completely dependent upon your believing me. I ask you to trust me, Gil, to judge me; to let me work, or to condemn me and watch me die." Still holding at ten percent, I thought.

But to have civilization on a leash! What a heady thought. And Sheridan had what it took. Almost. "What if I . . . don't decide immediately?"

"Wait," he answered. "I won't let you go, until you have decided; I think you owe me that."

"And if I . . . never decide?" I asked.

Sheridan played with his fork, smiled a bitter smile, and looked directly at me.

"Why," he said, "that would be the same as judging against me, wouldn't it?" He paused. "I've been dodging it for some time. We've used some pretty powerful techniques to keep me alive. I've made it to a hundred and ten; but the repair rate is getting out of hand. The doctor thinks I can live six more months." And Sheridan looked at me with twinkling, intelligent, predatory eyes.

"I think you had better prepare your guest room, Pappy."

"I'm not Pappy anymore. His attitude is dead."

"So he says."

"You'll see," said Sheridan, unruffled. "I can wait—for a little while. In the meantime, we'll need to keep you occupied. You'll be my personal assistant."

Sheridan and I walked through his personal section of the Station—two of the twenty-four major compartments circling the rim. The interior was decorated in subtle whites and greys, with

curved floors, plants, sculpture, and paintings scattered about. One compartment was a guest area, which contained along with a get-together room, visiting quarters and servants' area, the Observatory. The other compartment was Sheridan's *sanctum sanctorum*. Sheridan led me past its locked door and into a wide room tastefully done in the same white and grey décor. In one corner of the main room, a terminal to the Station's library silently presented a menu of games and reading material. Sheridan watched me while I browsed through some of the 1-person games, happy as a clam. Then he switched the terminal to the novice mode and showed me the query generator, commenting that this was one of the only two unsealed terminals in the Station, the other being in his room. "Look at anything you want," he said. "My life's work is on line." He then retired for the evening while I amused myself with the terminal.

I quickly discovered that the station library, and the station itself, were manifestations of Sheridan's interests. The station was his 'activity module', I suppose the best word is that; his library showed a preponderance of sociology, psychology, and biology, with an impressive number of unpublished papers. Sheridan had been gunning for the Fountain of Youth for some time, it seemed. A lot of his inquiries concerned genetic engineering—a practice banned on the surface—and he had on his staff Dr. William Vonner, who had gone into hiding when the scientific community announced its self-imposed moratorium on the design and manufacture of new species. It was good to know how the Doctor was biding his time.

A few touches of the paging stud informed me that Sheridan, while prospecting for the Fountain of Youth, had come up with a swarm of useful techniques. He had put brain implants and gene doping on a practical basis, if I interpreted this three-year-old report correctly, and had developed a system of protein fabrication that fit learning into little pills. He had been using it to teach languages to his staff and 'investment techniques' to clients who subscribed to his service. I whistled in appreciation: not only did Sheridan control his investors, they were paying for the privilege! He would have been a hell of a horse trader, back when.

After two hours at the data bank I sat back, amazed. Sheridan's inquiries into the science of direct and indirect control of the human subject were the most exhaustive I had ever seen. He had hit the problem on both the macro and micro levels. He was developing a mathematics of n-dimensional topological spaces, and

investigating how a functional projection of degree $(n-1)$ onto a given topological space could serve as a model for various macrophenomena—how a crowd will sell, or buy, or revolt. On the micro level he was developing subtle methods of direct individual control like his 'subscription service.'

The man had no competition in the science of manipulation. With all of these control mechanisms at his command, he could have become dictator of the Earth in the most subtle way, and no one would have been particularly aware of it—

I jerked up.

Maybe he was now. Maybe he just needed me to assure his subsequent terms in office.

Or maybe he was still consolidating his position and treading water until he was sure he could direct all phases of the program personally, without having to be inconvenienced halfway through by dropping dead.

Or maybe deathbed morality had changed his reach, redirected his vision, and he was waiting for me to give him the go-ahead, the time to do the world right—the world he had so sorely cheated. The groundwork was there for something magnificent, shenanigans or otherwise.

I turned off the terminal, stretched out on the resilient floor, and threw a pillow over my head.

I had, I thought, a powerful investigative tool that would clear out a lot of the guesswork—the longevity therapy itself. I discovered shortly after my first metamorphosis that I could gain access to other people's minds if they 'let me in'. The process is a little more complicated than that, but that is the best I can do with the language. Once I was let in I had a wide communication spectrum with a subject, and I could see—Hell, it isn't 'see' but that's the best word going—I could see his neural network and his chemical systems as well as he could; better, because I knew where to 'look' and he didn't. Telepathy and this clear inner eye and control of one's inner processes seem to go hand in hand and indeed, might even be the same phenomenon. I could learn a lot about what really went on in Sheridan's mind during the initial rapport, and I could pull out if I saw anything I didn't like. If he were being totally deceptive he might even balk at a telepathic link-up, and my decision would be easy—though getting out of the station might be pretty hard. I rather liked that alternative. I took off the pillow and smiled to myself. There just might be a way out.

I slept on the problem until a female voice by my head said, "Mr. Sheridan asked me to remind you that it is 0600, and that you are to meet with him at 0700 in the Administration Compound, segment zero one hundred, room thirteen."

"Fair 'nuff," I muttered. I wandered into the bathroom, and cycled the refresher cube until I was reasonably awake. Breakfast was a problem, and fresh clothing; and I pondered the point in my birthday suit until I remembered the terminal. I negotiated a large breakfast and a small wardrobe; in two minutes a chime rang out and I had what I'd asked for, although the surrogate coffee needed some development work.

I headed to work on my first job with the great Mr. Sheridan.

I found segment zero one hundred between zero two hundred and two four hundred. A 'can you tell me where Mr. Sheridan's office is?' got me the rest of the way.

"Good morning!" greeted Sheridan.

"It'll be a while before I have an opinion on it," I replied. He smiled. "I've got a job for you. Come with me, I'm starting on my rounds." We went through a priest's hole and into some unlisted corridor.

"The thing, is I'm getting forgetful in my old age," he said. "Every day I walk around to all of the departments and see the heads, trade a few words with the help. There are over a thousand people employed here, Fenton; and I know all of their names and faces—and all about their wives, husbands, lovers, families, and kids too. I used to remember all the things they told me, important or not. People work better for me when they think I care about them."

I nodded.

"But as I said, I'm getting forgetful, so I'd like you to tag along and keep track of things for me."

"Besides, you would always have your eye on me," I said.

"There's that too, isn't there," agreed Sheridan. "Of course, if you find the job offensive, I can always find another one for you. Engineering is a forte of yours. I have some systems work—"

"No, no. Don't go to a lot of trouble," I said. "I just might want to keep an eye on you too."

"Ha! Fenton, if life were any different, we just might have been friends—we still could be. But I must ask you to be quiet, and careful as to what you say, for on the other side of these doors are the public corridors."

The large doors slid easily in their slots to reveal a businesslike

corridor. To the left, at various intervals, were the slidevator stations; to the right were the working spaces appropriate for the pinnacle of the Sheridan Group Industries.

We went into a bio lab.

Some people, working at individual terminals, looked up. Sheridan got a chorus of 'Good Morning, Mr. Sheridan' and a few 'Hi Sher's.

"Morning, crew. Is Bill around?"

"In the office, Chief."

"Thanks, Frank. Group, I'd like you to meet Gil, my new memory man. If it's important, tell him. Gil is going to be the fellow who tells me what to do from now on."

Sheridan plowed to a hubward compartment, with me in tow.

The compartment was well laid out. There were happy plants all over the place, gentle curves, and light colors. We found the occupant contemplating the Hub with a ghost of a smile on his lips.

"Good Morning, Dr. Vonner," said Sheridan. I arched my eyebrows.

"Hi, Sher. I've got a biggie," announced Bill as he swung his feet to the floor. There was enthusiasm in his eyes, a sheaf of papers in his hand. He was young, sandy haired and pudgy, late of the genetic engineering effort on the surface.

"Look at this, Sher: a definitive carrier loop that can modulate codon transfer during the pre-meiotic stage . . ."

And off he went, bubbling, enthusiastic, optimistic: a delighted child who had just learned a new magic trick. I could have been happy for him if I weren't so busy taking notes.

After about fifteen minutes, Vonner wound down and Sheridan was nodding thoughtfully. He handed back the sheaf to Vonner and said, "If you think you can control a mutation like that without radiation, Bill, then be my guest. Just don't let a hairy monster out into the lab."

"Hairy monster?" Vonner looked indignant. "I happen to be careful with my facilities—not like those jackasses on the surface, who probably wash their equipment in the nearest stream. Anything that I make will be so weak that it will self-destruct if I look at it cross-eyed."

Sheridan's bantering tone vanished. "I know you're careful, Bill. I'm basically conservative, that's all."

Vonner cooled off and his enthusiasm resurfaced. "You'll see the most wonderful things from this! History will be made in these

labs!"

"I'd say you've made history in these labs already, Bill. When we release some of your experiments to a—more understanding world, your name will rank with Salk and Pasteur."

Sheridan wheeled out of the office, leaving Vonner in a happy, creative flush. Before we got any distance, I had notes on two birthdays and an anniversary, along with two get-well cards.

When we got to the slidevator, Sheridan was in a thoughtful mood. He said, in part to himself, "You know, Vonner's lucky that he's up here. If his own safeguards fail, and worse comes to worse, there is always the ultimate safeguard."

"Such as?" I asked. Sheridan looked up at me.

"Oh! Well, Space itself. Genetic labs are ideally suited to orbit because that big old vacuum out there will get anything the radiation misses. If something—unpleasant—does happen up here, then I have deadman instructions controlling a nuclear device located in the Hub. Couldn't have that kind of safeguard anywhere on the surface."

"How about traffic to and from the Station between the time a bug gets loose and when the first symptoms show up?" I asked.

Sheridan looked surprised. "I *am* getting senile! Note somewhere on that pad that I should issue a general three-week quarantine on personnel leaving the Station. Call it General Instruction Q3. The Station Provost Officer is going to inundate me with grievances by tomorrow night, dollars to donuts."

Sheridan fell to inspecting his tightly cropped fingernails. I had a doomsday thought.

"Sheridan, suppose there is a plague in the near future, after you and I resolve our . . . differences," I asked, "would you blow yourself up with the Station?"

Sheridan fixed me with his eyes, his steely glinting eyes.

"I have you thinking about it, haven't I?"

"Maybe."

"You're thinking about it. Progress, I can't complain." Sheridan sat back and a relieved expression crossed his face.

"Would you blow yourself up if the Incurable X disease slipped out of Vonner's test tube?" I pushed the matter. It was important.

The slidevator had stopped at the next station. Sheridan kept his bony fingers on the HOLD and DOOR CLOSE buttons, and said in a soft voice, tight with tension: "I have told you not to talk about this matter in public places. I suspect you made your way through the Black Plague in a manner that the contemporary alchemists

would have found amazing, not to mention the present ones. It turns on what you teach me, Gil. Now *can it*!" The door opened and a perfectly composed Sheridan slipped out with a thoughtful memory man padding along behind.

There were sixteen anniversaries, two-score birthdays, ten get-well cards and thirty pages of notes from Sheridan to others via my aching fingers. My feet were killing me. Sheridan was just starting his day. I saw data processing and genetic experiments, high vacuum industrial experiments, and crystal-growing experiments, and I had notes to get data sheets on a dozen more.

"We do a lot of research here," remarked Sheridan as we headed back to his office. "This is the only private industrial facility in orbit, and we have clients who need testing done in the high vacuum and zero-g—plus all of the housework from the industries in the Group."

When we got into his office I gave him the note pad. Sheridan looked at my tight notes, diagrams, circles, arrows, and three-colored inserts and made a tsk, tsk, sound.

"Good heavens, Fenton, do you think the way that you write notes?"

I marveled, as I wriggled in my seat, how a fellow barely a century old could make me, with my ten centuries' seniority, feel like a junior office boy.

"This is the most amazing aggregation of mixed-up markings. . . . Here." Sheridan opened a drawer, exactly the one he wanted; reached in; and picked out a sealed metal cylinder. He snapped it open and rolled a large green pill onto his felt desk-top.

"Take it. It's a special shorthand that I can read and you can take, real-time, without looking at the notepad."

I looked dubiously at the pill, tapped my teeth with my pencil, and thought of that investment subscription service of his.

"Come on, I wouldn't poison you now, would I?" laughed Sheridan.

I was thinking of Vonner's enthusiasm—genuine human reaction or derived from a German language pill? Everyone that Sheridan dealt with was respectful, loyal, and even loving in a businesslike way. Was it love and respect on a human to human basis, or were they chemically treated dogs and yes-men?

I didn't know. It was all as enigmatic as Sheridan himself. But I knew my body chemistry and I had my inner 'eyes' and 'hands'. I made a bet with myself that I could nullify any chemical in that pill should it get out of hand. Swallowing it, I noted a slight

suggestion of the taste/feel of dry peach rind, before the skin breaks. It was an interesting gamble, the kind that adds gusto to one's life. Besides, I was interested in how that pill would work on me.

"It'll be a while," remarked Sheridan. "Some of the secretaries say that when it starts to hit, it's best to draw some audio from the Station's library and practice. Others say to sleep on it. Do what comes naturally, and I'll see you tomorrow."

"Sure," I said, and I went to my quarters with my inner eyes watching.–

§ § §

It was a pleasant inner show, that pill. It didn't touch my value areas one bit. Any fragment of protein that banged on the doors in that neighborhood got a gruff 'We don't want any'. The protein looked at its instructions, said, 'Excuse me!' and moved on. When it got to the area that decided whether a sound should be shunted to a higher level or acted on right there, the proteins slipped in and established a correspondence between a sequence of motor instructions and phonal groups. The causality between 'loud noise: jump and cuss' which worked within a certain small loop suddenly had company in the form of such correspondences as 'freedom: motor instructions 4FEA'. There was a blocking neuron that controlled the loop, making it a function of will, so I wouldn't continually be urged to write everything I heard. When I *did* will the routine in, I would automatically write the shorthand analog of each word, knee-jerk fashion.

I suppose I could have done something similar myself, if I knew how; but there is a lot that I don't know about me. I do know the various control nexi and can manipulate a variety of neural, electrical, and chemical circuits. Since I see the body as a whole, I can appreciate the wide variety of 'domino chains' throughout the body: almost every circuit is linked to its neighbors, and an intentional adjustment will often trigger side effects in a (seemingly) unrelated function. Thus when I treat hardening of the arteries, I affect bone-cell manufacture. Though I know the nexi and how they can be excited, I still have to respect the overall body and its inter-related systems. In order for me to do that neural adjustment myself, I would be obliged to trace out all of the domino chains. Why Sheridan's little green pill failed to trigger any side effects is a mystery that goes to show how little I understand me, in spite of the intimate relationship that I enjoy with myself.

Which brought me to the problem of Sheridan, the next order of business after the Pill. My idea of what was on the man's mind and how it might be probed during the intimate link-up of the Therapy had taken a severe blow when I saw how Sheridan was received by his employees.

They liked him.

No one liked Sheridan when he was on Fulton Street. People did business with him because he was efficient, not because he was pleasant. Had he changed over the years?

Possibly Sheridan had changed. On the other hand, if it were deathbed morality, then I might miss it: unconscious self-deception, I cannot detect. I had missed That Woman's suicide tendency, and I was a hell of a lot more intimately bound to her than to Sheridan; and had rambled through her head for hours on end. And I now had the feeling that once I got inside of Sheridan, I would find answers that would beget more questions until it was *all* questions again.

In between arguing with myself, I watched the scenery that evening. The ceiling was cleared, and it treated me to alternate views of Space, then Earth, and then a period of occlusion while the sun was in view.

Good old Terra, I thought. Even she is a spaceship, with naturally evolving controls, hierarchies of systems, diverse phenomena working hand in hand: all of it fitting together so *right.* And the human creature is an outgrowth of that fit. Oh, he had a learning period, I thought, when he messed with chemicals that didn't dovetail with naturally existing systems; and when his material use was straight line, and not a loop that fed itself; but when the economics of recycling made themselves felt in the latter half of the depletion age, humankind learned the first aspect of systems; a lesson that John Donne put into the words: 'No man is an island'.

Indeed, no *thing,* man or otherwise, is an island: everything is adjacent in one way or another in the intricate universal topology, related, in a web of relationships, where everything can be connected implicitly or explicitly to every or any other thing in the web. Changes in one portion of the web mean changes in all other portions of the web and once this fundamental rule of systems was learned by Humankind, he was forever more careful with his garbage, especially when it became profitable to do so.

The ceiling occluded and I was cut off, for a time, from the outside.

I am a frail creature, dogged with uncertainty, lacking in personal self-worth at times; but I see that things fit together—click—joyfully like fine machinery, and that understanding is the basis of my morals; for I respect and wish to preserve that fit. It is the reason I believed that longevity was safe with me at the time, for I wouldn't spread it—willy-nilly—throughout Mankind until I had carefully traced out all of the domino chains—

I stopped, thunderstruck. Sheridan had shoved the job of judgment on me as if I were the sole judge, as if the buck could stop with me, and that is not the way things work at all, at all! I admired—marveled at—the man's postures, choice of words, styles of talking, and the way he maneuvered me into the role of an arbitrator, giving me the obligations of a judge—omniscient but detached—when I was intimately woven into the problem. Sheridan knew that, when he forced himself on me and displayed himself as a person loved and respected, I wouldn't have the courage to watch him die. He knew I was particularly sensitive to death. He gambled that I would keep him alive even if I didn't give him the full therapy. He gambled that I would remain in the judge's role long enough for the responsibilities of that august position to cloud my vision; until I would say to myself: 'Why am I keeping this guy on tenterhooks?' and give in. I jumped off the bunk, resolved. Sheridan played a skillful game, a damned skillful game, and he had come perilously close to winning.

But he didn't. And I knew exactly what to do.

I fixed myself an elegant meal with some help from the terminal. Just as I sat down, the compartment bell set up an enormous clatter. Annoyed, I put down my chopsticks, rose, and touched the door plate. My visitor was evidently in a hurry.

"Mr. Fenton, you are to come with me immediately. I—"

I stepped on the brakes gently. "Easy, son. I can't think offhand why I should neglect dinner on your say-so, can you?"

"Mr. Fenton, please, I understand you give security personnel a difficult time as a matter of course, but this is serious. Can you run?"

So we ran. We ran to the slidevator, which then skipped every stop until we reached the sickbay compound. Shortly I was in an emergency care room, and my guess was verified. A young doctor with a stormy look in his eyes confronted me.

"Mr. Fenton? I'm Mr. Sheridan's physician. Mr. Sheridan has had a severe coronary, which at his age—anyway, he wants you

here." I peeked past the doctor.

Sheridan wore a mask and had things wired to his chest. His eyes were closed and he was breathing with quick shallow breaths. He looked awful, very old-looking now, frail, the dynamic personality gone. There was a small pick-up on his pillow. His eyes opened a crack, he turned slightly toward us and whispered, "Jim."

"Mr. Sheridan." The doctor turned, businesslike.

"Get lost—clear room of—everyone—but Fenton."

"Mr. Sheridan, I have the responsibility. . . ."

"Jim." The doctor stopped abruptly. I looked at Sheridan. Despite the attack that had beaten his body, despite the tinny speaker and phone amplifier, the voice still carried command.

"Jim—I am a dying—man. Washed up. You—wouldn't deny—a dying man—his last—wish?"

The doctor turned red. Sheridan could still do it, turn a person against himself with a carefully composed sentence. Sheridan was a marvel.

The doctor and nurses and technicians retired behind the door. They were not to return until I allowed them.

Sheridan was peering at me again with that intense predatory look. I looked down at him, waiting.

"Your . . . decision, Fenton."

I checked my thoughts. It would be a calculated gamble; chances were there would be unfortunate aspects no matter what the outcome.

"Welcome to the Longevity Club. We're a small and select group."

"What . . . What . . ." Sheridan seemed almost surprised. Did he have last minute doubts about his game? I tabled the thought.

"All you have to do is relax and give me eye contact. Don't think of anything and when you feel me, *don't resist!*"

I found a chair to sit down on, cradled my head in my hands, and took a stab. I was in. Information flow was very wide and the exchange rate was fast.

"SHERIDAN!"

"Yes . . ."

"Don't will anything. Go to sleep."

"The pain . . ." I altered the firing threshold of a bundle of synapses.

"What did you do?"

"Later, sleep now. This is not the metamorphosis, this is just to patch you together."

It wasn't the worst session I'd had with death. My fourteenth metamorphosis, the short one, somehow found me in France during the year 1916. I called the shot that World War One wouldn't happen and got drafted in the French infantry. A moment of carelessness found me stitched up the side with a machine-gun burst. I had to keep myself alive *and* metamorphose at the same time. At least Sheridan wasn't halfway sawed through and lying in a trench.

Patchwork kept me busy for about an hour. Sheridan was in relatively healthy shape, so I took the liberty of hyper-regenerating the arterial walls. I worked on the local timing too, so I was sure the heart wouldn't stop on us. With the somatic problems mostly settled and the consequences of a few dozen toppled domino chains cleared up, I woke Sheridan.

"Sheridan."

"Yes."

"How do you feel?"

"Good! Is it over?"

"We haven't even begun. I just rewired you so you can make it

through the short haul, which is going to be a rough one. I am going to go through a metamorphosis step by step and you are to take notes. The first thing I'll show you is direct-memory access so you won't forget anything that I show you."

"I could use that trick in a thousand and one ways."

"Now a lot of these processes are traumatic and set up noise in the nervous system. It's painful. I also won't touch the exterior much. That's finishing and I'll leave it to you as practice; besides, it's best not to upset the doctor too much."

"Understandable."

"You ready?"

"Yes."

"This is going to hurt as much as your rubber hose."

I gave Sheridan very practical instruction. If you ever buy a piece of complicated machinery a field representative will come with it. That field representative will give you point-by-point instructions: this knob does this; that lever controls that. He isn't teaching you an overall philosophy, he's telling you how that button sorter can be specifically operated to sort buttons. It's the exact opposite of how I teach control systems and the exact opposite of how I taught That Woman because the two teaching methods stem from entirely different points of view.

Sheridan didn't seem to object.

"It's done."

"That was very comprehensive, Fenton; and this link-up is a very effective method of getting ideas across."

"True, but it's an 'and' link: both of us have to agree to it and either of us can cut at any time." I finished with my voice. "So it's subject to my vagaries."

Sheridan shook his head. The cyanosis was gone, but his exterior, to the quick glance, was about as old as when I first came on board.

Sheridan looked at the clock. "It's been two hours. Gil, let the doctor in; he'll be having kittens."

I opened the door and the doctor was about standing on it with a battalion of security men, it seemed.

"Good Heavens! I was about to break in, Fenton. What . . . ?"

"Are you sure there is anything wrong with Mr. Sheridan? He and I had a good long chat and he doesn't seem the least bit ill," I said innocently. The doctor shoved past me and bee-lined to the telemetry equipment.

"What happened?" he kept on saying through his teeth.

"Security, you're dismissed," Sheridan commanded. "Fenton, if I pull through," with amusement in his eyes, "I'll be in direct contact with you."

Near as I could tell, that ten percent chance was shrinking, and Sheridan would soon be up to his old tricks. I had made my move, however, and only time would tell if I had made the right one.

§ § §

Three days.

I had expected things to happen, but Sheridan was working on a grand scale. The afternoon of the metamorphosis, he had the doctors take him to his personal quarters, where he got out of bed and dismissed them. He relieved his physician and gave him a research post he was after. He then announced that Sheridan Industries would be marketing another First.

Three days. I knew my plan would work, but it might take a week. Meanwhile, Sheridan was going to town.

Sheridan had invited me to the Observatory for a private breakfast. Sheridan had dismissed his personal staff and made his domain 'taboo', while I was forbidden to go into the rest of the Station. I watched the Earth spin silently below my feet. "You've put up with a lot of silliness," I said to her. She bore the comment in silence. I wondered, for the umpteenth time, if my timing was off. A perfectly good scheme shot to Hell by poor timing still loses the war. If my timing was off, could I still patch up the pieces?

Sheridan came strutting down the catwalk. Oh God, I thought for the seventh time that day, Doc Savage and Conan rolled into one.

Sheridan was a magnificent specimen. His skin was bronzed, with muscles rippling smoothly beneath. His hair was blond again and close-cropped. The only real constants, his eyes, were still the same—steel grey and penetrating. He tried a mental hook-up, but I had the 'bug-off' shield up. So he shrugged and sat down to a breakfast that was large enough to feed the Golden Horde. Well, he was half of it, anyway. I nursed a cup of coffee—my seventh cup.

"You're bigger than yesterday," I said. "Have you got the inner man represented yet?"

"Yes, I do, and I feel at peace with myself and my exterior, thanks to you." He shot me an engaging, genuine smile. I suspect, knowing his mentality, that Sheridan considered me his only equal; his staff were people with whom words and charm sufficed.

"Don't thank me, you are what you are because . . . well, that's

the way you want to be," I said.

"But you taught me how to live and how to do this," sa Sheridan, gently flexing his body beautiful. "You pulled me fr the grave with your teachings."

"I taught you nothing. You taught yourself. I just told you a fe things that you used according to a certain philosophy."

"You're modest, Fenton. That's your only shortcoming: you hav no assertive qualities. You neither assert yourself nor impos your ideas on your surroundings. No wonder you've been in th background for a millennium."

"Where would you foreground people be if it wasn't for u background people giving you something to stand out from?"

"True, true—it takes all kinds to make a world. I am going t take advantage of this boon."

"You're going to charge a membership fee to the longevit club."

"More than that, Gil. I am going to make the Sheridan Grou the most powerful organization that has ever existed." Sheridan stalked around the room, lecturing me. I finally got around t breakfast, hoping that my timing wasn't off, ready to hear th worst, if it was.

"Nationwide, then worldwide hook-up, right on Day One." Sheridan paced around the room with Terra wheeling beneath hi feet. He turned to me.

"Why can't today be Day One?"

"Too soon," I replied around a dripping jam sandwich. "Take i from the authority on longevity. You need a little more practice."

"Hard to believe."

"Besides," I replied, "if you announce today you'll hit the North American continent on Friday. If you wait two days you'll hit 'em on a Monday. There ain't *nothin'* to look forward to on a Monday but another lousy week. The announcement of immortality wil break up an otherwise dull day."

"That would be better," Sheridan acquiesced. Turning to an unpowered holographic rig, he said, "People of the nation, I am the director of the Sheridan Group Industries and I have an Important Announcement to make." He smiled and turned back to me. "Sheridan Industries are now offering options on Immortality You and I will give the first lessons and hire the ones we've processed until we have a good line going. Then you'll be my chief engineer and I'll go back to the management of the Group. The price: no money, just the adoption of The Sheridan Plan; a plan of

recommended, rational behavior based on chemotherapy and classroom teaching. It's going to be a wonderful world, Gil."

"Do tell." I chased a bit of egg around. "What about population control?"

"That's in the plan—some special instructions for women," beamed Sheridan. "Having kids will be a privilege."

"I see, always the girl who carries the burden," I observed to Terra, turning slowly in space.

"Well, there's physical evidence if we catch her. I'm thinking in terms of logistics."

"Or stagnation?" I asked. "How about genetic remixing? How will the gene pool get stirred around?"

"I think Vonner and his boys can handle that; as for senility—well, you know the answer to that one."

"I don't mean senility. What will happen to the culture if the same points of view get banged around century after century?"

"Nor do I see any objection there, Gil; there's no point of view like the right point of view; and that's what The Sheridan Plan is for." He smiled, his hands on his hips. "Next objection! You see I've thought out this entire business of world direction. I am the first scientific ruler this planet has ever had, thanks to you."

Remembered as Sheridan's 'Dr. Frankenstein'? I was horrified.

"We've been over this teaching business," I said. "So what are the logistics of handling everybody and his uncle?"

Sheridan became serious, calculating. "We have to be rather exclusive in our clientele in the first phase. Between you and me, Sheridan is still consolidating its position. We will have to do business with potential investors and world rulers at first, and make the club exclusive, and use the *promise* of longevity to control the masses. As we go along, tying in more rulers and investors, we can consolidate our position and give permission to those populations who are most in tune with the Sheridan Group." The word 'Industries' had disappeared.

"As near as I can tell," I said musingly, watching the world turn, "we'll have, a century from now, a population with the right point of view, chemically cultivated by the Sheridan Group, which is an instrument of your philosophy." I looked at Sheridan and he nodded. I continued, "People will be born at an insignificant rate, to replace those who were careless with machinery or political points of view. Those born could easily be dealt with early in life, separately, for together they might brew up some silly ideas. Once cultivated, they pose no threat. Most everybody will sit around for

millennia on end, nodding to each other, thinking the right kind of thoughts, a worldwide Roman Empire without the boon of the Huns to stir up the show." I again looked at Sheridan. He nodded.

And continued nodding.

Nodding, with a blank stare.

Nodding, with a growing look of horror on his face.

Nodding, he grabbed at what he thought was the table and seized air.

Nodding, he shook and stumbled, as neural networks crumbled and revolted.

Nodding, he fell, soaked with sweat, trembling lips trying to form words, with chemical circuits awry, neural circuits oscillating or disengaging, his entire body politic in revolt.

I scratched the back of my head, much relieved. There were a few blows against my bug-off screen, but they weakened, and vanished.

"G-G-G-G-G-G-G—Gil!"

"Nothing I can do about it, chum; you are what you are and that is the bed of roses. Don't complain."

"What's happening? *God,* it hurts!"

"Easy question. You're dying."

"Impossible—I can't reach anything—falling apart. . . . *Help me!* Help the world—"

"I'm helping the world in the most humane way I can; and I guess that means your elimination. Sorry, Sheridan, but I abide by the circumstances of your passing." I folded my hands on the table and watched the heaving, sweating, crawling man.

"You judged me . . . *worthy!*" he growled out. He tried to fix his grey eyes on me but the head kept oscillating about the proper line of sight, giving Sheridan the appearance of nodding yes, no, yes, no.

"Before you pass on, Sheridan, I would like you to know that I almost fell for your judgment game: but I didn't. I never judged you. I did, however, give you an examination, knowing that I could live with the results of the examination—whether you passed or failed."

"Y-y-y-you gave me—*ability!*"

"I didn't know if you truly appreciated the obligations of one who instigates change. Many changes introduced to the culture have had vast side effects, such as the petroleum dirt of our late, great automobile; we lived through that era, you and I. And I, in search of that Universal Why, have come to respect the inter-

relatedness of things. I wondered if you had. I knew Terra was a network of dependencies. I also knew you had big plans for it. So after I got out from under that judgment syndrome you offered me, I gave you a microcosm to play with: yourself."

"Long—" Sheridan had stopped trembling now. He drooled.

"No, it wasn't longevity. I showed you a number of system controls that *could* have been used to promote your longevity wish. They could also make you big and handsome overnight. Used with the understanding that the body is an interrelated complex, where introduced changes in themselves trigger related changes, they could make you do a thousand different things. Used without the understanding of the relatedness of things, they kill you. You made yourself big and handsome, pushed your skeleton around, forced growth there, retarded activity here as if your body were one great plaything. Now you die, because you weren't sensitive to the chemical, neural, and electrical systems you bowled over. You kicked over too many domino chains." I looked at him. "And you were on the verge of doing it with Terra. Sheridan, if you can't run yourself right, how the hell do you expect to keep a *planet* straight?"

"You . . . tested me?"

"And you flunked."

Sheridan understood. Before Sheridan shot through, he understood, and died without fear.

And I sat for a long time at the breakfast table, wondering if, philosophies aside, Sheridan was a better man than I for facing fearlessly that which frightens me so. I could have changed him, tweaked a neuron or so while he was asleep to make him a less ambitious man.

But he had called me a man of principles: I didn't approve of his sawbucks, and I didn't approve of his conditioning either. Sheridan died Sheridan.

And at the breakfast table I mourned him for what he could have been.

I finished my sixteenth metamorphosis and attended to Sheridan's rounds. I sent the security force chasing around for a Gilbert Fenton, laid the plans for some very careful dismantling; cancelled an announcement that I had made the previous week, when I was ill and given to curious things. All in all, it was a productive Monday; and I finished out the day, alone, amused at the circumstances that induced me to metamorphose into a very old man.

MACHISMO ON BYRONIA
by Martin Gardner

This time, Mr. Gardner has provided us a statistics puzzle, a variation of his own on an older theme. This one contains three successive questions, and therefore, three solutions.

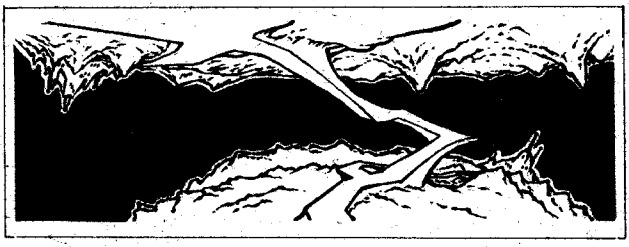
Byronia, a small planet that orbits a sun near ours, has a humanoid population similar to our own. The most striking difference is that Byronians come in three sexes. They correspond roughly to what we call male, female, and bisexual.

Because bisexuals have both male and female organs, they can perform as either sex and also bear children. Whenever a "mother" (female or bisexual) gives birth, the probability that the child is male, female, or bisexual is exactly ⅓ for each.

The new Supreme Ruler of Byronia, Norman Machismo, is a virile, hot-tempered male who gained total power by defeating a rebellious army of bisexuals. To solve the "bisexual problem" Machismo has issued the following decree: Every mother on Byronia, as soon as she or it gives birth to a bisexual, is to be rendered incapable of further conception.

Machismo reasoned like this. Some mothers are sure to have two, three, four, or even more heterosexuals before having a bisexual. True, occasionally a mother will have a bisexual first child, but that will be the end of her childbearing so these births will contribute only a small percentage of bisexuals to the population. In this way the proportion of bisexuals in the population will steadily diminish.

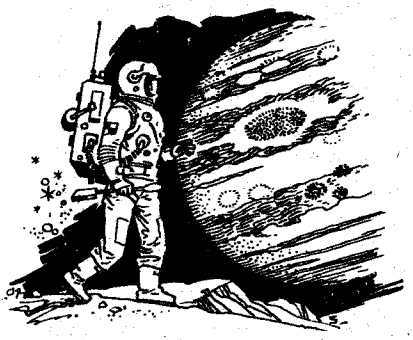
With the Supreme Ruler's plan work? See page 53 for the solution.



A SIMPLE OUTSIDE JOB

by Robert Lee Hawkins

The author tells us that he was born 23 years ago and raised on a small farm in Ohio. He is, he says, of that unique breed, American-hillbilly/Japanese (the latter on his mother's side of the family). He has a B.S. in physics from Ohio State and is now studying upper-atmosphere physics at Denver University. Hobbies include basketball and football, computers, and the philosophy of science. Mr. Hawkins reports that our purchase of this story—his first sale—was especially cheering since it reached him in the middle of final exams week.



Jeffrey Castilho used the mirrors in one corner of the airlock to check the back of his lifepack, his eyes going from the checklist painted on the wall to the fasteners and connectors of his suit, speaking each item out loud just as he'd been trained. Static muttered in his earphones, from the fusion generator equipment working outside on Titan's surface and inside Titan Pilot Project's lifedome. Then the earphones popped and Jeff heard, "Castilho, this is Rogers. You sure you don't want someone to come with you?"

Jeff tried to scowl and tongue the transmit button at the same time. He caught sight of his face in the mirror, with the stringy

beard he'd started to grow when he'd found that no one outside translunar space shaved, and realized he just looked funny. He took a breath to be sure he kept the irritation out of his voice and said, "No. It's just a matter of plugging in a new black box, and I know you have other things to do."

"Okay. You need help, just holler."

"Sure. Thanks." Jeff tongued the button off and said to the dead microphone, "You don't have to baby me."

Then he looked over the front of his suit: the replacement box for the broken icecube maker, test socket and adaptor, flashlight, screwdrivers, emergency oxygen tank. He'd be damned if he'd take a chance on leaving something behind and asking Rogers to bring it out. He planned on being an asset to Titan Pilot Project, not a liability.

Jeff punched the cycle button and felt his pressure suit become full as the airlock was evacuated. Anyway, he thought, I might be fresh out of engineering school, first time past the orbit of Luna, and earthgrown, but anyone short of a Self-Fulfillment Class dropout could handle this job. No matter what the Shift Supervisor thinks.

The outer door opened and Jeff stepped onto the orange-yellow surface of Titan. He felt the cold—not with his skin, but with his eyes: the dim light of the sun casting unnaturally sharp shadows, the fanciful shapes of melted and refrozen ice, orange-yellow snow drifted by the thin methane wind. Jeff looked closer. It wasn't snow, but chips of eroded ice.

Irritation fell away. This was his dream. Space-living man was self-sufficient in metals, oxygen, and silicon, but short of carbon, nitrogen, and hydrogen—especially hydrogen to be thrown away in his inefficient fusion drives. Titan had all three, carbon in the atmosphere as methane, nitrogen frozen in the ground as ammonia, hydrogen in everything. If Titan Pilot Project proved the feasibility of using these resources, dependence on earth for organic chemicals would end. Jeffrey Castilho was proud to be part of the Project, even if it only meant fixing broken icecube makers.

He found the broken machine a few hundred meters from the lifedome. It was an irregular, dull-silver box, the size of the front half of a railroad boxcar. It had cut a geometrically perfect trench, just wide enough for its caterpillar treads, and one-and-a-half meters deep. A double row of transparent water-ice cubes, as tall as Jeff, lay in the trench behind it.

Jeff carefully pushed in the safeties at the snout end of the machine, making sure the lasers wouldn't cut back in when he replaced the bad circuit. The lasers, radiating at a wavelength in the infrared strongly absorbed by water but not by methane, were supposed to melt the orange-yellow ice just ahead of the snout. The machine would then suck in the water, separate the dissolved ammonia and organic contaminants, let a cube start to freeze and drop it out the back. The cubes were shells of ice twenty or thirty centimeters thick filled with liquid water, but quickly froze solid. Plastic balloons of frozen ammonia were dropped off to one side.

But a monitor circuit in the laser control box had gone bad ten minutes before. The icecube maker's brain had turned the lasers off, signaled the main computer, and waited. The job had gone on the job board and Jeff had grabbed it.

Jeff moved to the snout end, shuffling in the low gravity. The lasers were mounted in blisters, connected by a thick wedge that formed an overhang over a pit where the melted water lay. He used his flashlight to find the access hatch, on the lower surface of the wedge.

There was a thin layer of ice covering about fifteen centimeters of liquid in the pit. The ice broke when Jeff dropped into the pit and crawled between the blisters, but he ignored it. His boots were well insulated.

Replacing the module should have been simple enough, but crouched down under the snout, in a pressure suit, trying to work in the crowded circuit compartment by the light of a flash velcroed to one leg, it took a frustratingly long time. Finally Jeff got the black box out and wired into the test socket. Then he plugged the socket into his suit radio and let it talk to the main computer in high-pitched whistles that changed almost too fast to hear. It sounded like a cage full of birds speeded up by a factor of ten. The computer replied vocally:

"Test: module micro 1777496 dash LOC5028: module defective: failure parameters follow. . . ."

Well, he had the right one. Jeff noticed that his helmet was fogging up. The icecube maker's internal heaters were still going, and he was getting vapor—probably ammonia—condensing and freezing on the faceplate. He turned up the faceplate defogger and went back to work, plugging in the new module and checking its operation. Then he hung the old module on his belt, fastened the access hatch shut again, and started to shuffle out from under the snout.

Except his feet wouldn't come.

He swore peevishly and jerked his left foot. The foot shifted inside the boot but the boot didn't move. Jeff twisted to see past his spacesuited legs and swore again.

He had little experience in swearing, but he gave it his best shot. The water in the pit that had been fifteen centimeters deep was now only half that, and there was a thick cylinder of ice around his boots all the way to the ankles.

For a second Jeff felt as cold as if he'd been naked in the methane wind. In the next second his tongue went automatically to the transmit button, but he took it back.

"Wait a minute. I must look like an *idiot*." If he called for help, would Rogers volunteer to come get him? What would the rescue party say when they saw him, crouched between the laser blisters, face in the corner, ankle-deep in dirty ice? "He expected me to screw up. Son-of-a—"

Jeff took three deep breaths. Then he tried chipping with a screwdriver, but the orange-yellow stuff was incredibly tough. He suspected new ice was freezing as fast as he chipped it off. "Couldn't wait for all the water to freeze? Had to jump right in and go wading, eh? Gahhh." Jeff stuck the screwdriver back on his belt. "It might be even stupider not to call for help. Still . . ."

He took his flashlight apart and shorted a wire from the test socket across the battery terminals. The wire glowed a cheery red in the dimness and was almost white-hot when Jeff applied it to the collar of ice around his right ankle. As far as he could tell, it sank right in, losing its glow, but the water seemed to freeze behind it as fast as it melted. Then the wire came loose from one terminal, sparking briefly, and was stuck fast in the ice.

"Great. I should have brought a blowtorch with me." Jeff crouched in the darkness for a while, still not willing to use his radio. And then he started to straighten up with a jerk, thumping his helmet on the overhang, and looked down at his emergency oxygen tank in a wild surmise.

§ § §

The inner airlock door cycled open. With the green emergency tank dangling from his left hand, Jeffrey Castilho stepped into the cloakroom. While he was racking the pressure suit, Rogers stopped in.

"Took you a long time to finish that job, Castilho. No trouble, was there?"

Rogers's face was hard to read behind his thick black beard. Jeff

made a vague motion with one hand. "Well, uh—"

Rogers saw the empty emergency tank. "What's that empty for?"

"Well—" Jeff bit the bullet. "I emptied it. I, uh, used it to build a fire."

"A fire."

Jeff's thumb indicated the outside. "People on earth used to burn methane all the time. So I burned some because my feet were stuck in the ice."

"Ah ha. So. You were stupid enough to get stuck." Jeff winced. "But smart enough to get loose." Rogers looked at Jeff for a moment. "I guess we'll settle for that.

"Now, we've been having some trouble with the methane compressors. . . ."

A SOLUTION TO MACHISMO ON BYRONIA
(from page 48)

The Supreme Ruler's plan will not work.

Consider all first-born children. One-third will be male, one-third female, one-third bisexual. Mothers who give birth to bisexuals will be sterilized.

The remaining mothers may have second children. One-third of the second-born will be male, one-third female, one-third bisexual. Again, mothers of the bisexuals will be made sterile.

The remaining mothers may have third children, and so on. This obviously generalizes to families of any size. The proportions of sexes will always be 1:1:1.

Assume that the decree lasts a thousand years and that all mothers live long enough, and are healthy enough, to keep bearing children until they have a bisexual. What will be the average number of children born to a Byronian mother during the millenial period? See page 71 for this answer.

THE MISSING ITEM

by Isaac Asimov

Dr. Asimov's tales of the Black Widowers usually appear in Ellery Queen's Mystery Magazine; *it's a pleasure to borrow the Black Widowers for this issue of* IA'sf. *The real-life model for this little group includes among its membership L. Sprague de Camp and Martin Gardner, who appear elsewhere in this issue, Don Bensen, who illustrated this episode, your Editor, and of course Dr. Asimov himself. The real group—alas!—has no counterpart to the waiter, Henry, who is wholly fictional.*

Emmanuel Rubin, resident polymath of the Black Widowers Society, was visibly chafed. His eyebrows hunched down into the upper portion of his thick-lensed spectacles and his sparse gray beard bristled.

"Not true to life," he said. "Imagine! Not true to life!"

Mario Gonzalo, who had just reached the head of the stairs and had accepted his dry martini from Henry, the unsurpassable waiter, said, "What's not true to life?"

Geoffrey Avalon looked down from his seventy-four inches and said solemnly, "It appears that Manny has suffered a rejection."

"Well, why not?" said Gonzalo, peeling off his gloves. "Editors don't have to be stupid all the time."

"It isn't the rejection," said Rubin. "I've been rejected before by better editors and in connection with better stories. It's the reason he advanced! How the hell would he know if a story were true to life or not? What's he ever done but warm an office chair? Would he—"

Roger Halsted, whose career as a math teacher in a junior high school had taught him how to interrupt shrill voices, managed to interpose. "Just what did he find not true to life, Manny?"

Rubin waved a hand passionately outward, "I don't want to talk about it."

"Good," said Thomas Trumbull, scowling from under his neatly-waved thatch of white hair. "Then the rest of us can hear each other for a while. —Roger, why don't you introduce your guest to the late Mr. Gonzalo?"

Halsted said, "I've just been waiting for the decibel-level to decrease. Mario, my friend Jonathan Thatcher. This is Mario Gon-

zalo, who is an artist by profession. Jonathan is an oboist, Mario."

Gonzalo grinned and said, "Sounds like fun."

"Sometimes it almost is," said Thatcher, "on days when the reed behaves itself."

Thatcher's round face and plump cheeks would have made him a natural to play Santa Claus at any Christmas benefit, but he would have needed padding just the same, for his body had that peculiar ersatz slimness that seemed to indicate forty pounds recently lost. His eyebrows were dark and thick and one took it for granted that they were never drawn together in anger.

Henry said, "Gentlemen, dinner is ready."

James Drake stubbed out his cigarette and said, "Thanks, Henry. It's a cold day and I would welcome hot food."

"Yes, sir," said Henry with a gentle smile. "Lobster thermidor today, baked potatoes, stuffed eggplant—"

"But what's this, Henry?" demanded Rubin, scowling.

"Hot borscht, Mr. Rubin."

Rubin looked as though he were searching his soul and then he said, grudgingly, "All right."

Drake, unfolding his napkin, said, "Point of order, Roger."

"What is it?"

"I'm sitting next to Manny, and if he continues to look like that he'll curdle my soup and give me indigestion. You're host and absolute monarch; I move you direct him to tell us what he wrote that isn't true to life and get it out of his system."

"Why?" said Trumbull. "Why not let him sulk and be silent for the novelty of it?"

"I'm curious, too," said Gonzalo, "since nothing he's ever written has been true to life—"

"How would you know, since you can't read?" said Rubin, suddenly.

"It's generally known," said Gonzalo. "You hear it everywhere."

"Oh, God, I'd better tell you and end this miasma of pseudo-wit. —Look, I've written a novelette, about 15,000 words long, about a world-wide organization of locksmiths—"

"Locksmiths?" said Avalon, frowning as though he suspected he had not heard correctly.

"Locksmiths," said Rubin. "These guys are experts, they can open anything—safes, vaults, prison doors. There are no secrets from them and nothing can be hidden from them. My global organization is of the cream of the profession and no man can join the organization without some document or object of importance

stolen from an industrial, political, or governmental unit.

"Naturally, they have the throat of the world in their grip. They can control the stock market, guide diplomacy, make and unmake governments, and—at the time my story opens—they are headed by a dangerous megalomaniac—"

Drake interrupted even as he winced in his effort to crack the claw of the lobster. "Who is out to rule the world, of course."

"Of course," said Rubin, "and our hero must stop him. He is himself a skilled locksmith—"

Trumbull interrupted. "In the first place, Manny, what the hell do you know about locksmithery or locksmithmanship or whatever you call it?"

"More than you think," retorted Rubin.

"I doubt that very much," said Trumbull, "and the editor is right. This is utter and complete implausibility. I know a few locksmiths and they're gentle and inoffensive mechanics with IQ's—"

Rubin said, "And I suppose when you were in the army you knew a few corporals and, on the basis of your knowledge, you'll tell me that Napoleon and Hitler were implausible."

The guest for that evening, who had listened to the exchange with a darkening expression, spoke up. "Pardon me, gentlemen, I know I'm to be grilled at the conclusion of dinner. Does that mean I cannot join the dinner conversation beforehand?"

"Heavens, no," said Halsted. "Talk all you want—if you can get a word in now and then."

"In that case, let me put myself forcefully on the side of Mr. Rubin. A conspiracy of locksmiths may sound implausible to us who sit here, but what counts is not what a few rational people think but what the great outside world does. How can your editor turn down anything at all as implausible when everything—" He caught himself, took a deep breath and said, in an altered tone, "Well, I don't mean to tell you your business. I'm not a writer. After all, I don't expect you to tell me how to play the oboe," but his smile as he said it was a weak one.

"Manny will tell you how to play the oboe," said Gonzalo, "if you give him a chance."

"Still," Thatcher said, as though he had not heard Gonzalo's comment, "I live in the world and observe it. *Anything* these days is believed. There is no such thing as 'not true to life'. Just spout any nonsense solemnly and swear it's true and there will be millions rallying round you."

Avalon nodded magisterially and said, "Quite right, Mr. Thatcher. I don't know that this is simply characteristic of our times, but the fact that we have better communications now makes it easier to reach many people quickly so that a phenomenon such as Herr Hitler of unmourned memory is possible. And to those who can believe in Mr. von Däniken's ancient astronauts and in Mr. Berlitz's Bermuda triangle, a little thing like a conspiracy of locksmiths could be swallowed with the morning porridge."

Thatcher waved his hand, "Ancient astronauts and Bermuda triangles are nothing. Suppose you were to say that you frequently visited Mars in astral projection and that Mars was, in fact, a haven for the worthy souls of this world. There would be those who would believe you."

"I imagine so," began Avalon.

"You don't have to imagine," said Thatcher. "It *is* so. I take it you haven't heard of Tri-Lucifer. That's T-R-I."

"Tri-Lucifer?" said Halsted, looking a little dumbfounded. "You mean three Lucifers. What's that?"

Thatcher looked from one face to another and the Black Widowers all remained silent.

And then Henry, who was clearing away some of the lobster shells, said, "If I may be permitted, gentlemen, I have heard of it. There was a group of them soliciting contributions at this restaurant last week."

"Like the Moonies?" said Drake, pushing his dish in Henry's direction and preparing to light up.

"There is a resemblance," said Henry, his unlined, sixtyish face a bit thoughtful, "but the Tri-Luciferians, if that is the term to use, give a more other-worldly appearance."

"That's right," said Thatcher. "They have to divorce themselves from this world so as to achieve astral projection to Mars and facilitate the transfer of their souls there after death."

"But why—" began Gonzalo.

And Trumbull suddenly roared out with a blast of anger, "Come on, Roger, make them wait for the grilling to start. Change the subject."

Gonzalo said, "I just want to know why they call them—"

Halsted sighed and said, "Let's wait a while, Mario."

§ § §

Henry was making his way about the table with the brandy when Halsted tapped his water glass and said, "I think we can

begin the grilling now; and Manny, since it was your remark about true-to-lifeness that roused Jonathan's interest over the main course, why don't you begin."

"Sure." Rubin looked solemnly across the table at Thatcher and said, "Mr. Thatcher, at this point it would be traditional to ask you how you justify your existence and we would then go into a discussion of the oboe as an instrument of torture for oboists. *But,* let me guess and say that at this moment you would consider your life justified if you could wipe out a few Tri-Luciferians. Am I right?"

"You are, you are," said Thatcher, energetically. "The whole thing has filled my life and my thoughts for over a month now. It is ruining—"

Gonzalo interrupted. "What I want to know is why they call themselves Tri-Luciferians. Are they devil-worshipers or what?"

Rubin began, "You're interrupting the man—"

"It's all right," said Thatcher. "I'll tell him. I'm just sorry that I know enough about that organization to be able to tell him. Apparently, Lucifer means the morning star, though I'm not sure why—"

"Lucifer," said Avalon, running his finger about the lip of his water-glass, "is from Latin words meaning 'light-bringer'. The rising of the morning star in the dawn heralds the soon-following rising of the Sun. In an era in which there were no clocks that was an important piece of information to anyone awake at the time."

"Then why is Lucifer the name of the devil?" asked Gonzalo.

Avalon said, "Because the Babylonian king was apparently referred to as the Morning Star by his flattering courtiers, and the Prophet Isaiah predicted his destruction. Can you quote the passage, Manny?"

Rubin said, "We can read it out of the Bible, if we want to. It's the 14th Chapter of Isaiah. The key sentence goes, 'How art thou fallen from heaven, O Lucifer, son of the morning!' It was just a bit of poetic hyperbole, and very effective too, but it was interpreted literally later, and that one sentence gave rise to the whole myth of a rebellion against God by hordes of angels under the leadership of Lucifer, which came to be considered Satan's name while still in heaven. Of course, the rebels were defeated and expelled from heaven by loyalist angels under the leadership of the Archangel Michael."

"Like in *Paradise Lost*?" said Gonzalo.

"Exactly like in *Paradise Lost*."

Thatcher said, "The devil isn't part of it, though. To the Tri-Luciferians, Lucifer just means the morning star. There are two of them on Earth: Venus and Mercury."

Drake squinted through the curling tobacco smoke and said, "They're also evening stars, depending on which side of the Sun they happen to be. They're either east of the Sun and set shortly after Sunset, or west of the Sun and rise shortly before Sunrise."

Thatcher said, with clear evidence of hope, "Do they have to be both together; both one or both the other?"

"No," said Drake, "they move independently. They can be both evening stars, or both morning stars, or one can be an evening star and one a morning star. Or one or the other or both can be nearly in a line with the Sun and be invisible altogether, morning or evening."

"Too bad," said Thatcher, shaking his head, "that's what *they* say. —Anyway, the point is that from Mars you see *three* morning stars in the sky, or you can see them if they're in the right position: not only Mercury and Venus, but Earth as well."

"That's right," said Rubin.

"And," said Thatcher, "I suppose then it's true that they can be in any position. They can all be evening stars or all morning stars, or two can be one and one can be the other?"

"Yes," said Drake, "Or one or more can be too close to the Sun to be visible."

Thatcher sighed. "So they call Mars by their mystic name of Tri-Lucifer—the world with the three morning stars."

"I suppose," said Gonzalo, "that Jupiter would have four morning stars: Mercury, Venus, Earth, and Mars; and so on out to Pluto, which would have eight morning stars."

"The trouble is," said Halsted, "that the farther out you go, the dimmer the inner planets are. Viewed from one of the satellites of Jupiter, for instance, I doubt that Mercury would appear more than a medium-bright star; and it might be too close to the Sun for anyone ever to get a good look at it."

"What about the view from Mars? Could you see Mercury?" asked Thatcher.

"Oh yes, I'm sure of that," said Halsted, "I could work out what the brightness would be in a matter of minutes."

"Would you?" said Thatcher.

"Sure," said Halsted, "if I've remembered to bring my pocket computer. —Yes, I have it. Henry, bring me the *Columbia Ency-*

clopedia, would you?"

Rubin said, "While Roger is bending his limited mathematical mind to the problem, Mr. Thatcher, tell us what your interest is in all this. You seem to be interested in exposing them as fakers. Why? Have you been a member? Are you now disillusioned?"

"No, I've never been a member. I—" He rubbed his temple hesitantly. "It's my wife. I don't like talking about it, you understand."

Avalon said solemnly, "Please be assured, Mr. Thatcher, that whatever is said here never passes beyond the bounds of this room. That includes our valued waiter, Henry. You may speak freely."

"Well, there's nothing criminal or disgraceful in it. I just don't like to seem to be so helpless in such a silly— It's breaking up my marriage, gentlemen."

There was a discreet silence around the table, broken only by the mild sound of Halsted turning the pages of the encyclopedia.

Thatcher went on, "Roger knows my wife. He'll tell you she's a sensible woman—"

Halsted looked up briefly and nodded, "I'll vouch for that, but I didn't know you were having this—"

"Lately, Carol has not been social, you understand; and I certainly haven't talked about it. It was with great difficulty, you know, that I managed to agree to come out tonight. I dread leaving her to herself. You see, even sensible people have their weaknesses. Carol worries about death."

"So do we all," said Drake.

"So do I," said Thatcher, "But in a normal way, I hope. We all know we'll die someday and we don't particularly look forward to it, and we may worry about hell or nothingness or hope for heaven, but we don't think about it much. Carol has been fascinated, however, by the possibility of demonstrating the actual existence of life after death. It may have all started with the Bridey Murphy case when she was a teenager—I don't know if any of you remember that—"

"I do," said Rubin, "a woman under hypnosis seemed to be possessed by an Irishwoman who had died a long time before."

"Yes," said Thatcher. "She saw through that, eventually. Then she grew interested in spiritualism and gave that up. I always relied on her to understand folly when she finally stopped to think about it—and then she came up against the Tri-Luciferians. I never saw her like this. She wants to join them. She has money of

her own and she wants to give it to them. I don't care about the money—well, I do, but that's not the main thing—I care about *her*. You know, she's going to join them in their retreat somewhere, become a daughter of Tri-Lucifer, or whatever they call it, and wait for translation to the Abode of the Blessed. One of these days, she'll be gone. I just won't see her anymore. She promised me it wouldn't be tonight, but I wonder."

Rubin said, "I take it you suppose that the organization is just interested in her money."

"At least the leader of it is," said Thatcher, grimly. "I'm sure of it. What else can he be after?"

"Do you know him? Have you met him?" said Rubin.

"No. He keeps himself isolated," said Thatcher, "but I hear he has recently bought a fancy mansion in Florida, and I doubt that it's for the use of the membership."

"Funny thing about that," said Drake. "It doesn't matter how lavishly a cult-leader lives, how extravagantly he throws money around. The followers, who support him and see their money clearly used for that purpose, never seem to mind."

"They identify," said Rubin. "The more he spends, the more successful they consider the cause. It's the basis of ostentatious waste in governmental display, too."

"Just the same," said Thatcher, "I don't think Carol will ever commit herself entirely. She might not be bothered by the leader's actions, but if I can prove him *wrong*, she'll drop it."

"Wrong about what?" asked Rubin.

"Wrong about Mars. This head of the group claims he has been on Mars often—in astral projection, of course. He describes Mars in detail, but can he be describing it accurately?"

"Why not?" asked Rubin. "If he reads up on what is known about Mars, he can describe it as astronomers would. The Viking photographs even show a part of the surface in detail. It's not difficult to be accurate."

"Yes, but it may be that somewhere he has made a mistake, something I can show Carol."

Halsted looked up and said, "Here, I've worked out the dozen brightest objects in the Martian sky, together with their magnitudes. I may be off a little here and there, but not by much." He passed a slip of paper around.

Mario held up the paper when it reached him. "Would you like to see it, Henry?"

"Thank you, sir," murmured Henry, and as he glanced at it

briefly, one eyebrow raised itself just slightly, just briefly.

The paper came to rest before Thatcher eventually and he gazed at it earnestly. What he saw was this:

Sun	–26.
Phobos	–9.6
Deimos	–5.1
Earth	–4.5
Jupiter	–3.1
Venus	–2.6
Sirius	–1.4
Saturn	–0.8
Canopus	–0.7
Alpha Centauri	–0.3
Arcturus	–0.1
Mercury	0.0

Thatcher said, "Phobos and Deimos are the two satellites of Mars. Do these numbers mean they're very bright?"

"The greater the negative number," said Halsted, "the brighter the object. A –2 object is two and a half times brighter than a –1 object and a –3 object is two and a half times brighter still and so on. Next to the Sun, Phobos is the brightest object in the Martian sky, and Deimos is next."

"And next to the Sun and the two satellites, Earth is the brightest object in the sky, then."

"Yes, but only at or near its maximum brightness," said Halsted. "It can be much dimmer depending on where Mars and Earth are in their respective orbits. Most of the time it's probably less bright than Jupiter, which doesn't change much in brightness as it moves in its orbit."

Thatcher shook his head and looked disappointed, "But it *can* be that bright. Too bad. There's a special prayer or psalm or something that the Tri-Luciferians have that appears in almost all their literature. I've seen it so often in the stuff Carol brings home, I can quote it exactly. It goes, 'When Earth shines high in the sky, like a glorious jewel, and when the other Lucifers have fled beyond the horizon, so that Earth shines alone in splendor, single in beauty, unmatched in brightness, it is then that the souls of those ready to receive the call must prepare to rise from Earth and cross the gulf.' And what you're saying, Roger, is that Earth *can* be the brightest object in the Martian sky."

Halsted noded. "At night, if Phobos and Deimos are below the horizon, and Earth is near maximum brightness, it is certainly the brightest object in the sky. It would be three and a half times as bright as Jupiter, if that were in the sky, and six times as bright as Venus at its brightest."

"And it could be the only morning star in the sky."

"Or the only evening star. Sure. The other two, Venus and Mercury, could be on the other side of the Sun from Earth."

Thatcher kept staring at the list. "But would Mercury be visible? It's at the bottom of the list."

Halsted said, "The bottom just means that it's twelfth brightest, but there are thousands of stars that are dimmer and still visible. There would be only four stars brighter than Mercury as seen from Mars: Sirius, Canopus, Alpha Centauri, and Arcturus."

Thatcher said, "If they'd only make a mistake."

Avalon said in a grave and somewhat hesitant baritone, "Mr. Thatcher, I think perhaps you had better face the facts. It is my experience that even if you *do* find a flaw in the thesis of the Tri-Luciferians it won't help you. Those who follow cults for emotional reasons are not deterred by demonstrations of the illogic of what they are doing."

Thatcher said, "I agree with you, and I wouldn't dream of arguing with the ordinary cultist. But I know Carol. I have seen her turn away from a system of beliefs she would very much like to have followed, simply because she saw the illogic of it. If I could find something of the sort here, I'm sure she'd come back."

Gonzalo said, "Some of us here ought to think of something. After all, he's never *really* been on Mars. He's got to have made a mistake."

"Not at all," said Avalon. "He probably knows as much about Mars as we do. Therefore, even if he's made a mistake it may be because he fails to understand something we also fail to understand and we won't catch him."

Thatcher nodded his head. "I suppose you're right."

"I don't know," said Gonzalo. "How about the canals? The Tri-Luciferians are bound to talk about the canals. Everyone believed in them and then just lately we found out they weren't there; isn't that right? So if he talks about them, he's caught."

Drake said, "Not everybody believed in them, Mario. Hardly any astronomers did."

"The general public did," said Gonzalo.

Rubin said, "Not lately. It was in 1964 that Mariner 4 took the

first pictures of Mars and that pretty much gave away the fact the canals didn't exist. Once Mariner 9 mapped the whole planet in 1969 there was no further argument. When did the Tri-Luciferians come into existence, Mr. Thatcher?"

"As I recall," said Thatcher, "about 1970. Maybe 1971."

"There you are," said Rubin. "Once we had Mars down cold, this guy, whoever he is who runs it, decided to start a new religion based on it. Listen, if you want to get rich quick, no questions asked, start a new religion. Between the First Amendment and the tax breaks you get, it amounts to a license to help yourself to everything in sight. —I'll bet he talks about volcanoes."

Thatcher nodded. "The Martian headquarters of the astral projections are in Olympus Mons. That means Mount Olympus and that's where the souls of the righteous gather. That's the big volcano, isn't it?"

"The biggest in the Solar system," said Rubin. "At least, that we know of. It's been known since 1969."

Thatcher said, "The Tri-Luciferians say that G. V. Schiaparelli—he's the one who named the different places on Mars—was astrally inspired to name that spot Olympus to signify it was the home of the godly. In ancient Greece, you see, Mount Olympus was—"

"Yes," said Avalon, nodding gravely, "we know."

"Isn't Schiaparelli the fellow who first reported the canals?" asked Gonzalo.

"Yes," said Halsted, "although actually when he said *'canali'* he meant natural waterways."

"Even so, why didn't the same astral inspiration tell him the canals weren't there?" asked Gonzalo.

Drake nodded and said, "That's something you can point out to your wife."

"No," said Thatcher, "I guess they thought of that. They say the canals were part of the inspiration because that increased interest in Mars and that that was needed to make the astral projection process more effective."

Trumbull, who had maintained a sullen silence through the discussion, as though he were waiting his chance to shift the discussion to oboes, said suddenly, "That makes a diseased kind of sense."

Thatcher said, "Too much makes sense. That's the trouble. There are times when I want to find a mistake not so much to save Carol as to save myself. I tell you that when I listen to Carol

talking there's sometimes more danger she'll argue me into being crazy than that I'll persuade her to be rational."

Trumbull waved a hand at him soothingly, "Just take it easy and let's think it out. Do they say anything about the satellites?"

"They talk about them, yes. Phobos and Deimos. Sure."

"Do they say anything about how they cross the sky?" Trumbull's smile was nearly a smirk.

"Yes," said Thatcher, "and I looked it up because I didn't believe them and I thought I had something. In their description of the Martian scene, they talk about Phobos rising in the west and setting in the east. And it turns out that's true. And they say that whenever either Phobos or Deimos cross the sky at night, they are eclipsed by Mars's shadow for part of the time. And that's true, too."

Halsted shrugged. "The satellites were discovered a century ago, in 1877, by Asaph Hall. As soon as their distance from Mars and their period of revolution was determined, which was almost at once, their behavior in Mars's sky was known."

"*I* didn't know it," said Thatcher.

"No," said Halsted, "but this fellow who started the religion apparently did his homework. It wasn't really hard."

"Hold on," said Trumbull, truculently. "Some things aren't as obvious and don't get put into the average elementary astronomy textbook. For instance, I read somewhere that Phobos can't be seen from the Martian polar regions. It's so close to Mars that the bulge of Mars's spherical surface hides the satellite, if you go far enough north or south. Do the Tri-Luciferians say anything about Phobos being invisible from certain places on Mars, Thatcher?"

"Not that I recall," said Thatcher, "but they don't say it's always visible. If they just don't mention the matter, what does that prove?"

"Besides," said Halsted, "Olympus Mons is less than 20 degrees north of the Martian equator and Phobos is certainly visible from there any time it is above the horizon and not in eclipse. And if that's the headquarters for the souls from Earth, Mars would certainly be described as viewed from that place."

"Whose side are you on?" grumbled Trumbull.

"The truth's," said Halsted. "Still, it's true that astronomy books rarely describe any sky but Earth's. That's why I had to figure out the brightness of objects in the Martian sky instead of just looking it up. The only trouble is that this cult-leader seems to be just as good at figuring."

"I've got an idea," said Avalon. "I'm not much of an astronomer, but I've seen the photographs taken by the Viking landers, and I've read the newspaper reports about them. For one thing the Martian sky in the daytime is pink, because of fine particles of the reddish dust in the air. In that case, isn't it possible that the dust obscures the night sky so that you don't see anything? Good Lord, it happens often enough in New York City."

Halsted said, "As a matter of fact, the problem in New York isn't so much the dust as the scattered light from the buildings and highways; and even in New York you can see the bright stars, if the sky isn't cloudy.

"On Mars, it would have to work both ways. If there is enough dust to make the sky invisible from the ground, then the ground would be invisible from the sky. For instance, when Mariner 9 reached Mars in 1969, Mars was having a globe-wide duststorm and none of its surface could be seen by Mariner. At that time, from the Martian surface, the sky would have had to be blanked out. Most of the time, though, we see the surface clearly from our probes, so from the Martian surface, the sky would be clearly visible.

"In fact, considering that Mars's atmosphere is much thinner than Earth's—less than a hundredth as thick—it would scatter and absorb far less light than Earth's does, and the various stars and planets would all look a little brighter than they would with Earth's atmosphere in the way. I didn't allow for that in my table."

Trumbull said, "Jeff mentioned the Viking photographs. They show rocks all over the place. Do the Tri-Luciferians mention rocks?"

"No," said Thatcher, "not that I ever noticed. But again, they don't say there aren't any. They talk about huge canyons and dry river beds and terraced ice-fields."

Rubin snorted. "All that's been known since 1969. More homework."

Avalon said, "What about life? We still don't know if there's any life on Mars. The Viking results are ambiguous. Have the Tri-Luciferians committed themselves on that?"

"Thatcher thought, then said, "I wish I could say I had read all their literature thoroughly, but I haven't. Still, Carol has forced me to read quite a bit since she said I ought not defame anything without learning about it first."

"That's true enough," said Avalon, "though life is short and

there are some things that are so unlikely on the surface that one hesitates to devote much of one's time to a study of them. However, can you say anything as to the Tri-Luciferians' attitude toward Martian life from what you've read of their literature?"

Thatcher said, "They speak about Mars's barren surface, its desert aridity and emptiness. They contrast that with the excitement and fullness of the astral sphere."

"Yes," said Avalon, "and of course, the surface *is* dry and empty and barren. We know that much. What about microscopic life? That's what we're looking for."

Thatcher shook his head. "No mention of it, as far as I know."

Avalon said, "Well, then, I can't think of anything else. I'm quite certain this whole thing is nonsense. Everyone here is, and none of us need proof of it. If your wife needs proof, we may not be able to supply it."

"I understand," said Thatcher. "I thank you all, of course, and I suppose she may come to her senses after a while, but I must admit I have never seen her quite like this. I would join the cult with her just to keep her in sight; but, frankly, I'm afraid I'll end up believing it, too."

And in the silence that followed, Henry said softly, "Perhaps Mr. Thatcher, you need not go to that extreme."

Thatcher turned suddenly. "Pardon me. Did you say something, waiter?"

Halsted said, "Henry is a member of the club, Jonathan. I don't know that he's an astronomer exactly, but he's the brightest person here. Is there something we've missed, Henry?"

Henry said, "I think so, sir. You said, Mr. Halsted, that astronomy books don't generally describe any sky but Earth's, and I guess that must be why the cult-leader seems to have a missing item in his description of Mars. Without it, the whole thing is no more true to life than Mr. Rubin's conspiracy of locksmiths—if I may be forgiven, Mr. Rubin."

"Not if you don't supply a missing object. Henry?"

Henry said, "On Earth, Mercury and Venus are the morning and evening stars, and we always think of such objects as planets, therefore. Consequently, from Mars, there must be three morning and evening stars, Mercury, Venus, plus Earth in addition. That is memorialized in the very name of the cult, and from that alone I could see the whole thing fails."

Halsted said, "I'm not sure I see your point, Henry."

"But, Mr. Halsted," said Henry, "where is the Moon in all this?

It is a large object, our Moon, almost the size of Mercury and closer to Mars than Mercury is. If Mercury can be seen from Mars, surely the Moon can be, too. Yet I noticed it was not on your list of bright objects in the Martian sky."

Halsted turned red. "Yes, of course. The list of planets fooled me, too. You just list them without mentioning the Moon." He reached for the paper. "The Moon is smaller than Earth and less reflective, so that it is only 1/70 as bright as the Earth, at equal distance and phase which means—a magnitude of 0.0. It would be just as bright as Mercury, and in fact it could be seen more easily than Mercury could be because it would be higher in the sky. At sunset, Mercury as evening star would never be higher than 16 degrees above the horizon, while Earth could be as much as 44 degrees above—pretty high in the sky."

Henry said, "Mars, therefore, would have four morning stars, and the very name, Tri-Lucifer, is nonsense."

Avalon said, "But the Moon would always be close to Earth, so wouldn't Earth's light drown it out?"

"No," said Halsted. "Let's see now. —Never get a pocket computer that doesn't have keys for the trigonometric functions.— The Moon would be, at times, as much as 23 minutes of arc away from Earth, when viewed from Mars. That's three-quarters the width of the Moon as seen from Earth."

Henry said, "One more thing. Would you repeat that verse once again, Mr. Thatcher, the one about the Earth being high in the sky."

Thatcher said, "Certainly. 'When Earth shines high in the sky, like a glorious jewel, and when the other Lucifers have fled beyond the horizon, so that Earth shines alone in splendor, single in beauty, unmatched in brightness, it is then that the souls of those ready to receive the call must prepare to rise from Earth and cross the gulf.' "

Henry said, "Earth may be quite high in the sky at times, and Mercury and Venus may be on the other side of the Sun and therefore beyond the horizon—but Earth cannot be 'alone in splendor'. The moon has to be with it. Of course, there would be times when the moon is very nearly in front of Earth or behind it, as seen from Mars, so that the two dots of light merge into one that seems to make Earth brighter than ever, but the Moon is not then beyond the horizon. It seems to me, Mr. Thatcher, that the cult-leader was never on Mars, because if he had been he would not have missed a pretty big item, a world 2160 miles across. Surely

you can explain this to your wife."

"Yes," said Thatcher, his face brightening into a smile, "She would have to see the whole thing is fake."

"If it is true, as you say," said Henry quietly, "that she is a rational person."

THE BLACK WIDOWERS

With arguments loud and emphatic
And logic that's sometimes erratic,
Each member deduces
Till Henry produces
An answer one *must* call Lunatic.

—**Don R. Bensen**

A SECOND SOLUTION TO MACHISMO ON BYRONIA

(from page 53)

Let n be the number of mothers during the thousand-year-period.

$n \times 1 = n$ children will be first-born,

$n \times \frac{2}{3} = 2n/3$ children will be second-born,

$n \times \frac{2}{3} \times \frac{2}{3} = 4n/9$ children will be third-born,

$n \times \frac{2}{3} \times \frac{2}{3} \times \frac{2}{3} = 8n/27$ children will be fourth-born, and so on.

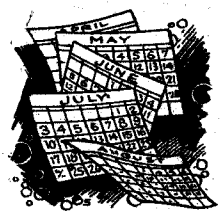
The total number of children will be:

$$n + 2n/3 + 4n/9 + 8n/27 + \ldots$$

The limit of this sum is $3n$. There are n mothers, therefore the average number of children per mother is $3n/n = 3$.

There is no need, however, to get involved with an infinite sequence that converges. Can you think of a simple solution that avoids algebra altogether? See page 76 for the answer.

BACKSPACE
by F. M. Busby



Mr. Busby is graying, bearded, and cheerfully bouncy. Like Jack Haldeman and your editor, he once had a major part in putting on a World Science Fiction Convention (Seattle in 1961: the SeaCon), but seems to be recovering nicely by now. An electrical engineer by training, he spent many years with the Alaska Communications System before turning to full-time writing.

The beard and overflowing hair would have fooled me—but who else comes visiting, late on a Monday afternoon, with a six-pack of canned Martinis? So I opened the door.

He lifted a finger to the probable location of his lips. "An important datum, friend Peter—I do not exist."

I shook hands and thought about it. Sam's only flaky until you figure out what he means; then the term becomes understatement.

I closed the door behind him and said, "Then who does?" Realizing I'd asked a poor question, I rephrased it. "I mean, who just came in here, wearing your skin?"

He nodded. "A debatable point. Let us repair to your kitchen and debate it." He led the way, opened the refrigerator and exchanged his six-pack for two beers, one of which he handed to me. "For now, Petrus Sapiens, think of me as an astral body—a refugee from the material world."

He sat, and I across the table. "For a while there," I said, "I was beginning to think you *didn't* exist. After you cleared up our smog problem here—and I haven't had a chance to thank you—"

He waved a hand. "*De nada*—a simple matter of editing."

I couldn't agree. Reversing the Earth's rotation, to switch the prevailing winds and blow the city's pollution the other way? Not that I'd realized, immediately, what had happened—but then I noticed that the books say the Sun rises in the East, when obviously the opposite is true . . .

"How did you do it, anyway?"

He shrugged. "How should I know? I don't have the scientific

mind." He fetched a Martini to set beside his beer. As in the old days, he sprinkled a powder into it and stirred until the stuff dissolved. I've never asked him what it is.

From under the low-hanging hair his eyebrows appeared and made a frown. "Something about a macrospin being the resultant of microspins—I read that someplace, and it *sounds* good. So I just spun the electrons in my head the other way, all at once, and the effect spread. You ever do anything like that, Pete?"

"Not on purpose," I said. "But why did you disappear?"

The brows rose to hide again. "Think about it. How did *you* find out what I did?" He nodded. "Lousy editing, is what. I forgot to fix the records, to match. So before the government could put a lid on me, I ran for cover."

"But how would *they* know—?"

He sipped the Martini and grimaced. "You can't get real zouch any more, but this stuff I put in here isn't half bad." I waited; he said, "Well, I edit freelance, you know—and sometimes for the gum'mint, even. You remember the Kairenger scandal?" I shook my head.

"Of course you don't," said Sam. "I edited it out, that's why. And lived three years on the proceeds—my fee." He sighed. "But *they* knew, Peter the Great—they had the handle on me. And to be utterly frank, this minor chore here, for your convenience—it was somewhat in breach of contract."

His next sip of Martini must have been heavy with zouch, whatever that is, for his eyes bulged. He gulped some beer. Still breathing hard, he said, "I am not given, Pieter, to maundering diatribes about ethics; I see myself as a practical man in an impractical world. So the question was rather simple."

"It was?" Thinking: *what* question?

"Of a surety. Whether to edit the government, with its threat to me, out of my life—or me out of its. I chose the latter."

"And so—"

"That's why I no longer exist. *Much* simpler."

I needed another beer. So would he, soon—I brought him one, and said, "Well, then—who *is* here, and why? I mean, I'm always glad to see you, and all that, but—"

He lit a cigar; I provided an ashtray. He said, "Through these eyes, Pedro, many of me look out—and ever have. Didn't you know?"

Well, Sam's mind always did have more independent parts than a jigsaw puzzle. I nodded. "Right now, which one's taking a peek?"

He finished the Martini, opened another, dusted and stirred it. One sip—his mustache rippled; I think he smiled. "Much better, Petrov. Either I have the combination or my taste buds have agreed to fake it." He waved a hand; cigar ash scattered.

"Question of identity," he said. "Who am I, and you also? Oh, I know—you remain yourself, changing only within moderate limits. Monotonous, I'd find it—but whatever flips your switches."

His eyes narrowed, closed, then opened wide. I waited, and he said, "I'm taking a vote. How else?" Then he laughed. "It's a tie between a name I dislike and one I can't pronounce. The hell with it—call me Sam, and hope this place isn't bugged."

§ § §

He'd changed, Sam had—and not only in appearance. The lazy voice was now brisk, yet still the mind dealt in caution. Not until his third Martini would he speak of purpose. Then suddenly he ground his cigar into the tray until both ceased to smolder, and said, "I've found, Pietro, a new way to edit—day by day, cautiously observing, proceeding by trial and thus reducing error."

"As you used to say—chickenly?"

"Indeed—and now, more so than ever. With a modern touch of gadgetry, to aid—" From a pocket he brought out a small, oblong device—black, studded with lights and buttons. After a moment I recognized it as an electronic perpetual calendar—with additions that somehow didn't surprise me.

"What does that thing do?"

He handed it to me. "Look for yourself—but don't touch the grey button. Today, I've already put in good order." I looked but said nothing; I felt my eyebrows heading north.

"Obviously," he said, "my contrivance indicates the date. Or else," and he opened a fresh beer for himself, "it *sets* the date. An interestingly philosophical question, really. Every action has an equal and opposite reaction. Do you know who said that?"

"Sir Isaac Newton?"

"In a limited sense, I suppose." He lit another cigar. "I was thinking of Manfred the Witless, an obscure Varangian chieftain of a century best left alone. The one valid memento of his entire reign."

I shook my head. "How did he get into this? And what's the business you said, about this thing *setting* the date?"

Using the unlit end of his cigar he stirred the Martini, then licked powder specks from the damp stub. "Manfred came to power through his mother's side of the family—necessarily so,

since no one would admit to being his father. And then—" He paused. "Oh, yes—I see what you mean. Well, it's the grey button. No—*don't* touch it."

"The grey button?"

"Yes. It's—well, you might call it a backspace key."

§ § §

I've never caught Sam in an exaggeration. The occasional lie, yes—exaggerations, never. Still, I had to test his claim—and said so.

"Very well, Peter the Skeptical. Let us see—" He looked at his watch. "I arrived here, I believe, at twelve minutes past five. Tomorrow at that time—you will be home?" I nodded. "Then I leave the device here with you. And at that exact point of tomorrow, twelve past five, you push the grey button."

§ § §

Traffic was heavy that Tuesday, but shortly after five I reached home. At the proper moment, I followed Sam's instruction. Then I heard a knock at the door and went to answer it.

The beard and overflowing hair would have fooled me—but who else comes visiting, late on a Monday afternoon, with a six-pack of canned Martinis?

Monday? But it had been . . .

I opened the door anyway.

§ § §

He was into his second Martini before we talked. I wasn't sulking—I simply couldn't think what to say. Finally, "Sam? It could be—it *should* be—that you're just here two days in a row. So how come—how it is that I *know* we've got Monday on reruns?"

For a time he didn't answer. I guessed the line was busy, to his other head you can't see. Then he said, "There's a *Mondayness* to Monday—you sense it, do you, Peter-san? Not to be mistaken. For centuries I could lie in my unforeseeable tomb, and when Gabriel—most likely portrayed by Louis Armstrong—blew his riff, I would rise in all my dank skeletal dignity. And I would wonder—why the hell did he have to rouse me on a *Monday*?" He nodded; his Martini wet his beard.

There are things it doesn't pay to ask Sam—but I was curious. "In that case, O Nonexistent One, why did you feel the need to *repeat* Monday?"

His eyebrows did their vanishing act; behind the mustache curtain I thought I saw a gleam of smile. "It is, Piterluk of the

Analytical Bent, that I am broke. So I have a job, an employment that pays me—no, not in peanuts, even, but rather in the shells of peanuts."

He drained his Martini. "And Monday happens to be my day off."

§ § §

Time passed. My wife Carla returned from visiting her grandmother in Sacramento. We had a great reunion. Sam pushed the button—the grey one. My wife Carla returned from visiting her grandmother in Sacramento. We had a greater reunion.

The president spoke on three TV networks and announced a new sure-fire plan to halt inflation. The next day, a Tuesday, prices rose an average of twenty percent. Sam pushed the grey button. The president spoke on three networks and announced a new sure-fire plan to keep his hands out of the economy. The next day, a Tuesday, prices rose an average of five percent. Sam pushed the grey button . . .

§ § §

All in all, Sam's button works rather well. Any time he starts getting too many changes for the worse, he plays it safe and leaves bad enough alone. He says the reason I notice, while others don't, is that since I've used the gadget once, now I'm tuned to it.

Maybe he's right. But I do wish he'd get himself a new job—or at least a different day off.

I'm getting pretty damned tired of Monday.

A THIRD SOLUTION TO MACHISMO ON BYRONIA

(from page 71)

We learned in the first answer that the proportions of male, female, and bisexual children remain permanently 1:1:1. Because of the decree, every mother has exactly one bisexual child. To preserve the 1:1:1 ratios, the average number of males to a mother must be 1, and the average number of females must also be 1. This makes an average of 3 children per mother.

THE SEVERAL MURDERS OF ROGER ACKROYD

by Barry Malzberg

The Good Doctor wrote to me recently, saying, "At the November writers' party we both attended, I spoke to Barry Malzberg and urged him to send us a story. He said he can't undertake to write stories with humor and clean language and so on. I said, 'I know that, Barry, but if you should happen to write such a story by accident, *why not send it in?' So he sent one to me, saying that he knew he should send it to you, but* I *was the one who asked. So I read it, and I liked it.—Would you therefore look this one over?" Well I did, I liked it too, so—*

Dear Mr. Ackroyd:

Your application for the position of mysterist has been carefully reviewed in these offices.

While there are many impressive aspects to your credentials and while we fully recognize your qualifications for the position of mysterist, I regret to inform you that the very large number of highly qualified applications for the few openings which do exist means that we must disappoint many fine candidates such as yourself.

Rest assured that this decision is not intended as a commentary upon your abilities but only upon the very severe competition encountered during the current application period.

Truly do we wish you success in all future endeavors.

Regretfully,
A. HASTINGS/for the Bank

Dear Mr. Hastings:

I have received your outrageous letter rejecting

me for the position of mysterist. I demand more than a form reply!

If you have truly reviewed my application you know that I have dedicated my life to achieving this position and am completely qualified. I know the major and minor variations of the locked room murder, I know the eighteen disguising substances for strychnine to say nothing of the management of concealed relationships and the question of Inherited Familial Madness. I know of the Misdirected Clue and the peculiar properties of the forsythia root; not unknown to me are the engineering basis and exhilarating qualities of antique vehicles known as "cars". In short I know everything that a mysterist must know in order to qualify for the Bank.

Under these circumstances, I refuse to accept your bland and evasive reply. I have a right to know: why are you turning me down? Once I am admitted to the Bank I am positive that I can find a huge audience which wants something more than the careless and unmotivated trash that your current "mysterists", and I dignify them by use of that name, are propounding. This, then, is to your benefit as well as mine.

Why have I been rejected?

Will you reconsider?

Hopefully,
ROGER ACKROYD

Dear Mr. Ackroyd:

Because we received several thousand applications, many of them highly qualified, for a mere twenty-five vacancies for mysterists in the Interplanetary Program Entertainment Division for the period commencing in Fourthmonth 2312, it was necessary for us to use a form reply. This letter, however, is personally dictated.

I am truly sorry that you are taking rejection so unpleasantly. No insult was intended nor were aspersions cast upon your scholarly command of the mysterist form, which does indeed appear excellent.

Your application was carefully reviewed. In many ways you have talent and promise is shown. But because of extraordinarily heavy competition for the limited number of banks, applications even more qualified than

your own were rejected. As you know, the majority of the Interplanetary Program Entertainment Division channels are devoted to westernists, sexualists, gothickings, and science-fictionists with only a relatively few number of mysterists to accommodate the small audience still sympathetic to that form. At present all twenty-five vacancies have been filled by superb mysterists, and we anticipate few openings in the foreseeable future.

I can, of course, appreciate your dismay. A career to which you have dedicated yourself seems now closed. I remind you, however, that a man of your obvious intelligence and scholarship might do well in some of the other branches offering current vacancies. For instance and for example we have at this time an opening for a science-fictionist specializing in Venerian counterplot and Saturnian struggle.

If you could familiarize yourself with extant materials on the subject and would like to make formal application we would be pleased to forward proper forms. Just refer to this letter.

Sincerely,
A. HASTINGS/for the Bank

Dear Mr. Hastings:

I don't want to be a science-fictionist specializing in Venerian counterplot. We have enough science-fictionists, westernists, sexualists, and gothickings. They are all dead forms. The audience will wise up to that sooner or later and all go away and where will your Interplanetary Program Entertainment Division be then?

What they are seeking is fine new mysterists with new approaches. Such as myself.

I did not prepare myself for years in order to become a hack churning out visuals of the slime jungles. I am a dreamer, one who looks beyond the technological barriers of our civilization and understands the human pain and complication within, complication and pain which can only be understood by the mysterist who knows of the unspeakable human heart.

The Interplanetary Program Entertainment Division was, in fact, originally conceived for people such as myself, the great mysterists who would bring a large audience ever closer to the barriers of human experience. Hundreds of years ago mysterists were responsible for all of your success. (I have read some history.) Only much later did the science-fictionists and the rest move in to make a wonderful entertainment device a dull nuisance predicated upon easy shocks drained of intellection. The audience was corrupted by these people. But now a wind is rising. It is time for the mysterists to return to their original and honored place.

You would insult me by offering me Venerian combat science-fictionist! I tell you, you people have no sense of the dream. You have no heart. I have devoted my life to mastery of the craft: I am a good mysterist on the verge of becoming great.

I demand a supervisor.

Bitterly,
ROGER ACKROYD

Dear Mr. Ackroyd:

I am a Supervisor. All applications must be reviewed by a Supervisor before final disposition. Complaints such as yours reach even higher; I am writing you on advice. I am highly trained and skilled and I know the centuries-long history of the International Division much better than you ever will.

In fact, I find your communication quite offensive.

I fear that we have already reached the logical terminus of our correspondence. There is nothing more to be done. Your application for mysterist -- a position for which there is small audience and little demand -- was carefully reviewed in the light of its relation to many other applications. Although your credentials were praiseworthy they were surpassed by candidates more qualified. You were, therefore, rejected. Mysterist is a small but useful category and we respect its form and your dedication, but the audience today is

quite limited. We are not mindless bureaucrats here, but on the other hand we accept the fact that the Division must give the audience what it wants rather than what we think it should want, and gothica and science-fictionists are what most people like today. We are here to make people happy, to give them what they want. We leave uplift to our very competent Interplanetary Education Division and they leave entertainment to us.

There is a tiny demand for mysterists.

If you do not wish to be a science-fictionist specializing in Venerian counterplot or to apply for other fine positions available as westernist, it must be your decision. We recognize your abilities and problems but you must recognize ours. You can give up and go to work.

A. HASTINGS/for the Bank

Dear Mr. Hastings:

I choose to ignore your offensive communication and give you one last benefit of the doubt. This is your last chance. May I be a mysterist? Do send me the proper authorization.

Reasonably,
ROGER ACKROYD

Dear Roger Ackroyd:

Mr. A. Hastings, Supervisor for the Eastern Application Division, Interplanetary Programming and Entertainment Division, has asked me to respond to your communication.

There are no vacancies for mysterist.

M. MALLOWAN/Over-Supervisor

Dear Hastings and Mallowan:

I gave you every chance.

You were warned.

As I did not see fit to tell you until now (having as well an excellent command of the deus-ex) I have a close friend who is already a mysterist although not as good as myself and who, for certain obscure personal reasons, owes me several favors.

He has given me tapes; I have completed them. I have turned them over to him.

He has done with them the requisite.

I am already on the banks!

My mysteries are already available on the banks and I think that you will find what the reaction is very soon. Then you will realize your folly. Then you will realize that Interplanetary Programming, which I sought initially in the most humble manner and which could have had me in their employ on the easiest terms is now at my mercy. Completely at my mercy!

You are bent, as the science-fictionists say, completely to my will!

It did not have to be this way, you know. You could have judged my application fairly and we could have worked together well. Now you shall pay a Much Higher Price.

Wait and see.

Triumphantly,
ROGER ACKROYD

DIVISION: SEND ENDING ABC MURDERS. TAPE MYSTERIOUSLY MISSING. SEND AT ONCE. DEMAND THIS.

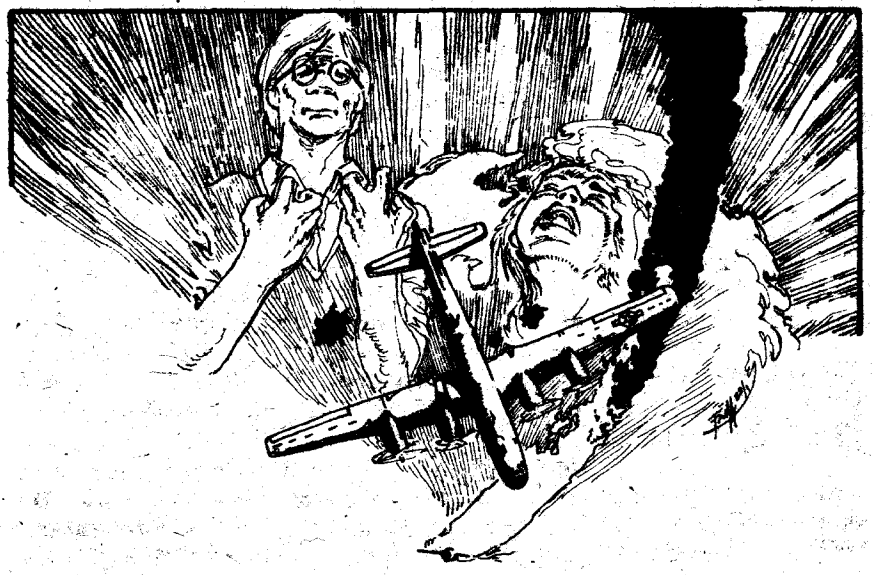
ZZZ Interplanetary STOP How did they get off that island QUERY Where is final material QUERY I insist upon an answer at once STOP AA +

DIVISION - THIRD REPRESENTATIVE DIVISION EASTERN DISTRICT DEMANDS KNOWLEDGE WHY POIROT DIED - REPEAT - WHY DID HE DIE QUESTION MARK NO FURTHER EXCUSES EXCLAMATION POINT COMMITTEE LICENSES PREPARED FULL ASSEMBLE TOMORROW FOR INVESTIGATION UNLESS MATERIALS SUPPLIED EXCLAMATION POINT

DIVISION: WHO KILLED THE INSPECTOR? ENDING MISSING. REPLY AT ONCE. MCGINNITY FOR THE PRESIDENT.

DIVISION - FIFTY-SEVEN MILLION NOW DEMAND ....

TIME AND HAGAKURE
by Steven Utley



Of himself, Mr. Utley reports that his is a sedentary life. His interests include dinosaurs, the Battle of Little Bighorn, and the guitar, which he admits he plays rather less brilliantly than, say, A. Segovia or J. Beck. Now 28, the writer lives in Austin, Texas, one of a number of excellent new writers there.

Inoue stepped into his apartment, closed the door and found himself on a sparsely wooded hillside. Not far from where he stood, a shaggy titan scratched its haunch and belched awesomely. Storm clouds were gathering in the sky overhead.

Inoue groped his way along the wall until he bumped into a chair. He eased himself down into it. From a table beside the chair, he plucked a photograph and held it as though it were a talisman. The phantom Megatherium went down on all fours and began tearing at the earth with its long, curved claws. Ghost lightning flashed on the horizon.

Control, Inoue told himself. He forced himself to concentrate on the picture, a curling yellow snapshot of a woman whose face reflected years of strain, whose eyes had once seen the sun touch the earth. Opaque eyes; blind, burnt eyes.

Across the room, the enormous ground sloth mooed softly, then shimmered and dissolved. The Pleistocene thunderheads swirled away.

Inoue studied cracks in the dirty plaster ceiling. Good, he thought, good. Don't let it run away with you. You have to be able to control it for a while closer each time. Relax. Relax.

He settled into the cushions and closed his eyes. He could feel the power coiled within, tensed to strike at him if he let it, tensed and ready to do his bidding if he made it.

He took a deep breath, and he began.

§ § §

The floor disappears as Tadashi starts to swing his legs over the edge of the cot. He stares down through the sky. Far below, silhouetted against a bright sea, the dark gnats of many airplanes swirl about angrily. As he watches, one of the gnats flares up like a match and drops toward the ocean, trailing a fine ribbon of burning gasoline and oily smoke. Tadashi pulls his legs back and huddles upon the cot. A wailing noise fills his ears.

"Lieutenant!"

He starts and looks up from the air battle. At the far edge of the sky, where the horizon merges with the wall of the hut, stands a glowering giant, fists on hips.

"What's the matter with you?" the giant demands. "Can't you hear the sirens?"

Tadashi shakes his head helplessly. His gaze returns to the dogfight. Two more airplanes are going down. The sea ripples, then yields to the familiar wooden planks. The airplanes vanish, swallowed up in the chinks between the planks. Tadashi rubs his eyes.

"Are you all right?" the giant says in a more solicitous tone.

"I . . . Captain Tsuyuki?"

"Of course! Aren't you well, Lieutenant?"

Tadashi puts his feet on the floor and is relieved to feel fine splinters tickling his soles. He rises and sways unsteadily, his head suddenly light, his stomach buoyant. "I'll be all right, sir. I was—the siren! Bombers!"

"They're going for the Yokosuka-Tokyo area," says the captain as Tadashi snatches up his jacket and boots. "The mechanics are warming up the planes. Get into the air immediately!"

Tadashi crams his feet into the boots and clomps past Captain Tsuyuki.

§ § §

Inoue became aware of the pain mounting behind his eyes and cursed softly as he slipped away from Lieutenant Tadashi Okido. He slumped in his chair, massaging his temples, then got up and went to the window. Outside, the lights of Tokyo held back the night.

When, in the forty-third year of his life, the power had first manifested itself, had begun running amok inside his head, Inoue's Tokyo—dirty, over-crowded, very dangerous Tokyo—started to hold new terrors for him. Thuggee stranglers stalked their victims through the corridors of his apartment complex. Barbarian hordes rode down out of the sky to lay waste to crude towns and villages that lay superimposed upon the dreary confusion of the metropolis. Assyrian, Roman, and Aztec priests wandered past the shrines of the city, and sun-blackened slaves labored to erect pyramids. Waves of mounted knights broke under black rains of arrows from long bows. Volcanoes loomed over the skyline and blew themselves to atoms. Prehistoric glaciers crunched along the highway to Kyoto, and monster-infested coal forests reclaimed boulevards.

Three hundred million years of ghosts filled his head and spilled out into his world.

He returned to his chair and picked up the photograph again and stared into the woman's eyes, the blind, burnt eyes, the eyes seared, ruined, made useless, that time when the sun had come down to engulf Nagasaki.

It had been in the fifth month of his affliction that she came to him the first time. Bent over the lathe, he had glanced up to discover a small garden where the north wall of his tool and die shop was supposed to be. The woman stood there, looking younger than

he could recall having ever seen her in life. But he knew her. He had some of the ancient photographs, pictures of her in her bridal attire and drab wartime kimono.

Her gaze was fixed on a point behind and slightly above his head. Awe and terror were creeping into her expression, and a brilliant light made her seem as pale as paraffin. She opened her small mouth and uttered a soundless scream. Her hands rose to her face to claw at her eyes. She fell prone, still screaming, still silent.

Crouched over his lathe, Inoue had reached out for her and caught just a word.

He had seen her several times more in the weeks and months that followed. The scene was always the same; once, though, an enormous iguanodon wandered past, unmindful of the furies raging all around it, unmindful of the stricken woman. Each time, Inoue tried to reach her, to hold tight to her. Each time, he caught only the single word.

Inoue folded his hand over the photograph and forced himself to concentrate and slipped away murmuring the word, the name, *Tadashi, Tadashi* . . .

§ § §

Tadashi is wedging himself into the cockpit of his airplane. Jerking his fur-lined flying helmet down over his close-cropped skull. Waving the ground crew out of the way. Rolling forward, gaining speed. Up. Up. Retract the landing gear. Up. **listen** Up. Three thousand feet and climbing. Young Shiizaki, Tadashi's new wing-man, is a poor pilot whose ship makes known its resentment of his heavy hand. Tadashi grimaces in annoyance and signals Shiizaki to remain in position. Seven thousand feet and climbing. **listen to me** Eight thousand feet. Nine. There is a stab of pain between Tadashi's eyes. **please listen to me** He blinks it away.

§ § §

It had taken Inoue another year to locate the man Tadashi. The stream of Time was a twisting, treacherous one. Inoue cast himself into those waters and discovered what it was to have been a mastodon asphyxiating in a tar pool. He experienced the terror and agony of a Russian officer being torn to pieces by mutinous soldiers. He was a Cro-Magnon woman succumbing to hunger and cold. He bore children. He raped and was raped. He decapitated a man. He was drawn and quartered. He knew moments of peace. He ate strange foods and spoke odd languages. He made love with a filthy Saxon woman and with a rancid Spanish nobleman. He

cast himself into the waters of Time again and again, and he felt himself drawn closer to his objective every sixth or seventh attempt, and then, finally, at last—

Tadashi is wedging himself into the cockpit of his airplane. Jerking his fur-lined flying helmet down over his close-cropped skull. Waving the ground crew out of the way. Rolling forward, gaining speed. Up. Up. Away.

§ § §

Tadashi cruises at seventeen thousand feet, tense behind the controls of the obsolete Zero-Sen fighter. The almost-daily air raids, the seemingly interminable howling of the sirens, the endless mad scrambles to waiting planes, are taking their toll. He had been having difficulty keeping his food down lately, and food is hardly so abundant anymore that it can be wasted in such a manner. His head hurts intermittently. He has been making too many mistakes in the air, overshooting targets, firing his guns too soon or too late and, always, for too long. Ammunition thrown away, wasted in ineffectual feints at the enemy bombers' shiny aluminum bellies.

Gone is the sure, deadly aim, gone the lightning-quick reflexes that made him an ace over the Phillipines. He will, he knows, make the final mistake very soon now, and then a Hellcat or a Mustang will blow him out of the air. A precious airplane lost, thrown away in a moment of inattention or confusion.

And what of your wife? Tadashi frowns behind his goggles and reproaches himself. He will only hasten his own end if he permits his mind to wander thus.

He is, he tells himself, a warrior. If he dies, he will die a warrior's death and ascend to Yasukuni Shrine. He will sell his life dearly, for that is his duty and his honor. *Hagakure,* the Bushido code, is too deeply engrained in him. He cannot imagine alternatives to that code— "A Samurai lives in such a way that he will always be prepared to die" —or to the Emperor's precepts to all soldiers and sailors of Japan: ". . . be resolved that duty is heavier than a mountain, while death is lighter than a feather."

Tadashi catches the flash of sunlight on unpainted aluminum in the distance. He wags his wings to attract Shiizaki's attention and points, then has to bank sharply as Shiizaki, craning his neck to search for the enemy formation, lets his plane swerve toward Tadashi's. Tadashi waves his clumsy wing-man back into position and mentally curses both the lack of radios, which have been removed to lighten the Zero-Sens, and the scarcity of fully trained

flyers. He opens the throttle and begins closing the gap between **himself and the** bombers.

In the space of a year, the Americans' B-29's have flattened virtually the whole of Japanese industry, have severely decimated populations in the major cities, have brought his homeland to its knees. The B-29's are gigantic aircraft, by far the largest he has ever seen. Their size notwithstanding, they are almost as fast as his interceptor, well armed and strong, altogether insuperable machines. Some of them have been brought down, but not many, not enough, and, for the most part, the behemoths seem discouragingly unconcerned with both fighters and flak.

Tadashi feels his guts drawing up into a tight, hard knot as he begins his approach. *Perhaps this is the day,* a part of him whispers, and he clamps his teeth on his lower lip, trying to repress the murmur of panic. The rearmost B-29 in the formation swells in his gunsight. He thumbs off the safety switch, checks his range-finger and opens fire. Tracers simultaneously spit from the bomber's tail guns. There is the whine of a ricochet. Tadashi flinches, scowls, completes his firing pass, kicks the rudder to the left to check on Shiizaki

Stitched by tracers, Shiizaki's Zero-Sen sweeps past the B-29, turns on its side and explodes.

you must listen to me think of her the war will soon be over and she will need you in the hard times to follow go back and land and call her to you without delay please please listen to me

Tadashi grimly drops into position behind a second bomber. But the American plane suddenly shimmers and dances in the sky before him, refusing to stay neatly framed in the gunsight. His eyes throb, his head hurts. The Zero-Sen wobbles sickeningly as his hand slips on the control stick. **I CAN SAVE US ALL IF YOU WILL LISTEN TO ME** and for just a moment he is deaf to the roar and vibration of his plane, removed, face to oddly familiar face with a middle-aged man whose furrowed brow glistens with perspiration, whose eyes are screwed tight with some great effort. Tadashi gives a cry of alarm, and the man appears to gasp and then smiles. The face shatters into scintillae of light. His bride reclines with him in semi-gloom, her skin slick with post-coital perspiration, her delicate fingers tracing patterns on his shoulder and breast as she whispers endearments, *I love you, Tadashi, I shall always love and honor you, stay with me, stay with me, with me, we shall have fine, brave sons and graceful daughters.* He

blinks, perplexed, filled with longing, and opens his mouth to speak to her. The soothing liquid flow of her voice is rudely terminated by the sound of canopy glass shattering. A sliver gashes his check. He wrenches himself away from his wedding night and finds himself bearing down on the B-29. He cannot remember how to fire his guns.

I don't need to shoot, he thinks. The moisture is gone from his mouth. I don't need to shoot.

break away I've seen you do this many times too many times I am tired sickened by the violence I've seen going mad because of what happened what is going to happen at Nagasaki there is no way to stop the ghosts except by coming to you making you break off this futile engagement Japan is doomed nothing you can do now can change that you can only return to your base and save yourself your wife me

Tadashi shakes his head savagely and gropes for the throttle. Finds it. Opens it to overboost. no no no *no no* NO NO, a scream behind his eyes, the words tumbling out, running together, *nonono,* and the Zero-Sen leaps forward.

§ § §

Inoue moaned, drew himself into a ball, quivered in his chair, sweat popping from every pore, fingers digging into scalp, teeth grinding together.

Then he realized that he had crumpled the photograph. He smoothed it out, whimpering softly to himself. A brittle corner had broken off. He found the wedge-shaped chip of paper in his lap and placed it on the table.

I can do it, he thought, I've made little ripples in Time, I've made him feel my presence, made him see, hear, feel things. I've broken through to him at last, he understands now, he's going to listen this time. I'm going to save us all.

But his headache was worse now. He put the picture into the pocket of his shirt and tiredly rubbed his face for a moment before getting up to go to the window again. He took the picture from his pocket and carefully cupped it in his hand. He regarded the dead eyes sadly.

He had tried, so many times, to reach her and warn her away from the doomed city. Had tried and failed: only that moment of her terror in the garden was open to him.

He had tried to return to the day, early that last month of the war, when Lieutenant Tadashi Okido had sent his young bride to

stay with his uncle in Nagasaki. Had tried and failed: only an hour of another, later day in the lieutenant's life was open to him.

He had been trying for weeks to cut short the lieutenant's mission of interception.

He was being driven mad in a Tokyo overrun with phantoms which he alone could see, and Lieutenant Tadashi Okido was his one hope. The Samurai Tadashi, who had to be made, somehow, convinced, somehow, to return to the airfield and call his wife away from Nagasaki.

Tadashi, who, in sending her to that place, had unknowingly cursed Inoue with the power.

This time, Inoue thought, this time it must not happen as it did.

§ § §

LISTEN TO ME YOU MUSTN'T DIE HERE AND NOW YOU MUST LIVE LONG ENOUGH TO SAVE YOUR WIFE AND MY SANITY YOU OWE IT TO US TO LIVE LISTEN ALL THE REMAINING YEARS OF HER LIFE WILL BE A TORMENT WITHOUT YOU AND Tadashi shakes his head savagely and gropes for **MY LIFE HAS BECOME HELL BECAUSE OF YOU** the throttle **YOU AND YOU ALONE** finds it **CAN SAVE US** opens it to **PLEASE LISTEN** opens it to **LISTEN** opens it to overboost, and the Zero-Sen leaps forward to plow through the bomber's tail assembly. The shivering fighter's starboard wing buckles like pasteboard and disintegrates. The cowling shoots away as the radial engine begins disgorging pistons. The Japanese and American planes fall away from each other, fall away spinning, throwing off pieces of themselves.

damn you

§ § §

A large pterodactyl soared past the window. Sobbing with frustration, Inoue pressed his fist against the grimy pane. Go away, Go away. Go away.

He looked at the photograph in his hand, and he said to the woman with the ruined eyes, I found him, I spoke to him, told him, showed him what was at stake. I invaded the past, I altered it a very little, but why doesn't he listen? Why does he keep doing it? What's wrong with him? Why can't I make him understand?

And he cried out, "Mother, doesn't he even *care?*"

§ § §

Slammed and held by centrifugal force against the wall of the cockpit, Tadashi dazedly listens to his wife's pleas and feels her

hands rove down over his body, and he tells her that he loves her, has loved her from the moment he first glimpsed her in her father's house, will love her always, and he tells her that their children, yes, their children will be fine, beautiful children, and he bids her goodbye, knowing she is proud of him now and will follow his example should the need to do so arise, for he is a warrior, with a wife worthy of a warrior, he has abided by the dictates of *Hagakure* and is assured of his place of honor at Yasukuni Shrine, and it is intensely hot and bright in the cockpit, there are screams which may be his own, but he is resolved that duty is heavier than a mountain, while death is li—

ON THE MARTIAN PROBLEM
by Randall Garrett

I am not at liberty to reveal whence I obtained the Xerox copy of this letter, nor why it was specifically sent to me rather than, say, Mr. Philip José Farmer, who would be far more qualified than I for the honor of putting it before the public. My duty, however, was clear, and with the kind co-operation of Dr. Isaac Asimov and Mr. George Scithers, it is herewith submitted for your perusal. The letter itself is written in a bold, highly legible, masculine hand. The heading shows that it was written in Richmond, Virginia, and it is addressed to a numbered postal box in Nairobi. The bracketed notes after certain of the writer's expressions were added by myself.

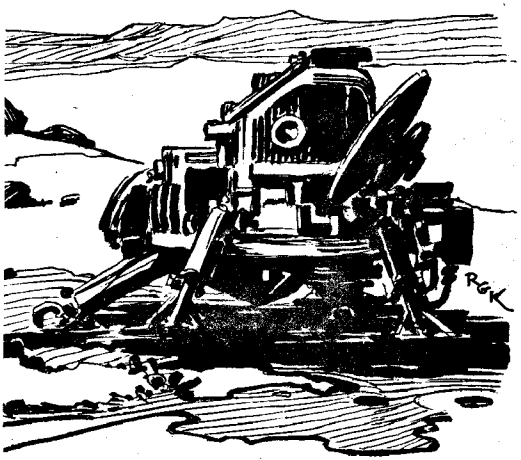
My dear Ed,

Since your secret retirement to Africa, we have had much less communication than I would like; but, alas, my duties at home have kept me busy these many years. It is, however, a comfort to know that, thanks to the Duke's special serum, you will, barring accident or assassination, be around as long as I.

I am sorry not to have answered your last letter sooner, but, truth to tell, it caused me a great deal of consternation. I fear I had not been keeping up with the affairs of Earth as much as I perhaps should have, and I had no idea that the Mariner and Viking spacecraft had sent back such peculiar data.

One sentence in your last letter made me very proud: "I would rather believe that every man connected with NASA and JPL is a liar and a hoaxer than to believe you would ever tell me a deliberate lie." But, as you say, those photographs are most convincing.

Naturally, I took the photoreproductions you sent to a group of the wisest savants of Helium, and bade them do their best to solve the problem. They strove mightily, knowing my honor was at stake. Long they pondered over the data, and, with a science that is older and more advanced than that of Earth, they came up with an answer.



The tome they produced is far longer and far heavier than any book you have ever published, and is filled with page after page of abstruse mathematics, all using Martian symbolism. I could not translate it for you if I wished.

In fact, I had to get old Menz Klausa to explain it to me. He is not only learned in Martian mathematics, but has the knack of making things understandable to one who is not as learned as he. I shall endeavor to make the whole thing as clear to you as he made it to me.

First, you must consider in greater detail the method I use in going to Mars. There are limitations in time, for one thing. Mars must be almost directly overhead, and it must be about midnight. To use modern parlance, my "window" is small.

At such times, Mars is about 1.31 x 10^6 *karads* [4.88 x 10^7 miles] from Earth.

I call your attention to my description of what happens when I gaze up at the planet of the War God. I must focus my attention upon it strongly. Then I must bring to the fore an emotion which I can best describe as *yearning*. A moment's spark of cold and dark, and I find myself on Mars.

There is no doubt in my mind that I actually travel *through* that awful stretch of interplanetary void. It is *not* instantaneous; it definitely requires a finite time.

And yet, for all that I travel through nearly fifty million miles of hard vacuum naked, or nearly so, I suffer no effects of explosive decompression, no lack of breath, no popping of the eardrums, no nosebleed, no "hangover" eyeballs.

Obviously, then, I am exposed to those extreme conditions *for so short a time that my body does not have the time to react to them!*

Consider, also, that the distance is such that light requires some 296 *tals* [262 seconds] to make the trip. Had I been in the void that long, I would surely have been dead on arrival. Quite obviously, then, when I make such trips, *I am traveling faster than light!*

There is, unfortunately, no way of telling *how* much faster, for I have no way of timing it, but Menz Klausa is of the opinion that it is many multiples of that velocity.

Now we must consider what is known to Earth science as the "time dilation factor." I must translate from Martian symbols, but I believe it may be expressed as:

$$T_v = T_o[1-(v^2/c^2)]^{1/2}$$

where T_v is time lapse at velocity v, T_o is the time lapse at rest, v is the velocity of the moving body, and c is the velocity of light.

The Martians, however, multiply this by another factor:

$$[(c-v)/(c^2-2cv+v^2)^{1/2}]^{1/2}$$

Thus, the entire equation becomes:

$$T_v = T_o[1-(v^2/c^2)]^{1/2}\,[(c-v)/(c^2-2cv+v^2)^{1/2}]^{1/2}$$

As you can clearly see, as long as the velocity of the moving body remains below the velocity of light (443,778 *haads* per *tal*), the first factor is a positive number, and the second factor has a value of +1. This, I believe, is why it has never been discovered by Earth scientists; multiplying a number by +1 has no effect whatever, and is not noticeable.

When v is exactly equal to c, both factors become zero; in other words, the moving body experiences zero time. Its clock stops, so to speak.

However, when v exceeds c, the equation assumes the form:

$$T_v = T_o(xi)\ (i)$$

where i is the square root of minus one, and x is a function of v.

If the second, or Martian, factor is neglected, it is obvious that the experienced time of the moving body would become imaginary, which is unimaginable in our universe.

However:

$$(xi)\ (i) = xi^2 = -x$$

In other words, if the body is moving at greater than the velocity of light, the elapsed time becomes negative. *The body is moving backwards in time!*

According to the most learned savants in Helium, this is exactly what happened to me. Indeed, so great was my velocity that I traveled an estimated 50,000 years into the past!

Thus, the Mars that I am used to has, in Earth terms, been dead for fifty millennia.

This explanation seemed perfectly sound when Menz Klausa first elucidated it, but suddenly a thought occurred to me.

Why did I always go forward *in time when I returned to Earth?*

For surely that must be so, else I could not be here today. If that formula I quoted were complete, when I returned the first time, I should have found myself a hundred thousand years in the past, in about the year 98,000 B.C. Considering the number of trips I have made, I should, by now, be somewhere back in the Miocene.

However, that, too, is explained by our Martian theorists. Another factor comes into play at ultralight velocities, that of gravitation field strength. At light velocity, this factor accounts for the gravitational red-shift of light when it is attempting to escape from a strong gravitational field, and the violet-shift when the light is falling toward the gravity source.

At velocities greater than that of light, the factor becomes +1 when the direction of travel is from a greater gravitation field force to a lesser one, and −1 when the direction is from a lesser to a greater. Thus, when I return to Earth, the negative time factor becomes positive, and I go into the "future" of Mars, which is your "present."

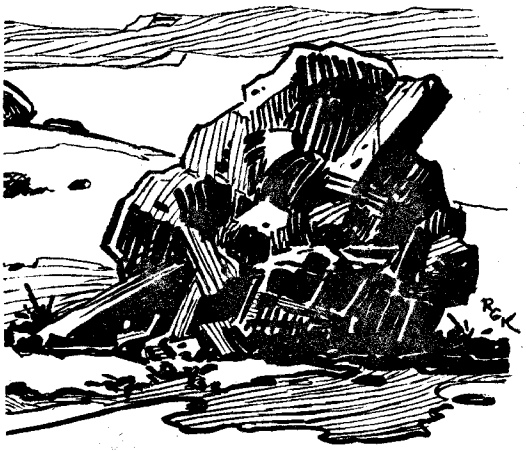
I trust that is all very clear.

Unfortunately, there is no way I can translate the gravity factor into Earth's mathematical symbolism. I can handle simple algebra, but tensor calculus is a bit much. I am a fighting man, not a scientist.

By the way, it becomes obvious from this that the Gridley Wave is an ultralight and trans-time communicator.

Another puzzle that the photos brought out was that they show no trace of the canals of Mars. And yet, Giovanni Schiaparelli saw them. Percival Lowell not only saw them, but drew fairly accurate maps of them. I can testify to that, myself. And yet they do not show on the photographs taken from a thousand miles away. Why?

The answer is simple. As you know, certain markings that are quite unnoticeable from the ground are easily seen from the air. An aerial photograph can show the San Andreas Fault in California quite clearly, even in places where it is invisible from the ground. The same is true of ancient meteor craters which have long since weathered smooth, but have nonetheless left their mark on the Earth's surface. From an orbiting satellite, more markings become visible when there is a break in the cloud cover.



Many modern paintings must be viewed from a distance to understand the effect the artist wished to give. Viewed under a powerful magnifying glass, a newspaper photo becomes nothing but a cluster of meaningless dots. One is too close to get the proper perspective.

Thus it is with the canals of Mars, long since eroded away, from your viewpoint in time. In order to see those ancient markings properly, you have to stand back forty or fifty million miles.

But what is going to happen to the Mars I love? Or, from Earth's view point, what *did* happen to it?

According to Menz Klausa, that is explained by one significant feature on the photos you sent.

Remember, even "today" (from the Martian viewpoint), Mars is a dying planet. Our seas have long since vanished; our atmosphere is kept breathable only by our highly complex atmosphere plant. Martians have long since learned to face death stoically, even the death of the planet. We can face the catastrophe that will eventually overtake us.

From Earth's viewpoint in time, it happened some forty thousand years ago. A great mountain of rock from the Asteroid Belt—or perhaps from beyond the Solar System itself—came crashing into Mars at some 24 *haads* per *tal* [10 miles per second]. So great was its momentum that it smashed through the planetary crust to the magma beneath.

The resulting explosion wrought unimaginable havoc upon the planet—superheated winds of great velocity raced around the globe; great quakes shook the very bedrock; more of the atmosphere was literally blown into space, irretrievably lost.

But it left no impact crater like those of the Moon. The magma, hot and fluid, rushed up to form the mightiest volcano in the Solar System: Olympus Mons.

And the damned thing landed directly on our atmosphere plant!

However, we won't have to worry about that for another ten thousand years yet. Perhaps I won't live that long.

Give my best regards to Greystoke. Your Aunt Dejah sends her love.

All my best,

Uncle Jack

Q R P . . .
by George M. Ewing

Mr. Ewing, now 31, was born in Illinois and brought up in northern Michigan. He attended Michigan Tech and Michigan State; now he is chairman of the English department of a consolidated rural high school while working on an MA in broadcasting and cinematic arts. He attended the 1973 Clarion SF Writers' Workshop; his first published story appeared in the fall of 1974. Current projects are a time-travel epic set in the 18th Century Great Lakes region and a series of parallel world stories set on the shores of prehistoric Lake Agassiz.

Tim Norlin eased back in his chair and allowed his eyes to rest on the blank rectangle of gray cardboard over his desk. The chair, a command seat salvaged from a wrecked hovercraft on the bottom of Lake Huron, sighed as it adjusted hydraulically to the weight shift. It had been a long day. First, there had been the usual pencil-grabbing and squabbling among the ninth-graders, then a faculty meeting dominated by pointless bickering over performance objectives. Now a kid was coming in for a conference, a full hour after the rest of the happy horde had fled the building. Tim looked again at the note on his desk, scrawled in the head counsellor's green marking ink. Andy Keller was a normal student, perhaps a shade brighter than average when it came to science and math, and he got along well in a less-than-ideal home situation. He had looked a little dopey and listless lately, though Tim doubted it was drugs; more likely the boy was staying up late playing with his short wave radio or reading paperbacks. He might even have discovered sex, though Tim hadn't seen him paired off with any one girl, and tenth-graders weren't usually too subtle about such things.

Tim put the note aside and passed the time sorting his junk mail, pulling an occasional travel folder or media catalog to look at later, and throwing the rest in the recycle hopper beside his desk. Eight minutes after five on the clock over the door there was a knock, and Tim thumbed the latch disable in his chair arm.

Andy was a squarish, muscular boy with short red hair, freckles, and a neater-than-average version of his generation's self-imposed denim uniform. He accepted a seat by the time-sharing terminal and turned the chair to face Norlin. After a few pleasantries about football and a cautious query or two about how the home situation was going, Tim got straight to the point.

"Andy, the note from Dr. Dahlin's office said that you were upset, and that you wanted to talk to someone. Is it anything to do with me in particular?"

"Well, sort of, Mr. Norlin. I had your mass media workshop last year; and, well, this is all tied in with electronics and everything. Mr. Norlin, do I look weird to you?"

"How do you mean, weird, Andy?"

"Oh, I dunno. Different, I guess. Like, different than I did last year."

Tim looked at the boy for a moment. Then, guardedly, "Not really, Andy. I guess you've looked rather tired the last couple of weeks, as if you weren't getting your sleep, or were worrying too

much about something. Is that part of it?"

"Yeah, though that's just from staying up late trying to work this thing out. I can sleep O.K. when I get around it."

"Why don't you just tell me the whole story from the beginning. I'll try not to interrupt with questions unless you lose me on something."

"Well, it began a few weeks before school started. This kid Alan and I had been working a regular sked on forty meters; that's a ham radio band. We were working QRP, that is trying to make contacts using real low power."

"I had a ham ticket back in high school, Andy. I can follow the jargon, I think."

"That's right; I remember you talking about it in class last year. Anyway, Alan lives in Louisiana, and he and I had a regular schedule using little five-watt transistor rigs we built with surplus crystals and junk parts. We'd try every night about midnight, after some of the other hams had gone to bed and the band wasn't as crowded. You can work a long ways with four or five watts on forty, so long as some lid with a kilowatt doesn't move onto your frequency and clobber you."

"I know the feeling."

"Anyway, Alan and I were getting through pretty regularly over the 1800-mile path between here and Jennings, so we decided to try some real QRP and see how weak a signal would still get through. When we cut the power to one watt, we started having trouble. But after we concentrated on the weak signals for a few days, they seemed to be getting stronger. When we cut it to about 500 milliwatts they faded down into the noise, and we started having to guess at letters here and there."

"Was this all in Morse code, or did you try voice, too?"

"All CW. A digital code like Morse gives a much better signal-to-noise ratio than with phone. Anyway, after about a week we were getting through about ninety per cent of the time, so we cut the power level again to about a hundred milliwatts. We were just keying the driver stage of the little transmitters now, with narrow filters in the receivers and good antennas, of course. Even so, we had a heck of a time getting through with a tenth of a watt. We set our digital watches with WWV, and took turns sending and listening exactly on the minute."

"Well?"

"The first couple of nights, all we got were a few random dits and dahs. You could just tell the other guy was in there, but even

straining your ears you couldn't quite make him out. About the third or fourth night, we started getting bits and pieces that made sense. We'd go back up to 'high power', say a couple watts or maybe even five, and repeat the messages back and compare. I guess our concentration was improving, 'cause after about a week of that, we started getting complete sentences through, and then there was a kind of breakthrough, and it was all armchair copy after that. Even when we dropped the power again, it was almost perfect copy. The signals were weak, but they were there; and if you missed a couple of letters and guessed, it almost always turned out to be correct. By the time school started, we were down to fifty or a hundred *microwatts* on good nights, and still getting through better than ninety per cent of the time!"

"Amazing. Did you or Alan work any other stations?"

"Only down to about one watt. After that we seemed to lose them, or rather, we could hear them, but they wouldn't come back when we called them."

"I still don't see the connection with why you're upset."

"I'm getting to that. After we got down to a thousandth of a watt or less, and were trying to build a rig that would work with less power, something crazy happened."

"What?"

"I was tinkering with the transmitter, trying to get the oscillator to run properly at such a low voltage. I was plugging the crystal in and pulling it out, to see if I could get the thing to start again. Alan called me while I had the crystal out. Without thinking, I grabbed the key and answered him. *He heard me anyway!*"

"Aw, come on now, Andy!"

"Honest. At first I thought the thing might be oscillating anyway, without the crystal. So Alan and I both disconnected the flashlight batteries we were using for power. It didn't seem to make any difference. The signals were noisy and you had to squint your ears to hear them, *but they were there!*"

"Supposing, just for the sake of argument, that I believe your far-fetched story, not that I really do, mind you, but just supposing: then what?"

"Well, the next thing we tried was just *thinking* the messages without even a dead transmitter as a prop. We tried whistling, and sending with a practice buzzer and a key—no radio gear at all."

"And?"

"As long as the guy who was transmitting could *hear* the signal

or had a key in his hand, we got through almost without error. Without something like a buzzer or a CPO for the sender to concentrate on, the signal the receiving partner was hearing would get extremely noisy, and it was back to bits and pieces again."

"I see, Andy. So this is what's been bothering you? You think you're some kind of freak, and that maybe you're going bananas?"

"Well, freaky talent, anyway. I don't think I'm imagining it."

"Oh, just supposing there is something to it, not that I'm thoroughly convinced yet, but even if it really is some kind of unusual telepathic thing, I guess it would be a remarkable curiosity, but not really all that earth-shaking. After all, anybody with fifty bucks worth of radio equipment can send a signal 1800 miles any time without 'using his head', and they can send voice and pictures and computer data too, not just shaky code messages that have to be received by one kid in Louisiana to be heard at all. I wouldn't let it upset me too much if I were you. How much have you told your folks, and what do they think about it?"

"They just think I play with the radio too much. I've been getting along O.K. most of the time. Once in a while there are hassles about money or me babysitting or something. The folks are still on the county, and they keep me home from school sometimes to watch the kids when I really shouldn't. I've been thinking of getting out of here after I turn sixteen. I could finish high school in the service, and work in electronics, too. The money isn't bad these days, and I could get some GI bill help for college later. My stepdad would probably let me enlist, and I could send them an allotment and still have enough to get by on. Mom would take some convincing, though. She'd rather I just stayed here and got a part time job at Ed's TV shop."

"I see. How's your love life?"

Andy hesitated, then grinned. "Fair to crummy, depending. I went out with Julie a few times, you know, to movies and stuff. You know Julie Howlett, the JV cheerleader? She's a real fox, and she likes me, but she can't talk about anything but dope and records. I don't mind partying down once in a while, but anything else I want to do, or anything *I* want to talk about, forget it!"

"You're sure you're not imagining all this then?"

"You mean about Julie?"

"No, the messages. Copying code can be funny sometimes, you know. You get to anticipating what the other fellow is going to say. You get a word like 'RE___VERS' and if you're talking radio gear your mind fills in 'RECEIVERS' and if you're talking about

hunting dogs perhaps it comes out 'RETRIEVERS' even with the spelling changed around so it makes sense in context."

"You think it's just more of that kind of thing, then?"

"Probably. You've been talking with Alan nearly every night, and you could well be giving each other subliminal cues. This getting through using low power has become a challenge; and your mind, helped by subconscious hints you don't consciously remember at all, has obliged by fooling you into thinking you're communicating when you really aren't and filling in the blanks to correct errors when you miss part of a transmission. Even if it were a genuine ESP effect of some kind—and almost all the experiments are against it—research has shown that such talents, if they do exist, are so erratic and unreliable that you'd be better off buying a radio or using Mother Bell anyway. If I were you, I'd forget the whole thing, maybe keep a schedule once in a while with Alan just for fun, but don't get so involved with it that it becomes an obsession and spoils your schoolwork and your social life. Maybe you and Alan could get together someday and work out a nightclub act or something, but even there the methods for cheating are so diverse and inexpensive, a *genuine* telepathy act would only be a curiosity."

"Well, Mr. Norlin, that's pretty much what I was thinking at first, too. I even got the paranoid feeling it might all be a hoax by Alan, that maybe he had another ham here in town someplace secretly relaying the signals on another band somehow, just setting me up for a gag. *But that was before we started hearing the other signals!*"

"Other signals?"

"Yeah. Just in the last few days after school started, we both started hearing some QRM. There were other weak Morse signals in there, slow five-character code groups, mostly, with lots of repeated messages. Tuesday, I thought I heard what sounded like teletype, but I might just have imagined it. I've been reading up a little on parapsychology and stuff since the night we first got through without using any power at all. Doctor Constantine has a lot of old psychology journals that he lets us read in class, and some of them had articles about research in Russia and other countries. It was pretty inconclusive, mostly, but from what I gathered from the articles, they seemed to claim that telepathy, if it exists, would be a communications channel with an extremely high signal-to-noise ratio. Well, Morse code with lots of redundancy would seem to be an ideal way of getting through a bad

SNR on a noisy channel, just like it is for moonbounce and VHF tropo scatter. I think that somebody, someplace, is experimenting, and that we're overhearing some of the transmissions."

"Andy, if you weren't just making this up to tease an old ham it would really be fascinating. Did you ever try *calling* any of these phantom stations?"

"Once. There was a guy the other night repeating twelve two-digit numbers over and over, and then a pause before he started repeating them again. I had a key with a practice oscillator lying on the table, and just for the heck of it, I sent the symbol QRZ—who's there?—a couple of times, and then a Morse question mark, 'dididahdahdidih'."

"What happened?"

"The station went right off the air, and didn't come back on again."

I'll bet they didn't! thought Tim. Aloud, he said, "Andy, I can see that you're convinced about this thing, and I won't waste any time trying to argue with you about it now. It's getting along towards suppertime, and before I let you go, I happen to have a gadget here that I think you'd be interested in. If you're interested in weak-signal hamming, have you ever tried a diversity-stereo filter?"

"A what?"

"A diversity-stereo filter. It separates the incoming signals according to audio frequency, and feeds them into a pair of stereo headphones. Your ears' natural sense of direction lets you sort the closely spaced signals on a crowded ham band. I have a homebrew version here hooked up to a test box with a tape loop. Give a listen and see how it works."

Tim handed the boy a pair of headphones and plugged the cord into a small gray cabinet on the bookshelf. Andy put them on while Tim fiddled with a single dial. After a few seconds, the boy mumbled something sleepily and slumped his head to one side. Tim took a pencil flashlight from the desk drawer and checked the pupils of the eyes. "Gotcha, Turkey," he muttered. He fastened the chin strap to hold the headphones in place. He scribbled something on the bottom of the note from Dr. Dahlin, the counsellor, tapped the light switch, and settled back in the hydraulic chair.

The room was nearly in darkness, with only the glow of the red LED pilot light on the gray box plugged into Andy's consciousness. Norlin stared at the cardboard rectangle over his desk, willing

himself to relax, and then thumbed another switch. A nearly imperceptible chirping began, a frenetic insect imprisoned in a cotton-filled matchbox. Norlin watched the 200-line slowscan pictures form on the rectangle, a new frame every eight seconds. A series of letters and symbols from nowhere marched across the plain cardboard in time to the insect, and he whistled the correct authenticating response to himself.

The face of the com chief at Langley appeared with the next scan. The tiny voice in Norlin's ear was distorted and compressed, like badly tuned single sideband on a night when twenty meters is starting to drop out, but it was several decibels louder than the hiss of random air molecules against his ear drums in the quiet room.

"What do you have this time, Norlin, another lottery wizard?"

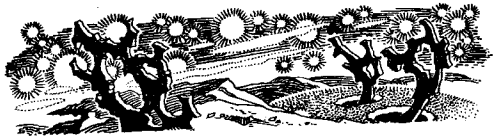
"Two radio hams, Chief." Tim gave the man Alan's name and call letters in Jennings, Louisiana. "I've got the other one here on the rushbox."

"That's a long hop without training."

"Not only that, they were eavesdropping, copying twelve-by-two's from one of the embassy stations. The kid tried to break in and visit; he probably scared the hell out of the traffic man."

"I can imagine. We've got a team in Beaumont that can handle the Louisiana pickup. It will be a few hours until we can get out to you there in the boondocks. Meanwhile, you hang on and play stupid."

Tim signed off then and looked at the sleeping tenth-grader in the chair by the terminal. He envied the kid for his year's training to come at the secret base in Samoa, with recruits these days running nearly eighty percent female and friendly. Then there were the assignments: fun, travel, intrigue. Maybe even space, if some funding went through. He looked at his digital watch and hoped the pickup team would get there without delay. If he made it home by midnight, he could fire up the old 75-meter sideband rig and get in on one of those late night chess tournaments.



BOARDER INCIDENT
by Ted Reynolds

Here is another story from Lloyd Biggle's writing class at the University of Michigan. The author, Mr. Reynolds, is well over 30; he's been a copy boy, egg candler, interpreter, yachtsman, teacher, accountant, and planetarium operator—among other jobs. He's traveled leisurely through some six continents, and asked us especially to mention eleven archipelagoes, but neglected to tell us which ones.

He strolled out of the alley, trying not to look like an alien who had just buried his spaceship under the forsythia bushes. The house he sought stood at the corner, high-peaked and gaunt. The sign in the lower window proclaimed: MRS. DOGEN, FINE ROOMS FOR RENT.

On the front steps, he paused to tuck in a stray tastestalk that had somehow slipped from under his rubberoid head covering. It was his careful attention to details like these that had made him such a valuable first contact man for Galactic Empire, Inc.

He rang the bell.

The last landlady he had encountered had been sesquipedal and oviparous, but the type was universal. With a shudder he began a sputtering explanation. Mrs. Dogen seemed wilfully bent on not comprehending him.

"Just a moment," she said finally. "Your name is Astroven?"

"In effect. And I request only that—"

"Why do you want to live in *my* attic? I have nice rooms available on both the first and second floors."

"I don't precisely intend to live in it," Mr. Astroven explained in his rubbery voice, "just set up a hyperdimensional interstellar space-warp booster station in it. I shall *live* in the stairwell cupboard."

Mrs. Dogen rotated her head. "Out of the question," she announced.

Mr. Astroven took a synthekit from his pocket and synthesized a small diamond. Mrs. Dogen watched the performance suspiciously until Mr. Astroven placed the gleaming end product in her

hand. "As a stipend, perhaps one of these per week," he suggested. "Its intrinsic value would equal some two hundreds of your dollars."

Mrs. Dogen's expression altered. "Perhaps," she announced, "some kind of explanation is in order."

§ § §

They sat in the cool living room and Mr. Astroven explained . . . and explained . . . and explained, and with deepening misgivings, for Mrs. Dogen obviously was gleaning not a tithe of it.

"So you see," Mr. Astroven said, bringing his explanation to a conclusion for the third time, "if we can't set up on Earth, we'll have to set up at least four booster stations and go several parsecs out of the direct route to the Persean spiral arm. We prefer worlds with no natives; and if there must be natives, we'd much prefer civilized ones; but in dry regions like this we have to make do with what is available."

"I see," Mrs. Dogen said, though she was still looking at the diamond. "Then what you're saying is that my attic is one of the three places on Earth where your gadgets will work."

"Yes, ma'am. One of the other two is a nexus at the bottom of the Marianas trench, under six miles of water. Its use poses certain inherent difficulties. The other place—" He shuddered. "The other place is in a bar in Belfast."

Mrs. Dogen nodded. "Under the circumstances, I think . . . perhaps . . . *ten* of these per week . . ."

Mr. Astroven expelled a hissing breath and agreed.

"But there is one thing. I notice that you are concealing your actual features under a headmask. I trust you are not keeping anything important from me?"

"We merely try to be discreet on first contact," Mr. Astroven said. "However, if it is a condition for renting . . ." He pulled off the mask and showed his real face. It was garish, variegated, surreal, and mostly green.

Mrs. Dogen was visibly relieved. "Perhaps it was foolish of me," she said. "I was afraid you might be black."

She paused to chase the cat from Mr. Astroven's lap for the tenth time. "Very well," she went on. "Kitty likes you, and I trust her judgment. You may—ah—bring your—er—friends through the attic as long as none of you create any disturbance, and your weekly rent will be—did we say—fifteen of these?"

Mr. Astroven expelled another hissing breath and while Mrs.

Dogen looked on greedily he operated his synthekit fourteen more times. "We use it more often to synthesize coal," he remarked.

He finished, and Mrs. Dogen counted fifteen and thanked him, and he returned her thanks. "And now," he said, "I must leave you temporarily."

"Please don't let Kitty out," Mrs. Dogen said. "She hasn't been fixed."

Mr. Astroven regarded her perplexedly. "Oh, I'm not going out*side*. It will be unnecessary to use your doors from now on."

He climbed to the attic, where he set up a tiny pendulum disc, touched it, and . . . *went*.

§ § §

For the first few days, there were no difficulties. Mr. Astroven's visitors, whoever or whatever they were, kept to the attic and behaved quietly. Still, there *was* the old friend he brought downstairs to introduce to Mrs. Dogen. It was a tritubiculated monosculate tissue culture from Mirfak, and it somewhat resembled a purple sea-cucumber. When it got a good look at Mrs. Dogen, it screamed in terror.

§ § §

"Mrs. Dogen," Mr. Astroven said petulantly, "could you kindly explain to your domestic symbiote that the Phlegoorian Ambassador is not a rat? She appears painfully intent on ingesting him."

§ § §

"You know this is a non-drinking house, Mr. Astroven. Perhaps you have a reasonable explanation for that strong stench of alcohol?"

"Why, yes, ma'am, I believe I do. The carbon rings at the basis of Danubian metabolism are made up in the following interesting arrangement—"

"That does not sound like a reasonable explanation," Mrs. Dogen said frostily. "If you're suggesting that some of your visitors smell like alcohol, then I insist that they use perfume."

"But my dear ma'am—what you are smelling *is* perfume!"

§ § §

Mr. Astroven clumped down the stairs in awed excitement. "Ma'am—Mrs. Dogen!" he called.

She regarded him irritably.

"The Imperial Cortege will be passing through your attic next week," he blurted, panting his excitement. "The Galactic Empress

Herself has expressed the wish for your presentation to Her."

Mrs. Dogen frowned. "Does *she* use perfume?"

"My dear ma'am! As a royal personage, naturally only the very finest—"

"You will kindly give her my regrets," Mrs. Dogen said firmly. "As a loyal American, I don't believe in royalty."

§ § §

"Mr. Astroven, I don't care if there *is* a war out there somewhere! Feet tramping noisily through my attic from one to seven AM is something I cannot tolerate. I'm giving you notice."

Mr. Astroven sighed. "Perhaps if I were to increase the stipend—it is rather important to us—an additional ten diamonds a week?" He got out his synthekit.

"Twenty," Mrs. Dogen said, holding out her hand.

§ § §

Mr. Astroven said apologetically, "The Loobite is forced to remain here until the proper cycle in its binary destination. Do you think you could turn the thermostat up forty degrees for a few days?"

"*Really,* Mr. Astroven!"

"It must have warmth to survive, you see."

"Out of the question," Mrs. Dogen said firmly.

"Perhaps for an additional five diamonds a week?"

"For ten diamonds," Mrs. Dogen said, "I'll rent the oven to you."

§ § §

"I regret to inform you," Mr. Astroven announced, "that my synthekit is broken. And therefore this week's stipend . . ."

"I'm giving you notice," Mrs. Dogen announced coldly. "Effective at once."

Mr. Astroven sighed. "Actually, that was my intention. Giving notice, I mean. My superiors feel that a weekly stipend of two hundred diamonds is excessive. The wear and tear on synthekits has become intolerable. Therefore we have decided to transfer operations to the other route, the one with the four additional booster stations."

"Under the circumstances," Mr. Dogen said, "I'll waive the required period of notice. Peace and quiet, and an absence of peculiar odors, are to be prized in one's home above diamonds."

"Indeed, yes," Mr. Astroven murmured; he knew it would take her years to dispose of the hoard she had accumulated. "Indeed, yes. Kindly express my farewell regards to Kitty."

He touched the pendulum disc and vanished. The disc remained. There was no way it could transport itself, or it would have gone, too.

§ § §

The same evening, Kitty went to the attic in search of her friend, Mr. Astroven. She batted the pendulum disc. She *went.*

§ § §

Mrs. Dogen sent several furiously worded notes out into the galaxy by space warp . . . "send me back my cat or else!" The cat did not return.

§ § §

Mrs. Dogen began dumping daily loads of trash into the galaxy by space warp. They sped to various stations within the Sagittarian or Perseid spiral arms and were duly noticed. Shortly afterward, the cat reappeared.

§ § §

Mrs. Dogen's joy in the reunion with her pet was sharply tempered by the realization that Kitty was in the family way. When the kittens arrived, her first impulse was to drown them. They were a constant reminder of the sights and sounds and odors of Mr. Astroven's tenancy, all of which she preferred to forget.

But they *were* cute, and now that they're old enough to talk . . .

BEN FRANKLIN'S AEROPLANE

Ben Franklin said to Thomas Paine,
"I shall invent the aeroplane.
It ought to be a simple thing—
a fabric fuselage and wing.
Through the heavens it might sail
with its belly full of mail.
There'll be hundreds, Mister Paine,
of uses for my aeroplane."

Said Thomas, grinning, "Just for fun,
give it a repeating gun."

—S. Dale

THE SF CONVENTIONAL CALENDAR
by Erwin S. Strauss

Your interest in SF will be more fun if you share it! Get out to a con, a science fiction convention, and meet your favorite authors, artists, editors—and fellow SF fans. For further info, call the phone numbers listed below. For a longer list, send a self-addressed, stamped envelope to: Erwin S. Strauss, 9909 Good Luck Rd., T2, Lanham, MD 20801.

RoVaCon, Sept. 30-Oct. 1, $3, Roanoke, VA. Guest of Honor: Leigh Brackett. Also, Kelly Freas. (703) 389-9400

PghLANGE, Sept. 30-Oct. 2, $7, Pittsburgh, PA. An informal con, this year honoring three local fans. (412) 561-3037

StarCon, Sept. 30-Oct. 2, $16, San Diego, CA. A multimedia extravaganza, with films and old TV shows. (714) 287-6458

WindyCon, Oct. 7-9, $8, Chicago, IL. Guest of Honor: William Rotsler. Impromptu masquerade. (312) 465-1581

SaltCon, Oct. 14-15, Salt Lake City, UT. Star-studded gala, with Heinlein, Pournelle, Alan Dean Foster. (801) 966-1144

OctoCon, Oct. 22-23, $7.42, Santa Rosa, CA. Guest of Honor: Poul Anderson. Also, Robert Heinlein and Leigh Brackett. Presentation of Edmond Hamilton Mem. Award. (707) 887-1474

World Fantasy Con, Oct. 28-29, Los Angeles, CA. A new tradition that's catching on fast. (408) 298-1951

PhilCon, Nov. 11-13, Philadelphia, PA. The oldest con—since 1936. (215) 727-0774

PenultiCon, Nov. 18-20, $7 until Nov. 1, $10 thereafter. Denver, CO. With Joanna Russ and Bruce Pelz. (303) 442-5302

ChattaCon, Jan. 6-8, 1978, $5 in advance, $7 at the door, $5 banquet, Chattanooga, TN. MC: Arsen Darnay. (615) 756-5150

Roc*Kon, Feb. 10-12, Little Rock, Arkansas. (501) 568-0938

WesterCon, July 1-4, $7, Los Angeles, CA. The major West Coast convention. Guest of Honor: Poul Anderson. Also, Jerry Pournelle, Don Thompson. Masquerade. (213) 838-0297

IguanaCon, August 30-Sept. 8, $15 in 1977 (join before rates go up), Phoenix, AZ. 36th World SF Convention. Guest of Honor: Harlan Ellison. The big one—go to one or more smaller conventions to prepare yourself. (602) 274-2011

ON BOOKS . . . & A MOVIE
by Charles N. Brown

Science Fiction at Large edited by Peter Nicholls: Gollancz, 1976, 224 pp., £5.95; Harper & Row, 1977, 224 pp., $8.95.

The Ophiuchi Hotline by John Varley: Dial, 1977, 237 pp., $8.95.

The Future Now: Saving Tomorrow edited by Robert Hoskins: Fawcett, 1977, 286 pp., $1.75 (paper).

Michaelmas by Algis Budrys: Berkeley/Putnam, 1977, 253 pp., $7.95.

Under Pressure by Frank Herbert: Ballantine, 1977, 220 pp., $1.50 (paper).

The Dosadi Experiment, by Frank Herbert: Berkely/Putnam, 1977, 320 pp., $8.95.

The Santaroga Barrier by Frank Herbert: Berkely/Putnam, 1977, 255 pp., $7.95.

The Heaven Makers by Frank Herbert: Ballantine/Del Rey, 1977, 183 pp., $1.50 (paper).

Witch World by Andre Norton; Gregg, 1977 xxxix + 222 pp., $7.95.

Web of the Witch World by Andre Norton: Gregg, 1977, 192 pp., $7.95.

Three Against the Witch World by Andre Norton: Gregg, 1977, 189 pp., $7.95.

Warlock of the Witch World by Andre Norton: Gregg, 1977, 222 pp., $7.95.

Sorceress of the Witch World by Andre Norton: Gregg, 1977, 221 pp., $7.95.

Year of the Univorn, by Andre Norton: Gregg, 1977, 224 pp., $7.95.

Spell of the Witch World by Andre Norton: Gregg, 1977, 159 pp., $7.95.

Modern Science Fiction edited by Norman Spinrad: Gregg, 1976, viii + 540 pp., $25.00.

Rite of Passage by Alexei Panshin: Gregg, 1976, xiv + 254 pp., $12.00.

Hothouse by Brian W. Aldiss: Gregg, 1976, xvii + 253 pp., $12.50.

10,000 Light Years From Home by James Tiptree, Jr.: Gregg, 1976, xxxvi + 312 pp., $13.50.

The Fiction of James Tiptree, Jr. by Gardner Dozois: Algol, 1977, 36 pp., $2.50 (paper).

Alternate Worlds: The Illustrated History of Science Fiction by James Gunn: A & W Visual Library, 1977, 256 pp., $7.95 (paper).

Star Wars, by George Lucas: Ballantine/Del Rey, 1977, 220 pp., $1.95 (paper).

In 1975, my wife Dena was in London seeing publishers, authors, friends, and relatives. A cousin drove her to the first of a series of science fiction lectures being held at the Institute of Contemporary Arts and was startled at the title posted outside. It was "Science Fiction and Mrs. Brown."

The cousin was suitably impressed.

It was coincidence, but I doubt if Dena's cousin believes it. Ursula LeGuin's lecture, the first in the ICA series, concerned real human characters in science fiction. The lecture title was taken from a Virginia Woolf quotation. The 11 lictures, including one by Philip K. Dick not actually given, have been collected in a boogk, *Science Fiction at Large*, edited by Peter Nicholls. Seven of the lectures are by SF authors; three by so-called scientists; and one by fantasy author Alan Garner, which is a self-revealing autobiography, not a lecture. LeGuin is eloquent, but seems to be preaching mostly to the converted. Harrison, Brunner, and Sheckley are rambling and nonspecific. Philip K. Dick is cranky and sometimes incomprehensible. The outside views by John Taylor and Edward De Bono are far more interesting and rewarding because they talk about their perceptions of SF and its relationships to science. The best essays in the book are by Tom Disch and Peter Nicholls. Disch, by choosing his ground carefully, manages to totally demolish the SF field. It will incense most SF readers, mainly because there are too many grains of truth in it. Nicholls spends his time skewering SF critics and does it quite well. Both essays are lively and well-written. They make the whole book a worthwhile experience for those genuinely interested in the field.

John Varley has been making a name for himself in the short story field as the most promising of the newer authors. His first novel, *The Ophiuchi Hotline*, is also promising but not really successful. Varley uses the kitchen sink technique to give us a bewildering array of characters, plotlines, concepts, and background—none of which are fully developed. The ending also fails to tie very much together. Despite this, I enjoyed the book and recommend it. A book that fails because it attempts too much

is still fascinating. A book that fails because it doesn't attempt enough is usually just dull.

One thing about the background Varley uses in both his novel and his short stories has always bothered me—his casual use of transplants. *The Future Now: Saving Tomorrow*, edited by Robert Hoskins, contains a short essay by Frederik Pohl which completely demolishes the whole idea of instant transplants. I won't try to summarize what he says, but the essay and the excellent story that follows it, "The Merchants of Venus," should be required reading for anyone interested in medical solutions to longevity. The ten other stories and introductory essays by Silverberg, Asimov, Anderson, Ellison, and others are also interesting and useful even if you've read the stories before. This is also a very thoughtful essay by Ursula LeGuin which was completely new to me. Hoskins has put together an excellent anthology.

Although his output is small, Algis Budrys has written two of the recognized classics in the science fiction field, *Who?* (1958) and *Rogue Moon* (1960). His new novel, *Michaelmas,* comes close to being a third. Laurent Michaelmas, the world's top hologram reporter and one of its prime movers, is a believable, well-developed person, as are several of the other major characters. The future background is well-integrated and realistic, the writing tense and exciting, the plot well-developed and interesting. Unfortunately, the actual menace, when it finally appears on stage, is unbelievable and uninteresting. The villains turn out to be pure pulp characters who are swept away in a perfunctory denouement. It's probably not as bad as it sounds, but the letdown after the terrific buildup was too much for me. A much shorter version of the book was serialized in *Fantasy & Science Fiction*.

Frank Herbert also has two of the major SF novels of the past to his credit. Everyone is familiar with his sprawling ecological novel *Dune* (1965), but his other early masterpiece *Under Pressure* (AKA *The Dragon in the Sea,* AKA *Twenty First Century Sub* (1956) is sadly neglected. It's one of the tightest suspense dramas in or out of the field, and its background of diminishing energy supplies is more relevant today than it was 20 years ago. I've read it at least half a dozen times over the past two decades without any diminishment in enjoyment. I can't think of a better recommendation than that.

Frank Herbert may have done it again with his newest novel, *The Dosadi Experiment*. It has the tightness of *Under Pressure* plus the wheels-within-wheels intrigue which was so fascinating

in *Dune*. Many SF authors have tried to portray a super-being fully on stage, but only Stapledon and Herbert have come close to succeeding, and only Herbert has managed to do it in an exciting, action-filled novel. I read this on a transcontinental flight and managed to forget where I was. The only reason I equivocated in the first line of this review is because I've read it only once and the complex plotting overwhelmed me. Two words of warning: although this book is nominally a sequel to *Whipping Star* (1970), I'd advise you to read it first. The earlier book is completely different and does not add anything not covered here. Also, read the complete *book*, not the cut version serialized in *Galaxy*. This is the best novel published so far this year.

Not everything by Frank Herbert is great by any means. Berkley has published the first hardcover edition of *The Santaroga Barrier*, a so-so Herbert novel first published in paperback in 1968. Herbert is popular and I assume it will sell, but I wish they had reset the book instead of photocopying the original paperback text and producing the blurred monstrosity we have here. I gave up part way through to save my eyes. Another 1968 Herbert novel, *The Heaven Makers*, has been revised and reissued. It's a not very good example of the "We're Property / Unknown Alien" theme. The revisions seem minor and haven't improved it any.

Gregg Press does hardcover reprints with photo-offset text from the originals; but, unlike Berkley, they do it well and never blur the text. Their latest offering is a set of the first seven "Witch World" books by Andre Norton (see the individual title listing at the beginning of this column). Unlike the usual Gregg Press books, these have handsome dust jackets by Jack Gaughan and endpaper maps by Barbi Johnson. They're also beautifully bound and printed on acid free peper. The series contains some of Norton's best writing; *Witch World* (1963) and *Year of the Unicorn* (1956) are particularly fine. The whole series is the type of fantasy adventure which stands up very well to conftant rereading. Highly recommended. The prices are surprisingly low for hardcover limited edition reprints, and the whole series is available at a discount ($50.00 for the seven books). If you're a Norton fan but can't afford the full set, try picking up the first volume, which has a long introduction about Norton, a bibliography of the complete series (this set only reprints the books which appeared first in paperback), and a chronological chart, all by Sandra Miesel.

Gregg also sent along some more volumes in its earlier series,

all of which I can recommend. Norman Spinrad's anthology, *Modern Science Fiction* (1974) is the best single anthology of post-Campbell science fiction. It is particularly strong on the science fiction of the sixties. Spinrad's history of the field from 1940 to 1970 is well-written, accurate, and succinct. This is the first hardcover edition of an important book which belongs in every library and major collection. Alexei Panshin's *Rite of Passage* (1968) is the best Heinlein juvenile not written by Heinlein. It won a Nebula award. The first American hardcover edition has a new introduction by the author. *Hothouse* (1962), by Brian Aldiss, won a Hugo in 1962 for best short fiction. The present edition is the first American publication of the complete text (a 1962 paperback retitled *The Long Afternoon of Earth* was heavily edited). It's a richly detailed fantasy about an exotic future Earth where the plant kingdom reigns supreme. The book incensed some of the "pure" science fiction readers when it first appeared because of its spider webs connecting the earth and the moon, but its continuing popularity as a major visionary fantasy novel is well-deserved. The new introduction by Joseph Milicia is excellent and contains information on Aldiss unavailable elsewhere. *10,000 Light Years From Home* (1973) was the first collection by a major new writer, James Tiptree, Jr. The original paperback edition was botched in production and is almost unreadable. This edition was reproduced from the first English hardcover (1975) and is a vast improvement. Particularly important is the new introduction by Gardner Dozois, a 30 page analysis of Tiptree and Tiptree's work, which is excellent in both its insights and information. The introduction, plus a bibliography, is available separately as a booklet for $2.50 from Algol Press, Box 4175, New York, NY 10017.

There are at least three encyclopedias of science fiction scheduled to be published in the next two years and I have no idea how good (or bad) they will be. I any case, I can't see any of them superceding *Alternate Worlds: The Illustrated History of Science Fiction*, by James Gunn, as the standard, concise book on the subject. The $30 hardcover, coffee-table edition sold extremely well, and this 9 × 12 paperback reprint is a real bargain at $7.95. The errors and typoes from the original edition have not been corrected, but thankfully the errors are few. Don't miss this one.

Rumor has it that the novelization of *Star Wars*, by George Lucas, was actually written by a well-known science fiction writer who wishes to remain anonymous. I don't blame him. The book follows the movie pretty well and reproduces a lot of the

dialogue, but while the movie is a glorious and exciting experience, the book is dull and embarrassing. Although this is a book column, what I *really* want to talk about is the movie.

I saw an advance preview of the movie with maybe a hundred others in a theater which can hold 1400 people. The audience was mostly movie critics, not normally what you'd expect to be a responsive group to this type of thing; but they all cheered in the right places, booed the villains, and applauded at the end. Me too. The movie recaptured for me a feeling I thought I had lost forever—the excitement one gets (usually at about age 12) of discovering something gloriously new which you need to share, but probably haven't the words to do it. In other words, the old, much-maligned sense of wonder. It was like discovering science fiction for the first time. Lucas took all the clichés from 1940's *Planet Stories*, treated them with love and warmth, and has given them new life. In the process, he has also made one of the most successful movies of all time because he has recaptured that feeling of youth and adventure.

May the force be with you.

CURRENT SCIENCE FICTION HARDCOVERS

AUTHOR	TITLE	PUBLISHER	PRICE	ON SALE
Watson, Ian	THE MARTIAN INCA	Charles Scribner's Sons	$7.95	9/30

CURRENT SCIENCE FICTION PAPERBACKS

Richmond, Walt & Leigh	THE PROBABILITY CORNER	Ace Books	1.50	9/1
Sturgeon, Theodore	THE WORLDS OF THEODORE STURGEON	Ace Books	1.50	9/1
Zebrowski, George	WAR STARS	Ace Books	1.50	9/1

Titles and Data Supplied by the Publishers

IASFM BOOK DISCOUNT DEPARTMENT

The titles which we are offering this month are listed on the right hand page. These books are regular publishers' editions, the very same those available in bookstores. Only those books which appear can ordered; we are not in a position to order other books so please do not include any others on the Order Form.

HOW TO ORDER:

1. Fill in the quantities you wish to order of each title.
2. Fill in the "Discount Price" column by multiplying the quantity of each title ordered by the "Discount Price."
3. Add these totals and fill in the sub-total.
4. Fill in the shipping and handling charges by multiplying the total number of books ordered by 70¢ per book.
5. Fill in sales tax if applicable.
6. Fill in the "Grand Total" of your order.

SHIPPING:

1. All orders will be shipped within 24 hours after they are received.
2. Out of stock titles will be shipped within 30 days.
3. All orders not completed in 30 days will be cancelled and money will be refunded.

PAYMENT:

1. Please enclose a check or money order with your order.

For Office Use Only

Check _____

M.O. _____

Other _____

Issue _____

SEND ORDER TO:
BOOK SERVICE
IASFM BOOK DEPT.
P.O. BOX 166
COS COB, CT 06807

ORDER FORM Please send me the following books:

Quantity	Title	Discount Price

SHIPPING AND HANDLING CHARGE
Add 70¢ per book
Connecticut residents add 7% sales tax

SUB-TOTAL	
POSTAGE & HANDLING Books at	
SALES TAX If Applicable	
GRAND TOTAL	

SHIP TO:

Your Name _____

Address _____

City/State _____ **Zip** _____

Enclosed is my check or money order for $ _____

AUTHOR	TITLE	PUBLISHER	RETAIL PRICE	DISCOUNTED PRICE
Aldiss, Brian W.	THE MALACIA TAPESTRY	Harper & Row	$8.95	$6.95
Compiled by Ashley, Mike	SOULS IN METAL	St. Martin's	6.95	5.50
Edited by Asimov, Isaac	THE HUGO WINNERS—Volume 3	Doubleday	12.50	10.00
Bishop, Michael	A LITTLE KNOWLEDGE	Berkley/Putnam	8.95	6.95
Budrys, Algis	MICHAELMAS	Berkley/Putnam	7.95	6.35
Butler, Octavia E.	MIND OF MY MIND	Doubleday	6.95	5.50
Edited by Carr, Terry	THE BEST SCIENCE FICTION OF THE YEAR No. 6	Holt, Rinehart & Winston	9.95	7.95
de Weese, Gene and Coulson, Robert	CHARLES FORT NEVER MENTIONED WOMBATS	Doubleday	6.95	5.50
Edited by Dozois, Gardner	BEST SCIENCE FICTION STORIES OF THE YEAR—Sixth Annual Collection	Dutton	8.95	6.95
Goldin, Stephen	ASSAULT ON THE GODS	Doubleday	6.95	5.50
Herbert, Frank	THE DOSADI EXPERIMENT	Berkley/Putnam	8.95	6.95
Herbert, Frank	THE SANTAROGA BARRIER	Berkley/Putnam	7.95	6.35
Hodder, William Christopher	THE PRAYER MACHINE	St. Martin's	8.95	6.95
Hoyle, Fred & Hoyle, Geoffrey	THE INCANDESCENT ONES	Harper & Row	7.95	6.35
Edited by Knight, Damon	ORBIT 19	Harper & Row	8.95	6.95
LeGuin, Ursula K.	ROCANNON'S WORLD	Harper & Row	6.95	5.50
Edited by Monteleone, Thomas F.	THE ARTS AND BEYOND Visions of Man's Aesthetic Future	Doubleday	7.95	6.35
Moorcock, Michael	THE ICE SCHOONER	Harper & Row	7.95	6.35
Morressey, John	FROSTWORLD AND DREAMFIRE	Doubleday	6.95	5.50
Edited by Silverberg, Robert	GALACTIC DREAMERS: Science Fiction as Visionary Literature	Random House	8.95	6.95
Van Lustbader, Eric	THE SUNSET WARRIOR	Doubleday	6.95	5.50
Wolf, Gary K.	A GENERATION REMOVED	Doubleday	6.95	5.50

HERETIC IN A BALLOON
by L. Sprague de Camp

In person, Mr. de Camp bears a suspiciously close resemblance to Geoffrey Avalon of his friend Dr. Asimov's tales of the Black Widowers —such as "The Missing Item," which appears in this issue. Mr. de Camp's first published SF story appeared just 40 years ago, in September 1937; but non-fiction works and fantasy—such as his work as editor of Robert E. Howard's famous Conan series—have kept him away for too long. Another tale set on the planet Kforri will be appearing in these pages soon.

I.

The clerk of the court called: "Hear, hear! On this the fifteenth day of Franklin, in the Year of Descent 1008, the District Court of the District of Skudra, in the Kralate of Vizantia, is now in session. All persons having business with this honorable court draw nigh."

As Judge Kopitar entered, the clerk added: "All rise and uncover."

Off came the sheepskin kalpaks, which most of the audience had kept on against the early-morning chill. The small peat fire in the bronze stove did little to lift this chill. Muphrid (Eta Boötis) had not yet risen. Skudra, although but a few degrees from the equator of Kforri, was cool because of its altitude. The doffing of hats revealed rows of broad skulls shaven, except for the single braided tuft, against the invasion of scalp mites. Jaws moved rhythmically, chewing quids of tobacco.

The judge said: "Clerk, lead the court in prayer."

The clerk rose and intoned: "Hail to the gods! May they preserve and watch over us; may they forgive our shortcomings. Hail to the holy trinity of Yez, Moham, and Bud! May Yustinn, god of law, guide us to just decisions. May Napoin, god of war, give us courage to face our duty. May Kliopat, goddess of love, inspire us with due sympathy towards our erring fellows. May Niuto, god of wisdom, increase our understanding. And may Froit, maker of souls, strengthen our characters to choose the right. O gods, inform us with the wisdom of the Ancient Ones, whom at the time of the Descent you did send from your paradise of Earth to teach us the arts of civilization. And look with favor upon the proceedings of this court. Amen."

The clerk looked up and said: "You may sit . . . You there! Put out that pipe! And no spitting on the floor, either! The dignity of the court must be preserved."

The judge said: "Good morning, fellow subjects. Clerk, call the first case."

The clerk said: "The first case is that of the Kralate against Marko Prokopiu of Skudra, twenty-one years old. It is charged that the said Marko Prokopiu did willfully and wrongfully, while employed as a teacher of boys in the public school of Skudra, teach the false and heretical doctrine called Descensionism or Anti-evolution, namely: that the Earth, instead of being a plane of spiritual existence, from which our souls come and to which they

return, is a material place or world like Kforri, and that all men, instead of having evolved under the guidance of the gods from the lower animals of Kforri, came from Earth at the time of the Descent in a flying machine. It is, moreover, charged that the said Marko Prokopiu did not only advance this false doctrine, but did also deny, contemn, and ridicule the true belief, certified by the Holy Syncretic Church of Vizantia and adopted as official by the Kral's ministers, to wit: the doctrine of Evolution—that is, that mankind has, under divine guidance, evolved from the lower animals of this present world. How plead you, Marko?"

Marko Prokopiu, the foster son of the late Milan Prokopiu the smith, stood up. He was a little taller than the average but seemed short because of his abnormal breadth and girth, looking more like a blacksmith than a small-town schoolteacher. His features were rather thick, coarse, and brutal-looking. The blondness of his scalp-lock distinguished him from the dark native-born Vizantians.

Although the elder Prokopius never said where they had obtained Marko, it was supposed in Skudra that he was of Anglonian or Eropian origin. These exotic antecedents had caused the intensely parochial Skudrans to look upon Marko with scorn and suspicion, even after he had grown too big and burly to be openly bullied. This treatment had caused his naturally introverted personality to become even more withdrawn.

Marko looked out over the courtroom. At the back stood the bailiff, Ivan Haliu, leaning on his billhook and wearing the same old helmet, blackened with oxidation, that Milan Prokopiu had hammered out for him years before. Ivan Haliu was looking intently towards the place where Bori Bender sat near Pavlo Arkas. The Benders and the Arkases had a feud on, and one of the two men might try to stab the other.

Marko Prokopiu picked out his friends and foes with a glance. In the front row were his friends: his foster-mother, small and sharpnosed; his wife Petronela, big and handsome; and his boarder Chet Mongamri, the very tall man with the pointed graying Anglonian mustache. It was Mongamri who had persuaded Marko of the truth of Descensionism.

Nearly all the rest were neutral or hostile. There was Vasilio Yovanovi, the father of the pupil whom Marko had thrashed for chasing a fellow pupil with a knife. Although this beating was perfectly legal, as homicide was forbidden to minors, Vasilio Yovanovi had brought the action against Marko. The boy sat

beside his father and visibly gloated. No doubt Miltiadu would call him as a witness.

And there in the bush-beard and tiara of black wool was Theofrasto Vlora, Metropolitan of the Holy Syncretic Church, who had come up from Stambu to oversee the trial and harken on the prosecution. Even if the five jurors had not included Sokrati Yovanovi, a cousin of Vasilio Yovanovi, there was little chance that they would acquit him under the stern eye of the Metropolitan.

"Not guilty," mumbled Marko shyly, and sat down.

The judge said: "The prisoner has pleaded not guilty. Prosecutor, state your case."

Jorgi Miltiadu stood up and began: "Your honor, we expect to prove that the prisoner, contrary to the laws of the Kralate and the regulations of the school board, did willfully and wrongfully . . ." Here followed a restatement of the charge, going in more detail into Marko's iniquities. When Miltiadu had finished, the judge said to Marko's lawyer:

"Counsellor, state your case."

Rigas Lazarevi rose and began: "Your honor, the defense will stipulate that my client did, in fact, teach the doctrines which he is accused—"

"Are you changing your plea to guilty?" cried Jorgi Miltiadu, leaping up like a startled tersor.

"Order," said Judge Kopitar. "Resume your seat, Master Prosecutor; you shall have your chance."

"No," said Rigas Lazarevi. "We adhere to our plea of innocence. It is on another ground altogether that we shall make our defense, namely, that the doctrines in question are true, and that not even the government has the right to compel my client to teach an untruth. For there is a higher law than princes, as our distinguished visitor the Metropolitan—" (he nodded towards Theofrasto Vlora, who stared back coldly over his bristling black beard) "—would be the first to assert. We shall produce—"

"I object!" cried Jorgi Miltiadu. "My honored colleague's proceeding is irregular, his arguments are irrelevant, and his implications are subversive. This is neither a churchly synod nor a meeting of the faculty of the University of Thiné to decide what is true. For our purposes, truth has been clearly set forth in section forty-two of Decree Number 230, Year of Descent 978, relating to the establishment and maintenance of a public-school system . . ."

On they went all through the long morning, back and forth, objecting, arguing, and splitting hairs. As the temperature rose,

the audience squirmed on their benches and unbuttoned their shaggy sheepskin jackets. One even started to pull off his boots until Ivan Haliu stopped him by tapping his shaven skull with the butt of his billhook.

Although the audience was supposed to stay quiet, it was constantly disturbed by individual spectators pushing out of the pews for a trip to the nearest spitoon or to step outside for a nip of slivic. Others whispered and muttered until Judge Kopitar threatened to clear the courtroom.

The prosecution witnesses assembled by Jorgi Miltiadu, such as the Yovanovi boy, were not called, since the defense admitted the acts to which they were to testify. On the other hand, Miltiadu caused the question of the truth of the Descensionist doctrine to be ruled out as irrelevant, so Rigas Lazarevi never had a chance to show the books he had assembled as exhibits. Privately, Marko was just as glad. Many of these books were of foreign origin, and Marko well knew the Skudrans' suspicion of intellectual argument and hatred of anything foreign.

By dinner time, when Muphrid stood almost overhead, all that remained were the summing-up speeches. The court recessed. Marko ate his dinner with the other prisoners: mostly cottage cheese and native Kforrian fungoids, with a little mutton. Prisoner, judge, jury, witnesses, attendants, and spectators scattered to eat their dinners likewise and to stretch out for their three-hour siestas.

§ § §

After siesta, Marko and the rest returned for the final arguments. Jorgi Miltiadu tore into Marko's foreignness: ". . . so this—this unspeakable *alien* not only tried to poison the minds of our youth by false and unholy beliefs. He even went to another outsider, this foreigner—" (He pointed at Mongamri, who glared back) "—from whom he got the damnable doctrine that all men are, in effect, aliens in their own world. Have you ever heard of anything so un-Vizantian?

"Do not be deceived by the specious arguments of my colleague, that it is the teacher's duty to follow the truth wherever it leads. Is Marko Prokopiu a god, that he can tell truth when he sees it, when wiser heads than his have been in disagreement? Obviously not. Shall we allow men tainted by alien blood to teach our children that black is white, or that Kforri is flat, or that Muphrid is cold, merely because some quirk of their natures or some insidious foreign influence has led them astray? As well hire the Einstein-

worshiping witches of Mnaenn to teach their deadly arts and spells in our schools! Or the black hermits of Afka to teach that they are the chosen people of their god!

"Who shall, then, decide the truth? Why, the government of his serene majesty, Kral Maccimo, which can call upon the keenest minds in the Kralate and upon the divine wisdom of the Holy Three as incarnated in the Syncretic Church . . ."

On he went. Marko's heart sank. Rigas Lazarevi, when his turn came, stoutly accused Jorgi Miltiadu of prejudicing the jurors by dragging in the irrelevancy of Marko's birth. But, argue as he might, he could not get around the fact that Marko had broken the law.

When the jury was sent out, the clerk announced: "The next case is that of the Kralate against Mihai Skriabi of Skudra, thirty-four years old. It is charged that the said Mihai Skriabi did, on the eleventh of Ashoka of the present year, ride his paxor down Cankar Street in Skudra while drunk; that he did moreover cause the said paxor to knock down two porch pillars from the house of Konstan Cenopulu the jeweller, causing grievous harm to the house of the said Konstan Cenopulu . . ."

By the time this case was over, the jurors considering Marko's case came back with their verdict:

"Guilty."

The spectators applauded. Marko cringed inwardly. What in the name of Yustinn had he ever done to them? When he got out, he would go far from this bigoted backwoods hamlet with its insensate feuds and its bitter xenophobia. He had been a fool to stay with them as long as he had, under the delusion that it was his duty to enlighten their savage brats.

The judge said: "Marko Prokopiu, I sentence you to imprisonment in the district jail for three years, beginning today, and to pay a fine of one thousand dlars, in default of which you shall spend an extra year in prison."

At this there was another spattering of applause. There were also a few murmurs of surprise at the severity of the sentence. Marko hoped that at least some of the spectators thought he was being unfairly used.

Marko caught a glimpse of Jorgi Miltiadu shaking hands with the Metropolitan, and then his own friends came up. His wife and his foster-mother wrung his hands. Chet Mongamri said in his Anglonian accent:

"It's a damnable shame, Marko, but it will be the making of my

book. Wait till you read the chapter about your trial!"

Marko gave Mongamri a sharp look. This seemed like an odd attitude; especially as Mongamri had, in a way, put Marko up to teaching Anti-evolution.

Back in the month of Aristotle, Mongamri had arrived in Skudra with a mass of notes. He explained that he was an Anglonian who made his living by traveling about the continent and then writing and lecturing on his experiences. He was looking for a place to do a few months' quiet writing before returning to his home in Lann. As no other family in Skudra would admit a foreigner unless paid a fantastically high rent, Mongamri had naturally ended up in the house of the more tolerant and cosmopolitan Marko Prokopiu.

Many a night, Marko had sat up late with his boarder, discussing the world beyond the Skudran Hills and the ideas that stirred men's minds in other lands. Marko had come to consider Chet Mongamri his closest friend. This was not saying much, as he had few friends of any kind and no real intimates. Now, Marko saw that to Mongamri he was at best a chapter in a book.

"Come along, Marko," said Ivan Haliu, grasping Marko's elbow.

Marko let himself be led away.

II.

Marko Prokopiu sat on a stool in one corner of his cell. He rested his elbows on his knees and his chin on his fists, staring down at the floor in front of him. Outside, the rain slanted grayly past the barred window.

Although to some, solitude is a punishment, Marko was glad that he had no roommate. He wanted nothing but to sit on his stool and wallow in solitary despondency.

Behind his somberly immobile face, his mind was a stew of emotions. Part of his mind was proud of him for being a martyr to truth. Another part was ashamed for exposing himself to punishment for the sake of a mere theory, which might not even be true. A third told him that all was over, that he might as well kill himself, while a fourth tried to console him with the thought that at least his mother and his wife Petronela and his friend Mongamri would remain true to him . . .

The lock went *clank* and the door groaned open. Ristoli Vasu, the jailer, said: "Your mother is here to see you, Marko. Come."

Marko silently followed the jailer into the anteroom. There stood little Olga Prokopiu, in her old raincoat of wool impregnated with stupa gum.

"Mother!" he said. He checked an impulse to hug Olga Prokopiu when he saw that she held a cake in her hands.

"Here, Marko," she said. "Don't try to eat it all in one bite." She gave it to him with a sharp look. "Now sit down. I don't want you to fall down when you hear the news."

"What news?" said Marko, alarm stirring in his mind.

"Petronela has run off with that man Mongamri."

Marko's jaw dropped. "What—when—"

"Just an hour or two ago. That's why I came over. I told you no good would come of taking that alien into our house. Either of them. Those Anglonians have no more morals than rabbits."

Marko sat back, waiting for his stunned wits to revive. His mother said sharply:

"Now, don't sniffle. You're a grown man, and it's unseemly to show such emotion. You know what you must do."

Marko glanced around the walls of thick stupa-wood planks. "How?"

"Something will turn up." She glanced at the cake, which Marko's huge hands had badly squashed out of shape.

"Oh," said Marko. He wiped away a fugitive tear and pulled himself together. When not crushed by adversity, he could think as well as the next man. "Tell me what happened."

"After dinner I took my siesta. When I awoke, I called to Petronela to help me with the dishes, and there was no answer, nor yet when I knocked on her door. When I went into your room, there were signs of her having suddenly packed, and on the bureau I found this."

She handed her son a piece of paper, on which Petronela had written, in bad Vizantian:

> My dear Marko: Forgive my leaving you, but I cannot abide such a long wait. I am not well suited to life in Skudra anyway, and you will be happier in the long run with a woman of your own kind.
>
> Farewell, Petronela

Marko read the note through twice, crumpled it, and threw it into a corner of the anteroom with such violence that it bounced halfway back. He said:

"Chet had left too?"

"Yes. I remembered that Komnenu's stage wagons leave around siesta time. I hurried down Zlatkovi Street to Komnenu's stable and found him just hitching up the paxor to leave for Chef.

"There was no sign of Petronela and Mongamri, so I asked Komnenu if he had seen them. He said yes, they had just gone out on the wagon for Thiné, an hour earlier. They seemed very cheerful, laughing and holding hands. Komnenu said he supposed they were going down to Thiné to hire some lawyer more skillful than Rigas Lazarevi."

Marko picked up the crumpled sheet of note paper, smoothed it out, and read it again, as if by reading it often enough he could persuade it to change its wording. The note remained the same, and so did the searing spiritual pain that flooded his mind. Finally he said:

"What should I do, Mother?"

"Wait till tonight." She lowered her voice, glancing towards the open door into the jailer's office. "Then eat that cake, and do what seems best to you."

"Thanks. Come again soon."

"I shall see you again sooner than you think. Good-bye, and keep your character up. Your father was a man of much less intelligence than you, but he had character."

Olga Prokopiu gathered her raincoat about her and clumped out, looking too small for the voluminous garment and the heavy peasant boots, but spry for her years.

Marko returned to his cell with the note and the mangled cake. He set the cake down in a corner and himself in the opposite corner. He stared at the cake, biting his lips. He beat his fist against his palm, jumped up to pace the cell, then sat down again. He dug his knuckles into his scalp and pounded his knees with his fists. His lips writhed; his huge hairy hands clenched and unclenched.

At last, unable to control himself any longer, he jumped up with a hoarse animal yell, between a scream and a bellow. He glared at the cake, half tempted to kick or trample it—anything to work off the volcanic energies rising within him. But he retained sense enough to know he might want it later, and anyway it was his mother's gift. Instead, he caught up the stool and slammed it against the cage bars with such force that he broke off the leg by which he held it.

"Here! Here!" cried Ristoli Vasu, coming at a run. "What are

you doing, Marko? Stop at once!"

Marko picked up the remains of the stool and continued to batter at the bars until the article was reduced to splinters. Then he leaped up and down on the splinters, stamping them with his boots.

"You shall have no supper!" yelled the jailer.

Marko only screamed at Vasu, rattled the cage door, kicked the walls, and pounded his own head and body with his fists.

"This is undignified!" cried Ristoli Vasu. "Marko, you're acting like a child in a tantrum!"

As these words penetrated Marko's red-hazed mind, the fit left him and he threw himself down on his pallet weeping. That, too, was un-Vizantian, but he did not care.

This, too, passed. Marko sat on the floor. He stared blankly, his mind filled with fantasies of horrible things he would do to Chet Mongamri and to Petronela, too; only the things he would do to Petronela were not quite so horrible. He still loved her in a way.

He could not understand how such a thing had happened. How, he thought, could he have overlooked the signs of Petronela's increasing dissatisfaction with her life in Skudra, or the mutual interest that flared up between her and Mongamri as soon as the traveler moved in? It would have been hard enough for an alien girl like Petronela to get herself accepted by the Skudrans if she had married the most popular man in town. Having married one of the least popular, she found it quite impossible. To her, social acceptance and activity were of great importance.

Deprived of his supper as punishment for destroying the stool, Marko ate the cake. Nobody, he thought, could make cheese cakes as his mother could. About the third careful bite, he encountered the expected file. He looked at the file and then at the window bars, beyond which the rain still fell. A slow smile formed on his broad face.

§ § §

After midnight, Marko Prokopiu knocked on the window of his mother's bedroom. The old lady got up at once and let him in.

"Good," she said. "I knew my son wouldn't falter when his honor had to be avenged. How will you get to Thiné?"

Marko grinned. "I stole Judge Kopitar's horse and then broke into the schoolhouse and stole the school funds. I had a key to the strongbox hidden away."

"Why, Marko! What a desperate character my mild-as-milktoast son has become!"

"Huh! What have laws and morals done for me? Here, take this. You will need something to live on. But don't spend it lavishly, or people will suspect it's not yours."

He pressed some of the stolen money upon her and stepped into the livingroom, plainly but decently furnished in the rustic style of the Skudran Hills. Olga Prokopiu's little tame tersor sat asleep on its perch, wrapped in its membranous wings. Marko stepped over to the big ornate chest, which Milan Prokopiu had brought all the way from Chef, to take out his father's war ax. He slid the ax head out of its leather case to see that all was well.

Milan Prokopiu had made this piece at the height of his powers. It had a two-foot steel shaft protruding from the wooden handle. From the other or butt end hung a leather thong to be looped over the wrist, so that if the handle slipped out of the user's grip, the weapon should not be lost.

Having returned the ax head to its case, Marko loosened the belt of his sheepskin jacket, thrust the pointed end through the loop on the back side of the case, and buckled the belt back on. The case was large enough to keep the steel spike on the end of the shaft, or the other, curved spike opposite the blade, from poking the wearer. All the steel of the ax was blued and heavily greased. So was all ironware on Kforri, where the damp, oxygen-rich atmosphere would otherwise soon rust it away to nothing.

He also took down from the wall a round steel buckler with a single handle behind its boss, a hook on the boss to hang a lantern from, and a strap to hang the shield over his back. Although no swashbuckler, he knew that the world was a rough place.

"How about some food?" he said.

"I'll get it for you," said his mother. Actually, one could make the journey from Skudra to Thiné without taking any food along, because the ubiquitous fungoids provided nourishment. But it was known that a diet of fungoid, unmixed with cultivated food, would in the long run cause bodily weakness and disease.

While Olga Prokopiu bustled about, Marko asked: "Was there anything to show where they were going after Thiné?"

"No. I suppose they mean to return to Anglonia."

Marko mused: "If they had gone to Chef, they would have taken a ship across the Medranian Sea. As they have set out for Thiné, they would cross the Saar by caravan."

"You should know, son; you have traveled."

"I shall catch them," he said.

"See that you do." She gazed fondly at her son. "Put them to a

terrible death; something I can be proud of."

Marko gathered up such spare clothing and other gear as he thought he would need, gave his mother a hug, and went out into the rain. Judge Kopitar's horse was tethered behind the Prokopiu house. Like all horses on Kforri, it was an animal of medium height and stocky, massive build.

Marko strapped his traveling bag behind the saddle, unhitched, and mounted. The horse shifted its feet and shook its head uneasily. It sensed that Marko was not its owner, but his weight discouraged it from trying to buck him off. Marko pulled the hood of his raincoat down low over his kalpak, so that it nearly hid his face, and turned the horse's head towards the road to Thiné.

Marko knew all the local roads well and had once been to Thiné, during his sabbatical two years before. He had, in fact, traveled all over Vizantia. He had been to the seaports of Chef and Stambu and Moska and Bukres, to the great stupa forests of the Borsja Peninsula, and finally to Thiné, where he had studied at the university.

At Chef, he had become acquainted with Woshon Seum, the representative of the Anglonian trading-firm of Choerch and Jaex. Knowing Woshon Seum, he was bound to meet Seum's daughter Petronela. They fell in love and got married, and Marko brought her back to Skudra, to the ill-concealed consternation of his mother and his associates. He had never been popular, and marrying an alien seemed to many townsfolk to be the last straw.

As he trotted through the outskirts of Skudra, Marko looked back towards the center of the town. All was dark and quiet under the pattering rain. He turned and faced the road north. Little mainte-

nance was done on this road, so that the only check on the swift growth of the fungoids was the hooves and wheels of traffic. These merely mashed the undiscourageable vegetation into slimy pulp. Despite the calks on its shoes, the judge's horse slipped and skidded on slight slopes. On steeper ones, Marko had to get off and led it, wishing he had been able to steal a paxor instead. This was an elephantine plant-eating reptile, which the people of Kforri domesticated and used as a heavy draft animal.

The rain let up. Marko plodded on. Wet fronds or stalks of the plants that overhung the road, like grasses and mosses enlarged to tree-size, brushed against him. An active volcano glowed dull red against the underside of the rain clouds and its own smoke plume. Rifts appeared in the clouds, through which Marko glimpsed Gallio, the nearest and brightest of the three little moons, sweeping through the stars.

III.

Ten days after leaving Skudra, on the first of Napoin or Napoleon, Marko Prokopiu jogged into Thiné. Along the way, he had been pursued in the Zetskan Hills by a transor, the largest of the planet's dinosaurian predators. Several nights he had to sleep out, but he was used to roughing it. His father, a mighty hunter, had taken Marko on many camping trips.

Near Skiatho, a trio of rash robbers waylaid him and sent an arrow through his raincoat. He turned the judge's horse while tugging out his ax, and presently the archer was lying among the fungi with a cleft skull, while his fellows fled. Marko appropriated a good steel bow, a lizard-skin bow case, and a quiverful of arrows.

All this, however exciting, had no real bearing on the object of his search. When he arrived in Thiné, a spacious city built entirely of marble (a material as common on Kforri as good wood was scarce) he found himself quarters. Then he spent a day searching the city for Mongamri and Petronela.

He inquired at all the inns and promenaded the parks and shops without success. He loitered in the central square, where the caravans made up to cross the Saar to Niok and the cities of Arabistan. He asked the caravan dispatcher whether any persons like Petronela and Mongamri had gone out on the last caravan.

The man assured him that he had seen nobody like that.

Moreover, the last caravan, which had left two days before, had been enroute to Asham in Arabistan, far from Niok. No caravan had left for Niok in ten days, although one was due to leave in four.

Marko was sure that his quarry must still be in Thiné. They would be bound for Anglonia. Believing him still to be in jail in Skudra, they would be in no great hurry. If he did not come upon them in the next three days, he could surely intercept them when the caravan for Niok mustered in the square. He preferred to catch them sooner if possible, before the news of his escape from the jail at Skudra should reach Thiné and a warrant be issued for his arrest.

He was also anxious not to let them escape from Vizantia, for he had heard that in some other countries, homicide was a criminal as well as a civil offense. And while Marko's rage at the wrong done him had been unbounded, his basically law-abiding nature had begun to reassert itself.

On his third day in Thiné, after a perfunctory stroll about the central part of the town to look for his wife and her paramour, he rode out to the university grounds. There he hunted up the professor who had been his faculty adviser when he had studied here.

In his office, Gathokli Noli was entertaining a stranger, a small gray-haired man with a bulging dome of a cranium, a sharp nose, and a receding chin. The man wore Anglonian clothes: knitted trunk-hose and shoes with flaring tops and pointed toes, instead of the Vizantian baggy, checkered pants tucked into the tops of heavy boots. The stranger wore eyeglasses, a Mingkwoan invention still rare in Vizantia. He spoke with an Anglonian accent,

reducing the rolled Vizantian *r* to a soft, vowel-like sound. Instead of his wearing the Vizantian scalp lock, his hair was cut to a uniform length of a half-inch, so that it stood up in a stiff gray brush.

"By the Great Fetish of Mnaenn, it's Marko!" said Gathokli Noli. "Come in, old man. Marko, this is Dr. Boert Halran of Lann, the eminent philosopher."

Marko acknowledged the introduction shyly but with the natural dignity of the Vizantian hillman. "What brings you to Thiné, Doctor Halran?"

"I have come to purchase stupa gum, sir."

"Isn't it for sale in Anglonia?" asked Marko.

"Yes, but only in minute quantities. I require a considerable amount, so it is cheaper for me to come all this distance to obtain it at a wholesale price."

"Are you using it for some experiment?"

"Yes, sir; the most portentous experiment of the era, if I may so assert." Halran shimmered with self-satisfaction.

"Indeed, sir? May I ask what it is?"

"Have you ever heard of a balloon?" asked Halran.

"No. The word is unfamiliar to me."

"Well, are you familiar with the hypothesis that, if one could inclose hot air in a bag, the bag would rise like a bubble in water?"

"There was some talk about it at the university when I was here. As I was immersed in courses in pedagogy, I didn't go very far into science."

"Well, I have actually accomplished it."

"Made a bag rise?"

"Yes, bags of various magnitudes." The little man glowed with enthusiasm. "One of the largest raised me to an altitude of a hundred feet and stayed up for two hours. It frightened the peasants to death when it came down in their fields, so my next model I tethered by its drag rope to keep it from being wafted anywhither.

"My next step will be to construct a balloon large enough to raise the weight of several individuals. The bag has already been sewn together; there remains but the matter of the stupa gum to render it air-tight."

"How do you heat this air?" asked Marko.

"By means of a large peat stove."

"I see. But after the machine has risen, won't the air inside cool off and let you down again?"

"Eventually, yes. But this balloon is equipped with a smaller stove suspended above the car, so that, by feeding more hot air into the bag, I can maintain altitude much longer."

"I should love to see it," said Marko.

"If you are in Lann about the third of Perikles, come around. On that day, I intend to inflate my balloon for a flight to the Philosophical Convention at Vien."

Marko said: "I have heard of these philosophical conventions and should very much like to attend one. How do you do it? I mean, what must one be or do to get in?"

"Merely pay a small registration fee."

"Is that all? No special degree is required?"

"No; we philosophers are only too glad to have the public take an interest in our accomplishments. These conventions have been in operation only about ten years, but they grow bigger every year. This year there are rumors that a pair of philosophical brothers from Mingkwo will bring some sensational inventions they have developed. If, that is, the Prem of Eropia does not choose that time to start a war or massacre his enemies."

"Is he a dangerous man?" said Marko, who had heard only vaguely of the vagaries of Alzander Mirabo.

Halran whistled, rolled up his eyes, and held his palms together as in prayer. "Extremely dangerous. Shrewd, ruthless, unpredictable, and insatiably ambitious. If he thinks you stand in his way, he may entertain you one day and charm you with his affability, and the next have your head hacked off in the main square of Vien.

"The Chamber elected him Prem because he promised to break the power of the magnates, which he did. Then he got all their lands and manufactories into his own hands. Since then, he has ruled the country with an even more iron hand than the magnates did."

"Why don't the Eropians revolt?" asked Marko.

"Them? Oh, most of them like him. He poses as the champion of the masses against their exploiters and so has achieved a meretricious popularity—"

"He has effected some real reforms, too," interjected Noli.

Halran shrugged. "If you consider those worth his turning the judicial system into an instrument for punishing his personal opponents. But his ambitions do not stop there. He has been strengthening his army lately, and rumors hint at an invasion of Iveriana. Of course, when my balloon is perfected, it will make war impossible. But there are still many details to be worked out."

"How will it make war impossible, sir?" said Marko.

"By making it too risky and too horrible for men to endure. How could any government defend its land against a horde of enemies rising in balloons on the windward side of the border and descending anywhere in the realm? This invention will compel the nations to unite to abolish war."

Marko inquired: "Have you got your stupa gum yet, sir?"

"No; it will take some days. The Kral's government requires much signing of papers before it will let me export the material, which is curious when you consider that stupa-tree products are the main export of Vizantia."

"Not so odd," said Gathokli Noli. "These forms are to make sure nobody fells a stupa tree on his own, contrary to law." He turned to Marko: "And now let me ask: What brings you down from your misty mountains? How is your handsome wife?"

From a stranger, Marko would have resented a question about his wife. Vizantians considered it indelicate to talk about marital relationships. After all, everybody knew what married people did. But Noli was an old friend, and the people of the university were a bit looser in such matters than Marko's fellow-Skudrans.

As for Halran, it was notorious that Anglonians had no such inhibitions. Marko gulped and replied:

"As a matter of fact, it is she that brings me here. She decided she liked one of her fellow countrymen better than me, and I'm following them to send them to Earth." He touched his ax.

Halran started visibly. Noli merely raised an eyebrow. "Oh? I shouldn't have mentioned the matter, had I guessed this complication. I'm sorry for your trouble and wish you success."

"Have you seen either of them?" Marko, twirling an imaginary mustache, described his faithless friend Mongamri.

"No-o," said Gathokli Noli. "But I'll keep a watch for him."

Halran said: "By Kliopat, you two talk calmly enough about slaying a man. Do you really mean that, or is this a jest?"

"No joke at all, sir," said Marko. "What I plan to do is not only legal; it's practically compulsory. If I didn't make every effort to kill the guilty pair, I should be held in aversion and contempt."

Halran shuddered. "In Anglonia we consider such a thing barbarous."

"No doubt, sir. Of course, an ignorant hillbilly like myself has no right to speak. But, while in Anglonia you place an absurdly high value on human life, you don't take honor and purity so seriously as we do."

"But my dear fellow, there is no comparison between killing a fellow being and giving one of the other sex a few minutes' harmless pleasure."

"Harmless pleasure! That only proves how depraved and immoral—" began Marko with heat, but Gathokli Noli interrupted: "Other lands, other customs. I'll tell you: why don't you, Marko, promise to spare the man who cuckolded you while Boert swears eternal chastity?"

"But I am a married man!" protested Halran.

Marko said: "That would not be fair. At Doctor Halran's age—"

"I like that!" cried Halran. "What do you know about my private life, Master Prokopiu?"

"Gentlemen, gentlemen," said Noli. "Let's change the subject, which is becoming just too indelicate. Are you attending commencement tomorrow, Marko?"

"I hadn't known you were having it," said Marko. "But I shall be glad to come." Privately he thought this a good chance to run into Mongamri and Petronela.

"As a diploma holder," said Noli, "you will be deemed a member of the university, ranking with the two-year sub-bachelors. You shall therefore sit with the graduates and wear an academic robe."

"Oh, said Marko. "Had I known, I should have brought mine from Skudra, but as it is . . ."

"That's all right; I'll get you one," said Noli. "Meet me here at

the third hour tomorrow."

§ § §

Marko spent the rest of the day in a further futile search for his victims. The next morning, he appeared at Gathokli Noli's office at the appointed time.

Gathokli Noli hung upon him the short black cape of the holder of a mere diploma in education, and himself donned the sweeping scarlet cassock of a full professor. Boert Halran appeared too, in the purple surplice of an Anglonian Doctor of Philosophy.

They solemnly tipped their academic hats to each other and marched out and across the campus to the commencement grounds. Over these had been erected a great canvas canopy; for, although Muphrid showed his face at that time, it was too much to expect the heavens of Thiné to refrain from raining for half an hour at a stretch.

Gathokli Noli explained as they walked: "Sokrati Popu will deliver the commencement address and receive an honorary doctorate. That should cause some uproar."

"Why?" asked Boert Halran. "Is this Popu unpopular?"

Gathokli Noli rolled his eyes. "He's the leader of the Distributionist movement."

"What is that?" inquired Halran. "I have sufficient difficulty keeping up with the politics of my own land, let alone that of others."

Gathokli Noli explained: "As you know, the main wealth of the Kralate lies in the great stupa forests of the Borsja Peninsula."

"Yes."

"Besides the stupa gum you are after, one of those trees contains enough wood to build a small city. Nowhere else in the world, as far as it has been explored, do real trees grow to a fraction of such size."

"I see," said Halran.

"Well," continued Noli, "a generation ago, private lumbermen were making serious inroads into the forests. The then Kral, Jorgi the Second, was a far-sighted man. He saw that the trees were being cut faster than they grew and that the whole process was wastefully managed. So he nationalized the forests and set up a program of controlled cutting and planting.

"That worked until the present Kral came to the desk. Kral Maccimo—" (Noli glanced about) "—is a man of, say, a character different from that of his father. There have been complaints that the forest service is loaded with political hangers-on who do

nothing but shuffle papers. Therefore a group of magnates started a movement to have the government sell the forests to them cheaply.

"To promote their idea, they take advantage of the Kralate's financial troubles, the complaints of people who wish unlimited stupa wood for building, the pressure of the lumberjacks' guild, and anything else that will serve their turn. But the students are mostly Retentionists—that is, anti-Distributionists—so there may be a distrubance."

They came to the commencement grounds, where the public seats were fast filling. Gathokli Noli showed Marko and Halran their proper places. Marko found himself in a whole section of diploma capes. As he sat down, the handle of his ax, hitherto hidden by his cape, touched the leg of the man beside him. This man stared and whispered:

"You should not have brought that thing in here!"

Marko smiled and shrugged vaguely. He began peering at the other sections from under the brim of his academic hat.

The professors were assembling on the platform. Undergraduates were pushing into the large front-center section reserved for them. They indulged in much shoving and horseplay, which the admonitions of the beadles did little to check.

Then Marko saw Chet Mongamri and Petronela come in through one of the main entrances and take places with the rest of the public. They were a long way from Marko and to his left rear, so that he had to crane his neck to see them. His breath quickened, and he turned his head to the front again lest they recognize him. A cold rage filled him, so that he hardly heard what went on around him. He clenched his fists and bit his lips. The men next to him edged away from his apocalyptic aspect.

At last everybody was in place. The beadles stood at attention at the ends of the aisles, holding their staves as if they were pikes. The president of the university, Mathai Vlora, opened the proceedings.

The university's band played *Vizantia Victorious*. The president introduced the Bishop of Thiné. The bishop invoked the blessings of the gods upon the university and its students—especially the blessings of Dewey, the god of education.

The president gave an opening address, which seemed to Marko to say nothing very eloquently, and began introducing the recipients of honorary degrees. There was Maccimo Vuk, the distinguished assassin, who had given the university ten thousand

dlars. There was Ivan Laskari, who claimed to have proved that atoms existed. And, after several others had been honored, there was Sokrati Popu. His only qualification seemed to be that, as head of the Distributionists, he stood to become the richest man in the nation if his scheme went through.

Sokrati Popu was a short man with a large head, bald and jowly. He let the president drape the yellow stole of the honorary doctorate around his neck. They tipped their academic hats. Sokrati Popu stepped to the lectern at the front of the platform, laid a sheaf of manuscript down in front of him, raised a lorgnette to his eyes, and began to read the commencement address.

"Young men and fellow subjects," he began in a rasping monotone, "it gives me great pleasure . . ."

After several paragraphs of the usual clichés of commencement oratory, he got down to business: ". . . Vizantia stands at the fork of the road. Which horn of the dilemma shall we take? One hurls us into the swamp of state monopoly, which has crushed the proud nation of Eropia, once a leader of civilization, to a nightmare of bureacratic stagnation. The other leads the ship of state back along the highroads of private enterprise, which stand guard at the shrine of economic sanity—"

At that instant, a student stood up in the undergraduate section and threw a tersor egg at Sokrati Popu. The missile missed its target and spattered against the wall of the Liberal Arts Building, which formed a background for the ceremony.

Instantly the two beadles nearest to the undergraduate section plunged into the black-cloaked mass and pounced upon the student. They dragged him out, despite the efforts of the other undergraduates to trip and impede them, and hustled him up an aisle to the exit.

"There's one who gets no degree today," said the man beside Marko who had objected to his ax.

Sokrati Popu resumed his discourse, but now the undergraduates began to mutter in cadence: "I—want—money; I—want—money; I—want—money . . ."

The beadles, hovering on the fringes of the undergraduate section, reached in and whacked a couple of the noisier of the mutterers with their staves. The chant subsided; Sokrati Popu doggedly resumed:

"What do these benighted bureaucrats really want? To save the stupa forests for posterity as they say? Nonsense! We can never exhaust the stupa forests, and anyway what has posterity ever

done for us? The bureaucrats want power! Make no mistake, my ardent young friends—"

Another student threw another tersor egg. More beadles tried to reach him, but now the undergraduates clutched them and pulled them down. Marko glimpsed a beadle's arm flailing about with its staff and then disappearing under the black, billowing mass. The students chanted:

"Wood—for—Popu; wood—for—Popu; wood—for—Popu . . ."

Others stood up and hurled not only eggs but also bits of edible fungoids in various states of decay. The president popped up and shouted threats at the undergraduates, who made rude noises and threw more missiles. These spattered not only Popu but also the president, the faculty, and the other guests. The president roared orders to the beadles, who waded into the throng, swinging their staves at every undergraduate head they saw.

The fight boiled out into the aisles. Through it all, Sokrati Popu stood behind his lectern, raw tersor-egg running down his face, and doggedly continued his address. Marko could see his mouth move, even though he could not hear any words.

Marko tore his attention away from the fracas in front to look back into the audience. They were all standing up to see better. Among the heads he glimpsed the sweeping Anglonian mustache of Chet Mongamri.

Knowing his duty, Marko rose with pounding heart, unsnapped the flap of his ax sheath, and pushed his way out into the aisle. He dodged a couple of fights, ran up the aisle all the way to the rear, crossed over to the left side of the audience, and started down the left interior aisle. As he ran, he drew the ax from its case.

Marko dodged around beadles dragging undergraduates out and bore down upon Chet Mongamri, who had taken an aisle seat. He was sighting on the back of Mongamri's head for a place to sink his ax blade when a beadle, taking cognizance of Marko's homicidal intentions, released his undergraduate and grabbed Marko's sleeve, shouting:

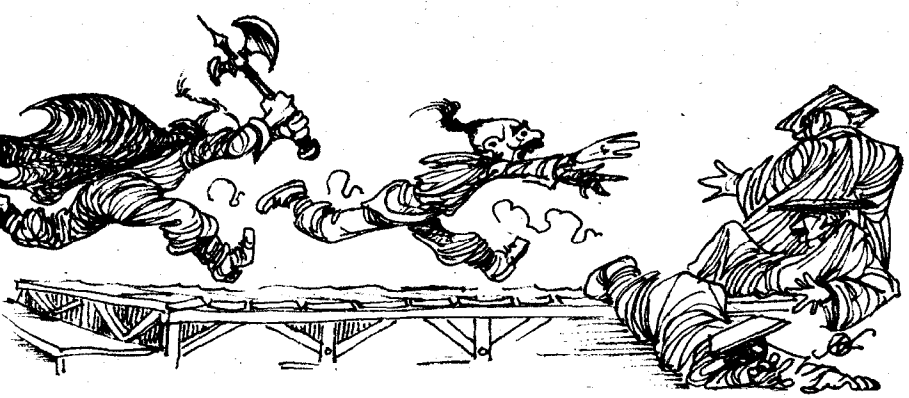
"Ho, there, you!"

Marko jerked his arm free and pushed the man in the chest, bowling him over, then turned back to resume his charge. But the beadle shouted, and others joined in. The noise down front had momentarily subsided, so that this sudden outburst caused many of those further foward to turn their heads. One of those who looked around was Chet Mongamri.

Marko saw Mongamri's jaw sag and his eyes bug as he recognized Marko. Marko swung the ax high and bounded forward. Beside Mongamri, Petronela shrieked.

Mongamri stepped out into the aisle and ran towards the stage ahead of Marko. A lean man, taller than Marko, he could show a remarkable turn of speed. Marko pounded after, and the beadles ran after Marko.

Mongamri leaped to the left end of the platform and started to run across it. Marko jumped up after him. In the middle of the stage, President Vlora was still shouting directions to his beadles and threats to his students, while Sokrati Popu continued to deliver his inaudible speech. On the upstage part of the platform, the faculty and the distinguished guests were crouched on their



knees, holding the light chairs in front of them as shields against the rain of missiles.

Mongamri pushed between the president and Popu and ran on to the right end of the platform. The president and Popu looked around at this interruption. Both saw Marko approaching with his ax. With a scream of terror, Sokrati Popu turned and dove in amongst the cowering faculty, while Mathai Vlora leaped off the platform into the boiling, black-cloaked mass of undergraduates.

Marko ran on. He reached the right end of the platform to see Chet Mongamri streaking back up the right interior aisle. The fellow was actually gaining on him. Marko sprang down from the edge of the platform and gathered his great muscles for a desperate sprint, when his head exploded and he knew no more.

§ § §

When Marko Prokopiu regained consciousness, he was first aware of lying on a bed and then of a splitting headache. He raised a hand to his head and discovered that on the crown, just in front of the scalp lock, it bore a lump the size of a tersor egg.

"Waking up, eh?" said a voice with an accent. After a few seconds, Marko identified the voice as that of Boert Halran, the little Anglonian philosopher.

Marko groaned and sat up. "Where is this?" he asked.

"This is my room," said Halran.

"How did I get here? The last thing I remember was chasing that lecher Mongamri—"

"A beadle fractured his staff on your head as you ran past him. He would have arrested you, because it transpires that in Thiné there is some quaint law that renders it a misdemeanor to kill people during commencement exercises, church services, and other public occasions. But the riot became general, and the beadle had his hands full with whacking undergraduates. I thought only Anglonian students did that sort of thing."

"I don't know Anglonia, but the Thinean undergraduates are the rowdiest lot of savages in the Kralate. I had to knock several of them cold when I was here before. Go on, please."

"Well, Noli and I fought our way through the mob and carried you to his office; or rather, we got an undergraduate to help us, because you are the heaviest man I ever tried to lift. Then we could not bring you back to consciousness. You must have had a slight concussion."

"Where's my ax?" said Marko.

"Here is that murderous monstrosity. While you were in the

office, some of your local police agents came by looking for you. Noli hid you in his closet. They explained they had a warrant for your arrest, which had been sent down from Skudra for breaking jail there. I did not realize you were such a calloused character."

"I didn't use to be," groaned Marko. "I was only trying to do my duty."

"Well, they informed us about your having been sentenced for teaching Descensionism, too, and Noli told them he had no conception of where you were. As he explained to me subsequently, he is an Evolutionist himself; but, believing in freedom of speech, he thought himself obliged to protect you. Finally, they departed to scour the town for you. Then Noli asked me to conceal you. I do not like to become involved in the domestic quarrels of another country, but I owe Noli many favors and so let myself be persuaded."

Marko's mind had begun to work, despite the fact that an invisible smith seemed to be using his head for an anvil. "What day is this?"

"The fifth of Napoleon. You have been unconscious for almost exactly twenty-four hours."

Marko groaned. "They'll have left on the caravan! I must get my horse!"

"You will not find your horse, I fear."

"What? Why not?"

"The officers informed us they had recovered a horse you had stolen from some magistrate in Skudra. Is that the one you refer to?"

"Yes." Marko held his head for a few seconds. "Do you know when the next caravan leaves for Niok?"

"On the eleventh. That is the one I shall take."

"Then I shall go too."

"Oh?" said Boert Halran with a note of alarm in his voice.

"Why not? I can pay my way, and it looks as though the Kralate would be too warm for me for a while." Marko stood up and cautiously moved his head. "A little dizzy, but it will pass. I'll go to my own quarters so as not to encumber you any more, sir."

"Are you feeling all right?" said Halran. "It would be most inexpedient for you to lose consciousness in the street."

"It will take a thicker club than that to crack my skull. Thank you for your valued hospitality."

"You are welcome, my friend. Oh, before you go, Noli asked me to collect from you the price of that academic hat he obtained for

you. The blow ruined it, and if you do not pay for it he will be compelled to do so."

Marko paid and departed. He got back to his own room without encounters and spent most of the next five days there. He would have liked to search the town some more, to make sure that Mongamri and Petronela had in fact departed on the caravan of the fifth; but he feared being recognized.

IV.

As Muphrid rose on the eleventh of Napoleon, Marko Prokopiu, carrying his bag, came to the central square, where the caravan was mustering. Having no mount, he would have to buy a seat on a camel to Niok.

The caravan conductor, a swart Arabistani named Slim Qadir, stood at the center of a knot of travelers, assigning them their places and collecting fares. Among the passengers, Marko recognized Boert Halran. Halran had, besides his own luggage, a large hand cart on which stood four huge jugs. A pair of workmen leaned against the wheels of the cart.

Four archers in well-oiled hauberks of chain mail squatted on their heels, holding the reins of their horses. These men were supposed to protect the caravan from robbers and wild beasts. Because of the protection they afforded, the conductor collected

fares even from those who had their own mounts or vehicles for the privilege of accompanying the rest.

"All right," said the conductor to Halran. "I'll hang these four jugs on one of my camels and give you a seat on another. Can you manage a camel?"

"Yes."

"Then let me see, who shall take the other seat of old Mutasim? You!" The conductor addressed Marko. "Do you wish a seat too?"

"Yes," said Marko. "To Niok."

"Can you drive a camel?"

"I've never tried."

"Then you can't. You shall take the back seat on this beast. I ought to charge you extra fare because of your weight, but I'm in a generous mood."

Halran looked quizzically at Marko. "You seem to be my fate, my sanguinary young friend. Have you ever traveled by camel?"

"No, sir."

"You have much to learn, then. Strap your bag on here."

Boert Halran showed Marko how to stow himself and his gear aboard their beast. Then he went to help the two workmen, the conductor, and the caravan dispatcher to manhandle the jars off the cart and sling them on the next camel astern. When this had been done, he came back and climbed into the front seat on Marko's camel.

The caravan dispatcher looked at the big vertical sundial, which rose out of the ornamental fountain at the center of the square. "Only fifteen minutes late," said he to the conductor. "If I live long enough, I shall get a caravan off on time yet."

The dispatcher smote a gong with a long-handled mallet. The conductor shouted orders. With a chorus of snorts and moans, the camels rose. Marko, forewarned, gripped the handhold in front of him and so was not thrown off, although one other passenger was. The camel behind Marko's rose, laden with the four amphorae of stupa gum.

Marko's saddle was part of an elaborate structure, which fitted around the camel's forward hump, with a gap in the middle through which the shaggy apex of the hump projected. Behind the hump was one seat, on which Marko sat. Forward was another, on which sat Boert Halran with his feet resting on the back of the camel's neck.

The caravan consisted mainly of thirty-two camels, carrying riders or loads. There were also a wagon pulled by two camels, a carriage drawn by a pair of horses, two other horses with riders, and the four mounted archers. The camels had little sticks tied to their tails with flags to indicate ownership.

"Go!" cried Slim Qadir, the conductor. The procession formed as mounts and vehicles took their places in the line, which crawled out of the main square of Thiné.

They plodded out the square, through the streets, and along the west road. They passed through the avenue of stupas that Jorgi the First had planted many years before. These were mere saplings compared to those of the Borsja Peninsula, none being over twelve feet in diameter.

As the caravan climbed towards the Pindo Hills, a northward continuation of the Skudran and Zetskan Hills, the trees became smaller and sparser. Their place was taken by the crowding, bamboolike kackinsoni. The sky clouded over; the rain began. They sloshed through the Borgo Pass, between the volcanoes Elikon and Parnasso, and down the long slope towards the Saar.

§ § §

On the following day after siesta, Marko saw the Saar for the first time. The sandy soil stretched away to the horizon, sparsely covered with patches of phosphor-grass and little bat-veiled fungoids. Here and there rose a clump of the onion-mushroom, *Scallionis*. Slim Qadir warned his party that the local variety, although appearing just like other onion-mushrooms, was deadly

poisonous. When they got closer to the Medranian Sea, the onion-mushrooms would become safely edible again.

Hours ticked slowly past as they jounced across the vast waste. Its aridity was due to the long spur of hills, which the Equatorial Range thrust northward from the spine of the Borsja Peninsula. The Skudran and Zetskan and Pindo Hills were links in this chain, which wrung most of the moisture out of the prevailing northeasterly winds.

The terrain varied from hour to hour. Sometimes it was flat or gently rolling sandy country with scattered fungoids and spiny shrubs. Sometimes there were lifeless dunes. They passed jagged outcrops of rock and clumps of low, steep-sided hills, and sometimes a group of smoking volcanic cones. Little life was to be seen, save an occasional herd of dromsors, slender running lizards something like a reptilian ostrich in shape, or a flock of batlike tersors flying overhead.

Once they were well into the Saar, Slim Qadir forbade cooking fires. "Robbers," he explained. "Zaki Riadhi's band lurks in these hills."

"Oh, mercy!" said Halran. "I hope we shall not encounter them."

North of the L-shaped peninsula of Vizantia lay the Khlifate of Arabistan, including not only the base of the peninsula but also the great offshore island of Mahrib. The territory of the Khlifate extended southward along the shores of the Medranian Sea to take in the whole Saar. Under the feeble and disorderly government of the Khlif, Yubali III, the Saar was for practical purposes not governed at all.

During the first days after leaving Thiné, Marko learned how to manage the camel Mutasim. He also tried to engage Boert Halran in conversation. Although a man who did not make friends easily, Marko felt such a wealth of mutual interests with Halran that he had no hesitation in talking to him. In fact, Marko became positively garrulous, babbling openly about his ideas of man and the universe.

Halran, normally a much less inhibited person, remained aloof and taciturn. The philosopher's attitude became so marked that Marko, with a rush of shyness, finally said:

"Doctor Halran, have I been—ah—have I been boring you? Have I offended you in some way? I know I'm just—just a backwoods bumpkin—"

"No, sir," said Halran. "I find you, yourself, a personable and likable young man. It is your bloodthirsty social ethos that I take

exception to."

"Oh? Why, I wouldn't harm *you*!"

"You do not understand. You are proceeding to Anglonia, where murder is the most serious crime on the calendar, with the avowed intention of killing this fugitive pair. When you have done so, the law will take you and hang you. Because you have associated with me, it might be proved that I had knowledge of your designs. In that event, the law is likely to throw me into prison for the rest of my life as well."

"But you are not asked to take any part in this deed!"

"Nevertheless, I shall be what our law calls an accessory before the fact. By merely keeping silent and failing to turn you over to the law to imprison or deport, I incur part of your guilt. Now do you see what a difficult position you place me in? For all I know, you may decide your only security lies in killing everyone having knowledge of your intentions, and split my skull with that frightful cleaver."

Marko was shocked. "I didn't know that! I'm—I don't know what to say. I wouldn't antagonize you for anything."

"Well, you see how things look to others."

"I know. I have never understood how other people's minds work. But look, doesn't an Anglonian whose wife has been stolen have any recourse? Is he expected to say merely 'Yes sir, thank you sir, is there anything else sir?' "

Halran shrugged. "In the first place, our law does not class people as property. So, as one can only steal property, one cannot 'steal' a wife or husband. And the mere fact that one's mate prefers somebody else does not constitute damage."

"Not damage? Isn't breaking up a home and family damage?"

"Well, if she were kept against her will, your life with her would be unhappy anyway, so is it not better to let her go? If you can show actual damage—say from loss of her services as housekeeper—you can recover that amount by a suit at law. But our courts are slow and expensive, and the amount awarded is usually trivial."

"But your loss of honor—"

"Honor is a subjective, intangible loss. Therefore our laws take no cognizance of it."

"One might say," said Marko, "that most Anglonians have so little honor that it isn't worth bothering about. If you'll excuse my saying so. Isn't there some maxim about the law's not taking account of trifles?"

Halran laughed, throwing back his head. "I believe there is. However, we do think we have, by eliminating all these subjective and sentimental considerations like 'honor' and 'purity', attained a degree of rationality in our legal system surpassed by no other nation."

"It may be rational, but how about the results? Many people are naturally lustful and polygamous. So we set up a strict barrier of custom and law to restrain these impulses. You say, what harm does it do to indulge them? and let people do as they please.

"As a result, you Anglonians trade mates every year, and your children grow up a feckless, irresponsible lot from always changing parents and never having any consistent rules to obey. We have a saying, 'Distrust three things: a wild onion-mushroom, a quiet volcano, and an Anglonian's word.' "

"Oh, we are not so bad as that. Wait until you have visited Anglonia before you condemn us."

"I shall be most interested to see it, sir."

"For instance," said Halran, "I have been married to the same woman for fifteen years, and each of us had been married only twice before we met each other. True, our friends do regard us as a trifle quaint."

"Well, Anglonians shouldn't go marrying Vizantians and then revert to the Anglonian moral standard. We don't stand for that sort of thing. Petronela knew I expected to be her first, last, and only man—"

"What reason have you to believe you were her first? No normal Anglonian girl marries before she has accumulated some experience."

"Good gods!" groaned Marko. "I never thought of that!"

This discussion went on for several days. Finally Marko said: "Sir, I still think it my duty to kill the guilty pair. But I wish neither to be hanged myself—I'm not really brave, I fear—nor to get you into trouble. So I've given up the idea of killing them, at least unless they return to Vizantia where it would be legal."

"Good!" said Halran. "I congratulate you on your good sense. Then you will yourself return to Vizantia as soon as we attain the other side of the Saar?"

"No, sir. You forget I have a jail sentence hanging over me there. Could a man like myself make a living in Anglonia?"

"Mmm—I suppose you could. There are various possibilities such as mercenary soldier, teacher of Vizantian, and so forth."

"Besides," said Marko, "even if I don't kill Mongamri and my wife, it is my duty to confront them and demand an explanation."

"What is there to explain, except that she prefers him to you?"

"Well—ah—perhaps Petronela, having come to know Mongamri better, would like to come back to me," said Marko wistfully.

"Do you learn nothing from one painful experience? I advise you to have nothing to do with them," said Halran. "A conflict might arise that would eventuate in somebody's being injured despite your good intentions."

"Isn't one even allowed to kill in self-defense?"

"Yes, but the burden of proof is on the slayer. Forget them."

"I can't. You have no idea how ashamed I am at giving up my resolution to kill them. I'm a weak, wavering, immoral, dishonorable knave. The least I can do is to find and confront them."

§ § §

They rode on. Once he had announced the shelving of his homicidal resolution, Marko found Halran perfectly friendly. The little

man was not well adjusted to the rigors of caravan travel, having a fastidious dislike of soiling his hands and hating the discomforts of camel-riding and sleeping out. On the other hand, he mixed well with the other people and was always organizing them into teams and groups for any purpose that arose, from fetching water to folk-singing. His favorite expression was "Let us get organized," and he could always find some way of making tasks lighter by planning them.

"Indolence," he told Marko, "is the mother of invention, and I am the laziest philosopher in Anglonia."

He was also an expert card player. In three days, before the other caravaneers learned to be wary of him, he had won half his fare from them in small games.

On the sixth day, the caravan stopped for its siesta at the Oasis of Siwa. The oasis lay in a wide basin, broken by irregular outcrops. From a distance, it was distinguished from the rest of the barren scene by clumps of kackinsoni, whose spearlike leaves added a splotch of green to the otherwise drab gray-and-buff landscape.

Slim Qadir rode his camel up to the waterhole and made it lie down, shouting to the others to keep the animals back until some water had been scooped up for the people. There was much noise and confusion, neighing of horses and burbling of camels struggling to get to the water and shouts of their riders and drivers trying to keep them back.

Marko heard Slim Qadir yelling to his guards in Arabistani. Marko knew only a few words, but the intent seemed to be that they should get out to the edges of the oasis to guard the party against surprise attack, instead of flopping down on their bellies to have the first swill of water.

The camel ridden by Halran and Marko, together with the led camel bearing the jugs of stupa gum, were near the tail of the procession. From the back seat, Marko said:

"Hurry, Doctor Halran, or the water will be all muddied."

"There is plenty of time," said Halran.

When Marko and Halran were almost the only persons in the caravan still mounted, somebody shouted and pointed. Marko heard the drumming of hooves. As he turned to look, there came the snapping of many bowstrings and the harsh swish of arrows. The sound of an arrow's striking flesh caused him to look down to see one embedded in the side of his camel, just below his left foot. The camel started and roared.

A band of mounted men had ridden out from behind the nearest outcrop and now were charging the oasis. They were small dark men on stocky ponies. Besides the usual sheepskins, some wore colored scarves around their heads and other bits of incongruous finery.

The people of the caravan seemed to lose all sense. They rushed about, screaming and trying to climb back on their mounts. Halran emitted a wordless squeak and tugged wildly on Mutasim's halter.

Marko, however, remained steady. He decided what he ought to do and set about doing it. He drew from its case the steel bow he had taken from the robber near Skiatho and began shooting at the oncoming attackers.

"What shall we do?" cried Halran. "What shall we do? They will kill us! I am terrified!"

"Turn this beast around," said Marko.

Marko saw his fourth arrow strike one of the Arabistanis, who were now close. Some of them swerved around the oasis, shooting. A few rode right through it, spearing and swording as they went. People shrieked.

Marko continued shooting, squirming about in his seat to loose arrows wherever he saw a robber. Those who had charged through the oasis circled around and galloped back. In the rear of the charge rode a man on a white horse, clad from head to foot in fine chain mail, with an inlaid steel helmet on his head. Perhaps, thought Marko, Zaki Riadhi himself.

Marko reached for an arrow to try a long shot at the leader of the robbers and glanced at his quiver. This was his last arrow. As he nocked it, he had a glimpse of one of Slim Qadir's archers lying on the ground while a mounted robber jabbed at him; of another flinging himself on his horse and galloping off into the desert. The fat merchant from Begrat ran past Marko's camel until a robber's lance took him in the back and hurled him prone.

Another robber rode up alongside Marko's camel, fumbling with an arrow. As he came abreast, he got it nocked and raised the bow. Marko, who had started to sight on the leader in armor, brought his aim down and released at the near robber. The arrow hit the man in the upper chest, while the robber's own arrow hissed past Marko's head.

The robber dropped his bow, threw out his arms, and fell out of the saddle. The riderless horse trotted past, right under Marko. Marko hesitated, thinking out a plan.

Boert Halran had gotten the riding camel turned around, so that it faced away from the oasis. The burden camel plodded after. Marko hung his bow on the pommel in front of him and leaped off the back of the camel onto that of the horse, which staggered under the impact. He unslung his buckler, drew out his ax, and called up:

"Make all the speed you can. I'll try to keep off the Arabis."

Marko gathered up the reins with his shield hand and turned the horse. The robbers were scattered all over the oasis, within and without it. Some were killing the remaining caravaneers.

A couple fought Slim Qadir himself, who stoutly swung a scimitar with his back to a clump of kackinsoni until another robber thrust a lance through the clump into Slim's back. Down he went.

Other robbers rode about in aimless fashion. The arrows had ceased to whiz because the archers, like Marko, had exhausted their quivers.

At the sight of Marko's camels trotting off, the armored man shouted and pointed. A little knot of horsemen gathered and cantered towards Marko and the camels, opening out into a line abreast.

Marko kicked his horse's ribs with the broad, shovel-shaped butt ends of his stirrups. The animal started so suddenly that Marko almost fell off backwards. He guided the horse straight towards the armored man, making practice swings with his ax.

Between Marko and the robber chief, the line of horsemen galloped nearer, swords waving. One, a little ahead of the others, swung a scimitar in a downright cut at Marko's head. Marko caught the blow with a clang on his buckler, at the same time striking forehand with his ax. The ax cut through the corner of the shield of paxor hide, which the robber lowered to protect his body, and went on into the man's ribs. The force of the blow, driven by Marko's massive muscles, hurled the man out of his saddle.

As the rider passed him, Marko stuck back-handed at the next one. This time, the ax caught the man between neck and shoulder and sank in a hand's breadth. As the man toppled from his seat, Marko wrenched his ax out. He had passed through the line of charging horsemen and made for their chief.

Horses often go in directions other than those wished by their riders. Marko's horse missed the chief, who was also cantering towards him, by a good twelve feet. At that distance, they could only flourish their weapons at each other.

The other riders either had not realized that Marko had cut his way through their line or were unable to turn their mounts to come to their leader's rescue. They cantered away from Marko and the chief for another hundred feet before they began to pull up and turn.

Marko reined his horse into a tight circle. The chief did the same, and this time they came knee to knee.

Clang-cling! went the curved sword of Zaki Riadhi against Marko's buckler, and clang! went Marko's ax against the chief's shield, which like Marko's was of sheet steel. Marko struck again at Zaki's head, covered by a barbute that came down low and almost entirely concealed the robber's features. Zaki caught the blow on his shield again. Although the ax was driven with enough force to break a man's arm, Zaki held his buckler at such an angle that Marko's blow hit it slantwise. The ax twisted out of Marko's hand. He thought for a horrible moment that he had lost it, but the thong around his wrist held.

Then a plunge of the horses carried the fighters apart, so that Zaki Riadhi's next blow cut empty air. Marko turned his horse again and found himself directly in front of Zaki Riadhi just as his

groping fingers got a grip on his ax handle.

Unable to reach the rider, Marko struck at the horse and felt his blade bite into the fine animal's forehead. This was not an honorable blow, but Marko had no time for scruples. The horse fell dead, pitching Zaki Riadhi over its head, almost against Marko's off leg.

Marko brought his ax down once more on the back of the falling chief's helmet. The ax sheared through helmet and skull. The helmet flew off, revealing Zaki's dark, hawk-nosed features. Zaki fell in a heap upon his horse's head. Blood and brains were spattered across the sand.

In the ten seconds that it had taken Marko to kill the leader of the robbers, the others who had ridden at him had turned their horses around and started back. When Marko faced towards his camels, which were now several hundred paces off, the bandits were in front of him and on both sides. They had not yet had time to close in.

"Out of the way!" roared Marko. He raised his ax, still dripping Zaki's brains, dug the shovel-stirrups into his horse's flanks, and plunged forward.

The Arabis gave way before him, circling and yelping but not quite daring to close with a man twice their size, who had stretched three of their number dead on the sand in half a minute. Marko rode through them and off across the Saar after Halran and the camels.

V.

When Marko caught up with Boert Halran, the Oasis of Siwa was but a smudge of green in the distance. A few robbers had ridden after Marko, but then they all wheeled back towards the oasis. Marko surmised that they feared to miss the division of loot and the choice of a new chief. Boert Halran called down:

"I am overjoyed to see you, Marko. For a moment, I believed they had slain you and that you were an Arabi pursuing me. Now let us get organized. Which way shall we proceed?"

Marko said: "If we go west, we're bound to reach the Medranian in a few days. We shall then at least be fixed for water. So turn your beasts to the left."

"What shall we do for water meanwhile?"

"Watch for green spots indicating water holes. If we find none,

we may be in trouble. Also, there's a spiny plant with thick leaves. When you cut off the spines, you can get moisture from the leaves."

Halran said: "Slim Qadir told me camels can endure several days without water."

"We're not camels. People like Slim know where all the oases are. They leap from one to the next like a man crossing a sea from island to island."

"That was a noteworthy feat, Marko. I never expected a schoolteacher to be so handy with weapons. One—two—three—and three Arabistanis lying dead."

Marko made a deprecatory gesture and looked away with an embarrassed grin. "That was nothing. I'm so much bigger than they that it was like swatting spider-bugs."

"Still, I think you were the only man in the caravan actually to send any of them to Earth."

Marko shrugged. "More luck than skill. If Slim had had his archers under control, those robbers would never have attacked. They fight for loot, not for honor, and they hold off if they think there's any serious risk."

They pulled out the arrow that had struck the riding camel and jogged on. In mid-afternoon the sunlight became uncomfortably warm, so they shed their jackets. Marko's horse began to droop, stumbling along with hanging head, until Marko gave him a rest and asked Halran to change places with him.

"These little Arabistani rabbits aren't built for a man of my size," he said.

With the setting of Muphrid, the moons Gallio and Kopern appeared. Arcturus rose. Swiftly, the temperature fell. Being handier in such matters than his companion, Marko made camp.

Marko was sweeping the camping area to drive out the blood-sucking arachnids when he looked at Halran. He shouted "Hey!" and grabbed his companion's arm.

"What?" said Halran.

"I thought you knew those were poison!"

"Oh," Halran dropped the onion-mushroom from which he had been about to take a bite. "I do recall Slim's saying something . . ."

"Well, recall a little sooner next time!"

"Oh, go to space!" said Halran.

Next day, they plodded westward without sighting water. Vegetation became scarcer, until there was nothing to be seen save occasional small spears of phosphor-grass, which the animals

would not eat. They also found one of the spiny thick-leaved plants, peeled several leaves, and cut them up into slices to eat despite their bitter taste. But they saw no more of these plants. Other travelers must have swept the country along the caravan route clean of them.

Marko asked Halran: "Doctor, you know the story of my trial for teaching Descensionism. Which belief do you adhere to?"

"Well, the sciences of life are out of my line, but from what I have heard and read, I should say that the arguments for Descensionism were quite strong. My colleagues have confirmed the evolutionary hypothesis to some extent as regards the non-mammals of Kforri. They have done this by finding fossils, which they have pieced together. In some cases, these do seem to be the more primitive ancestors of forms now living; but no such fossils have been found for mammals, including men. Of course, that may be merely the result of mammals' being more intelligent and so not getting caught in swamps and similar places where they are likely to be fossilized."

"The question is not really settled, then?"

"Not in the sense that the sphericity of Kforri may be taken as settled, although I think the odds are at least ten to one in favor of Descensionism."

"Then who were the Ancient Ones?"

Harlan shrugged. "There are as many interpretations of those myths as there are mythographers. One plausible interpretation is that they were the leaders of a band of settlers who somehow came from Earth and who died or were killed off after the landing. Do you know the story of Hasn the Smith, who, denied an honorable place at the Feast of the Ancient Ones, stood in the doorway and slew them all with his magical arrows?"

"Yes."

"That no doubt refers to some real event, although we do not know what."

Marko asked: "How about the myths of the gods on Earth, such as the one about the rivalry of the sea god Nelson and the war god Napoleon for the favor of the love goddess Cleopatra?"

"I do not know, though there are the usual speculations. There is a story that the key to these mysteries lies on the Isle of Mnaenn, but the witches do not let outsiders go poking around their sacred island."

The following day, there was still no sign of water. Suffering from thirst, Marko watched for the main caravan route. When he

failed to sight it, he could only suppose that they had crossed it without noticing it. It had no permanent marking, and a good breeze soon obliterated the tracks of the animals.

Halran complained incessantly. Marko twice lost his temper and roared at the older man, feeling ashamed of himself afterwards.

The next day, Halran began to reel in his saddle. They choked down their food as best they could. Marko, rolling a pebble about his mouth to lessen this thirst, looked longingly at a distant herd of dromsors. If he could kill one, its blood would relieve their thirst. But he had no more arrows, and the beasts could easily outrun even a fresh horse.

The day after that, Marko was nodding half-asleep atop his camel when a violent jerk of the saddle caused him to open his bloodshot eyes. He blinked, then croaked down to Halran:

"Look! Water! The sea!"

Halran looked. "Huh? Where?"

"There! I suppose you can't see it because I'm higher than you."

Halran wiped his glasses. "Curse my weak eyesight . . ."

Marko shaded his eyes as he gazed towards the faint line of blue, which showed along the horizon between the humps in the barren gray-and-buff landscape. The animals' nostrils dilated, and their pace quickened.

As he neared the sea, Marko saw that the Saar extended out to the edge of a slope, which ran gently down to a sandy beach. Before he reached the beach, however, a small bay appeared on his right. He angled towards it. The basin in which the bay lay supported a sparse growth of onion-mushroom and bat-veiled fungoids, in contrast to the almost complete lifelessness of the Saar during the last day's ride.

The margins of the bay, however, did not form a beach. A mat of seaweedlike vines made a green strip ten to twenty paces wide around the marge, converting it into a kind of swamp.

Halran kicked and beat the horse into semblance of a trot. When he reached the vines, he turned left and rode parallel with the shoreline, until he came to where the vine thinned out. Then he flung himself off his mount and ran to the edge of the water, stepping over the few vines athwart his path.

The horse followed. Sap-sucking arachnids, like large land crabs covered with long red hair, scuttled rustling away. The horse buried its muzzle in the water and drank noisily, while Halran flopped on his belly beside it to drink too.

The camels also showed signs of eagerness. Marko hit Mutasim

over the head with the butt of his whip to quiet him and clucked to him to kneel.

When the camels had both knelt, Marko got off. He set about staking down Mutasim's halter to keep the animal from running away, keeping a wary eye on the creature's head lest it bite him. Then a yell from Boert Halran attracted his attention.

The philosopher was wrestling with a length of acceleratum vine. While he had been drinking, a tendril of the vine, half-buried in the sand, had looped itself about one of his legs and had begun to root through the boot. In thrashing about, he had touched another tendril with his arm; this seized him too. He shrieked as the rootlets penetrated his skin.

Marko caught Halran's free hand and tugged, but the effort merely pulled lengths of the vine out of the sand for a few feet until the really thick trunks were exposed. Another tendril fastened itself to Halran's other leg. Halran yelled:

"You are pulling my arm off!"

Marko relaxed his grip and got out his ax. Three slashes severed the tendrils that had fastened themselves to Halran. The stumps, dripping greenish-white fluid, fell to the ground and lay limply, looking like ordinary harmless vines.

Halran staggered back from the margin of the bay and sat down to cut loose the tendrils still clinging to his arm and legs. First the main tendril had to be cut from the rootlets that it had sent through his clothing. Then he had to work off his boots and jacket, leaving the rootlets in his skin. Finally, the rootlets had to be pulled out one by one, each leaving a puckery little hole, which bled freely.

"I am a dead man!" said Halran. "I shall bleed to death, or at least be rendered unable to travel!"

"It doesn't look that serious," said Marko. "I had heard of this stuff, but had never seen it. I didn't believe it would root so fast."

"I knew about it," said Halran, "but I erroneously supposed there was not enough at this spot to be dangerous. Or perhaps I was so thirsty I did not think. I am no good at roughing it, no good whatever. There is one individual who got captured." He pointed westward along the shore of the bay to the bones of a dromsor, lying scattered among the cables of the vine.

When he saw that Halran was all right save for minor punctures, Marko walked over to where Halran had been drinking. He severed all the vines he could see and kicked the sand to uncover any others beneath the surface. Then he drank, making a

face at the brackish taste. Drinking sea water might not kill a man, but too much of it would upset his digestion.

After that, Marko led the camels down through the path he had cut so that they could drink. Halran chased the horse, which had run away when he dropped its reins. The beast was, however, so exhausted that it did not try very hard to escape.

While they were eating, Halran said: "You are an odd one, Marko. You have saved my life twice on this trip, yet you have no more compunction about slicing off the head of this fellow who eloped with your wife than you would have about killing one of those." He pointed to one of the hairy arachnids.

"I see nothing odd about it," said Marko. "You're my friend, while Mongamri wronged me in a malevolent and perfidious manner. So it's only right that I should kill him. But I agreed to drop the plan out of deference to you."

"So you did, so you did. I had forgotten."

§ § §

They marched north along the eastern shore of the Medranian Sea, sometimes seeing the white tooth of a sail or the black plume of a steamer's smoke on the horizon. One of Marko's burning ambitions was to ride a steamship, despite the fact that their bronzen boilers sometimes blew up with grisly results. But then, Halran explained, they had been invented only a half-century earlier and were not yet perfected. During his sabbatical, Marko had admired a couple of the craft tied up to the piers at Chef. He would have liked to go aboard to look around, but his shyness had prevented his asking permission.

Marko continued to ply Halran with questions, partly because it seemed like a good opportunity to enlarge his knowledge and partly to practice his Anglonian. The only trouble was that, once opened up, Halran talked so much that Marko got little chance to speak any language.

The day after they reached the seashore, they picked up the main caravan trail. They were running low on food. That presented no pressing difficulty, because the onion-mushrooms here were edible. One could live for a while on these.

They also encountered a couple of caravans headed the other way. Each time, the people were so interested in the story of Zaki Riadhi's raid that they entertained Marko and Halran with all the food and drink they could hold.

As they turned the northeast corner of the Medranian Sea, the terrain became greener. Sometimes there was a spatter of rain.

Cultivation appeared, then villages inhabited by folk of mixed Arabi-Anglonian descent. They crossed the guarded border from Arabistan into the Republic of Anglonia. Marko had worried about his lack of passport, which he knew to be needed in Anglonia and Eropia. But Halran assured him that he could get him in, by a simple endorsement, as his assistant. So it proved.

Marko knew little of Anglonia, save what the Vizantian geography textbooks said: "... mostly flat, but hilly in the northern parts ... the people are friendly and gay, but shameless, frivolous, and unreliable ... their children are spoiled ... the principal exports are wheat, bron fiber, iron ore, pure-bred livestock, and ingenious mechanical devices ..." Therefore he looked about him with interest. The Anglonians, he found, were a tall, handsome people. Many had blond hair and blue eyes. They also had a widespread tendency towards obesity. Most of them over twenty (Kforrian years) were fat and paunchy.

They did not seem exactly frivolous. At least they were not lazy. They worked and played with furious intensity. They loved speed, and their light carriages tore through crowded towns at full gallop. They were not merely friendly; they were impudently and insatiably curious. Every time Marko and Halran sat down in an eating-place, the Anglonians crowded around, introducing themselves. They asked the details of Marko's past history, present occupation, and future prospects. They asked about his love life until he turned purple with embarrassment and pretended not to understand them.

When the Anglonians were not inquiring, they talked about themselves. Marko had never met such garrulous people. As far as he could tell, their main topics were food and sex, mostly loud boasts of their own prowess in both lines. Both sexes dressed gaudily, used perfume, and were given to public drunkenness and quarreling. Thinking them decadent, Marko at times preferred the dour dignity and cold reserve of his native land.

Halran suggested that Marko could avoid this friendly persecution by looking more like an Anglonian. Accordingly, Marko bought a pair of knitted trunk-hose like those of his comrade and retired his baggy trousers to his duffel bag. The new pants embarrassed him by their tightness, but the Anglonians paid less attention to him. He kept his boots, because he was used to them. Anyway, they looked much like Anglonian riding boots.

The hair had grown on Marko's scalp and jaw during his journey. Instead of having his pate shaven but for the scalp lock, he

had that lock cut off and left the rest as it was, in a short blond bristle. He also began cultivating one of the mustaches affected by Anglonians. He bought a tobacco pipe and learned, with much coughing and spitting, to smoke it, instead of chewing plug like a Vizantian.

On the fourteenth of Newton, they stopped at an eating place in Kambra. Marko was just getting well into his meal when Halran squeezed his wrist and said:

"Do not look around, Marko, but get ready to pay your bill and go."

"Huh?"

"Do as I say, I shall explain subsequently."

Grumbling, Marko did as he was told. When they were on the road again, he asked Halran what had happened. Halran said:

"Did you not notice that trio of youths at the bar, staring at us?"

"I did in a vague sort of way. Why?"

"I could tell by their actions they were contemplating an assault upon us."

"Oh? If they had, I should have simply knocked their heads together hard enough to crack them."

"That is what I feared. If, in defending us, you had injured one of them, we should have at least been mobbed. If we survived, the law would have dealt severely with us."

"Napoin! Why?"

"They were *minors*, and nobody is allowed to injure a minor in Anglonia."

"So what?" snorted Marko. "All the more reason to knock their heads together, to teach them respect for their elders."

"Do not let anybody hear you say that. Minors are sacred in Anglonia. They are not held responsible for their actions, but any harm done them is severely punished."

"Sometimes," said Marko, "Anglonians almost act like reasonable people, and at others like a race of lunatics. What's the

reasoning behind this worship of minors?"

"Why, you see, we believe that if a child or young person is thwarted or curbed in any way, he will grow up into a sour, frustrated, mentally diseased adult. So they are allowed to do pretty much as they please, on the theory that they will thus work off all their anti-social impulses before reaching their majority. That is why all adult Anglonians are so well-adjusted."

Marko spat in the dust.

VI.

On the eighteenth of Newton, Marko and his companion came to the seaport of Niok, which rose in graceful spires and crude blocks from the estuary of the Mizzipa. Marko wanted to stop a few days to make sure that his victims were not there. Halran was anxious to push on to Lann, to complete his aerostatic experiment in time for the philosophers' convention.

They finally agreed to split up. Halran kept the horse and the burden camel, paying Marko half the value of the horse. He said:

"Good-bye, then. If you get to Lann, come and visit me."

"I will, sir," said Marko.

Halran rode off towing his burden camel, still swaying under the four great jars of stupa gum. Marko spent the rest of the day in the stock market. Thinking himself a poor bargainer, he was sure that the more worldly-wise Halran would have obtained a better deal.

Actually, Marko was not so bad as he thought. His embarrassment over haggling caused him to put on a stiff, stony air. This, together with his monstrous brawn, gave traders the impression that he was more self-assured than he was. Eventually he traded the camel for a large horse and a few extra dlars.

He spent the next two days searching for Mongamri and his wife. The search took him through Niok's endless rows of drink shops, brothels, and the dives of marwan addicts. Sometimes rough-looking characters stared threateningly or muttered at him, but they turned away on noting his ax and musculature.

Niokers, he found, were an even noisier species than ordinary Anglonians, much given to outbursts of rage over trivial matters. They would leap up and down like tersors on perches and scream threats and insults. The minute Marko put on his fighting face and reached for his ax, however, they found reason to go elsewhere.

A suspicious, discourteous, and truculent race with no sense of dignity, Marko thought. He was puzzled by their common expletive "*Cop!*" (pronounced something like "kyop" or "chop") until he realized that it was the shrunken remnant, in Niokese dialect, of the name of the goddess of love, Cleopatra, or as Vizantians pronounced it "Kliopat." Also, despite the alleged sanctity of human life in Anglonia, he got used to the sight of the bodies of murdered men in the gutters.

On the other hand, the Niokers were perfectly willing, if Marko acted friendly towards them, to suggest a joint foray into vice or crime. It was, he supposed, their notion of doing a stranger a good turn.

Marko had given much thought to the handling of Mongamri and Petronela. While he was not sure that he had done right in promising Halran not to kill them, he could not go back on his promise without feeling even guiltier than he did over sparing them. Vizantians took the keeping of one's word with as much seriousness as they did sexual morality. And there was something to the maxim: "When in Roum, behave as do the Roumians."

The idea of copying the loose morals of the Anglonians had a certain sinister appeal to Marko; but, brought up where such matters were surrounded by a high wall of puritanical inhibitions, he could no more have advanced an improper proposal to a woman than he could have walked on the Medranian Sea. The mere thought of exposing himself to rebuff and embarrassment gave him cold chills.

§ § §

Marko failed to find his quarry. A fortnight later, he jogged into Lann, a sprawling old city built of the dark gray limestone of that region. When he had taken quarters, he set out through the narrow, crooked streets to find Mongamri.

First he went to the public library. By asking for Mongamri's books, he learned the names of his publishers. He found that he could understand literate Lanners well enough, although the slurred, whining dialect of the working class defeated him.

Then he found where these people did business. This was a matter of some difficulty, because the Lanners had no rational system of naming or numbering their streets. One thoroughfare might have five different names in the course of ten blocks.

Marko called at the office of the first publisher on his list and asked where Mongamri lived. He presented himself as a friend whom Mongamri had met in his travels. The publisher gave the

address with what seemed to Marko a rash lack of suspicion. In Vizantia one was chary of giving out such information, because the seeker might be a feudist out to kill a member of a hostile family.

He returned to his quarters for siesta. Afterwards he got detailed directions to Mongamri's address and drew a sketch map. Since the place was well out in the suburbs, he rode his horse out to Mongamri's house.

The house was smaller and less impressive than Marko had expected. He had a vague idea that an Anglonian literary man would live in the style of a Vizantian magnate. Here, the address turned out to be a little fieldstone bungalow in a medium-poor neighborhood.

Marko still wondered what to do with these people. He would not, he thought, kill them save in self-defense, but he owed it to his self-respect to give the faithless Chet the beating of a lifetime. As for Petronela . . . If she were willing to come back to him, that might be worked out for so long as he stayed in Anglonia. But he could not take her back to Vizantia, as his disgraceful failure to slay her would then be patent to all. Of course, he might never go back to Vizantia . . .

Marko opened the flap of his ax sheath and reached for the door knocker. It took all his self-mastery to force himself to bang the knocker. What should he say if . . .

The door opened. There stood Petronela, tall and big-boned, looking like any other young Anglonian housewife. Marko felt a boil of conflicting emotions rising within him.

Petronela recognized Marko despite the budding mustache. She screamed and tried to slam the door, but Marko had thrust his boot into the crack.

As Petronela ran back into the house. Marko followed, surmising that she would lead him to Mongamri.

"Chet!" shrieked Petronela in Anglonian. "He's here!"

She led Marko into a room at the back, where Mongamri sat at a desk littered with papers and cigarette butts, correcting a set of proof sheets. When Marko shouldered his way into the room, Mongamri said:

"Kyopt! You, eh?"

Marko began in a coldly cutting tone: "Yes, you swine, it's I. Perhaps you'd be so good as to explain—"

Mongamri picked up a large Arabistani knife, which he kept on his desk as a paperweight and letter-opener. He lunged towards

Marko, raising his arm for a stab.

Marko threw up his left arm. The point of the knife pierced skin and flesh and bone, while with his right hand Marko fumbled for his ax. Although he had not meant to kill Mongamri, this attack altered matters. As Mongamri drew back the dagger for another stab, Marko got his ax out. Lacking room to swing, he thrust the spike on the end into Mongamri's chest and gave a push that hurled Mongamri across the room.

Mongamri fell back against his desk. A lamp fell with a crash. Marko stood where he was, ax half raised. Mongamri slipped down until he was sitting on the floor with his back to the desk. He muttered something in which Marko heard the word "police," fell over sideways, and lay still.

"You killed him!" cried Petronela. She glanced at the ax, which Marko had lowered so that blood dripped from the spike, and darted to the door.

"Petronela," said Marko, "if you'll promise—"

"I'll see you hanged!" screamed Petronela, and fled.

"Hey!" called Marko. "I didn't intend . . . If you will . . ."

The front door slammed. Marko hurried after Petronela, sure that, if he stayed where he was, he would soon find himself involved with the unknown laws of this strange land.

When he looked out the front door, there was no sign of Petronela. He paused to think out a plan. Then he stepped back into Mongamri's study to confirm Mongamri's death. He cursed himself for an idiot; here he had promised not to kill Mongamri and then had done so, if unintentionally.

Marko went out, mounted, and rode briskly back to his lodging. There he bandaged his slight wound, paid his rent, gathered up his gear, and moved out. He rode to the house of Boert Halran.

§ § §

"Oh, very well, very well," said Halran, wrinkling his nose. "After all, you did save my life. According to your story, you acted in self-defense. So you may hide out here. But if anybody inquires, you told me nothing of your escapade, do you understand?"

"I understand, sir," said Marko, staring at the floor and flushing. "I'll try to be as little trouble as possible."

"I warned you something of that sort would happen. Oho!" said Halran, looking at Marko with bright piercing eyes. "That gives me an idea. When I got home I found that my apprentice, curse him, had gone away and refuses to return."

"Can't you have him flogged back?" said Marko.

"Not in Anglonia. It occurs to me, however, that you might have difficulty in making your exit from Lann in the usual manner, if the police are watching for you. I doubt if you are rich enough to obtain release by bribery in the event of your capture."

"What then?" said Marko.

"Be my new assistant! You will pass out of Lann through the air where nobody can seize you."

"What, me fly in your machine?" cried Marko.

"Certainly. Are you afraid?"

"A Skudran afraid? No, but the idea startled me. Are you sure I'm not too heavy?"

"No. The balloon was designed to carry my apprentice and me, and he was even heavier than you."

Marko almost asked if Halran would pay him but remembered that, as a fugitive, he was already asking all that he decently could. He said:

"May I see the balloon now?"

"Come this way."

Halran led Marko out the back of his house. His yard overflowed with a huge, shapeless mass of cloth, sewn together in contrasting strips of black and white. Clustered around the mass were a score of women of all ages, brushing on the stupa gum that Halran had brought from Vizantia. They chattered like a flock of tersors as they heaved the heavy folds this way and that in order to get the gum on every square inch.

"Come and meet my family," said Boert Halran. "Dorthi, this is Marko Prokopiu, my new assistant. Marko, my wife; and these are my daughters Bitris, Viki, Greta, and Henrit."

Marko acknowledged the introductions with the formal manners drilled into him years before. Harlan said:

"The other women are housewives of Lann, mostly my wife's brizh-playing friends. I got them *organized.*" He grinned like an imp and launched into a lecture on aerostatics, pacing about and gesturing to indicate mathematical concepts.

VII.

Six days later, on the fifth of Perikles, the gum had dried and the balloon was ready. Boert Halran said:

"I will send one of my daughters to make the round of the newspapers, asking each to send a reporter to witness this great event."

"Hey!" said Marko. "If they see me . . ."

"Oh. I forgot. Couldn't you wear a mask?"

Marko shook his head. "That would whet their suspicions."

Halran sighed. "Very well. I need publicity to elicit more financial support, though; these experiments are fiendishly expensive. We shall, however, hope the sight of our soaring over the rooftops of Lann will furnish adequate excitement. I will send Viki merely to get the weather report. Not that it will help much; old Ronni is right about as often as if he stayed indoors and guessed."

As Muphrid set, little Viki Halran returned with the report that there was no indication of a disturbance in the northeast tradewinds.

Marko had been casting an eye with more than purely academic interest on Halran's four daughters. (A fifth, married, lived in Niok.) All were handsome, vivacious girls. He did not, however, go beyond looking. Besides the puritanism of his culture and his own introversion, he was inhibited by his inner turmoil about Petronela.

As for the girls, Marko thought that they regarded him as a amiable and amusing monster. All four girls had suitors of their own. Marko had been horrified the first time one of these youths had called for an evening and paid his respects (in a casual and impudent manner) to the older Halrans. Then he and the girl ha retired to a bedroom, whence soon came audible creakings.

Marko's overthrow was complete the next evening. The four girls quarreled shrilly over the fact that each had a lover and there were not enough bedrooms to go round. Viki broke the deadlock by asking Marko if he would lend his cot in the attic. Marko, red to the ears, could only gulp and nod.

"If it will inconvenience you," said Viki, evidently mistaking h silence for unwillingness, "I can repay you by—"

"No-no, no, do not of it think," said Marko in his broken Anglonian. "I only too happy am."

"Oh? If you hesitate on account of your wife Petronela, she isn your wife any more anyway."

"No?"

"No. My sister Henrit saw the notice of divorce in yesterday paper. We meant to tell you, but such a little thing slipped our minds. So now you're fair game for all of us."

"Thank you. I am being much interested." Marko bowed formally, withdrew, and spent two days sunk in gloom.

As he recovered from his depression, it occurred to Marko that

he had been a fool not at least to have found out what Viki was offering. A man, once womaned but now womanless, finds celibacy much harder to bear than one who has never known a woman at all. Marko had now been unwomaned long enough so that the primal urge drove him nearly crazy.

To the Halran family, however, he presented an effect of urbane dignity and good humor. He struggled to improve his command of the language and kept his eyes open for the minutiae of Anglonian manners. Inside, he was a mass of conflicting emotions.

§ § §

When he got word that the good weather would hold, Boert Halran ordered Marko and his family to rig the balloon for inflation. The three moons were sweeping through the dark sky when they finished this onerous task. Halran lit the fire in the main peat stove.

"I hoped to get off several days earlier," he explained to Marko. "This is the beginning of the hurricane season. But I think we shall make out all right and shall arrive at the convention in ample time for the opening."

It took all night to inflate the balloon. Marko and Halran took turns feeding the fire and sleeping. When the water clock indicated an hour before dawn, the bag of the balloon swayed overhead, holding the ropes taut. Halran explained:

"By filling it at night, one can conserve much ballast. As Muphrid strikes the bag, it warms the air and imparts extra lift to it. Are you ready?"

They placed in the basket the equipment that they were taking, including Marko's ax but not, for weight, his shield. Marko climbed up the ropes to the small stove above the basket and got that fire going. Halran's women smothered him with embraces, and the girls made plain their intention of kissing Marko. Marko had been shocked with the freedom with which people kissed in public in Anglonia. By now, however, he was so hardened to these people's loose ways that he even enjoyed being kissed.

Marko and Boert Halran climbed into the basket, cast off, and waved good-bye. Marko's heart rose into his throat as the dark ground dropped away and the lights of Lann appeared below him. People were already abroad.

Marko thought that the ascent might be unnoticed, as the sky had not yet begun to pale. But the glow of the little stove overhead soon attracted attention. People shouted, ran, and looked up pointing.

The swift rise of the balloon, however, soon caused the clamoring voices to fade. After the first few minutes, Marko could no longer gage their rate of ascent. As they rose, their horizontal movement speeded up. Soon, the lights of Lann slid out from under them to the northeast. The temperature swiftly fell, causing Marko to put on his sheepskin.

"If my calculations are correct," said Halran, "the wind ought to drop us down within a few miles of Vien by this time tomorrow."

"I hope you're right," said Marko.

For the first hour or two, nothing happened. Muphrid rose through banded streaks of cloud, which soon thickened to hide it in a high overcast. Marko and Halran ate. Between intervals of climbing up the ropes to tuck another briquette of peat into the stove, Marko hung over the edge of the basket, gazing down upon toylike houses and farms.

"Now remember," said Halran, "when we touch down, stand by to pull the rip cord just a second before the basket touches, or we shall be dragged and spilled out. I shall give you the signal."

The rip cord, Marko knew, opened a great slit in the upper part of the balloon by pulling down the slide of a zip-fastener. The garrulous little philosopher went on:

"I sent messages to my colleagues in Vien asking for a proclamation that, if a great bag came down out of the sky with a man dangling under it in a basket, it was a harmless scientific experiment and not a visitation from Earth. When I made my first trial flight, I descended on a farm in the vicinity of Lann. The peasants thought I was a devil and would have killed me with pitchforks if I had not taken flight. They tore my balloon to fragments, too."

He fussed about the basket, checking his altitude by a sighting device with cross wires. Once he dropped the sand from a ballast bag and told Marko to stoke up the peat fire. Then they went up too fast, and Halran had to valve air to bring them down again.

As time drifted silently by, little dark-gray clouds appeared below and on a level with them. At first they were so small and few as hardly to be noticed, but Halran muttered:

"I do not like that. Curse it, if I could only check our direction by Muphrid!"

The high overcast had become so thick that no trace of sun could be seen. The little clouds multiplied and grew, until the balloon seemed to be drifting in the midst of a great throng of them. Now and then a flash of lightning lit them up, and thunder rolled in the distance. Marko realized that they were drifting into the

midst of a great storm. Because the balloon went with the wind, there was no feeling of motion or rush of wind.

The balloon, however, became hard to control. It either shot up until Halran had to valve air or dropped until he had to drop ballast, while Marko stoked the fire. Marko understood that, when they ran out of either ballast or peat, they would soon have to come down.

On one descent, they plunged into a mass of cloud. The mist around them got darker and darker. Marko wondered what that pattering noise was, until he realized that rain was striking the gas bag. The cooling effect of the rain made the balloon drop faster than ever, until they broke out of the bottom of the layer of cloud.

Marko was astonished to see the ground a mere seventy-five feet below, shooting past at a dizzy speed. Below them, plants bent in the wind, which roared as it poured over the ground. The rain was coming down hard, but the bag of the balloon acted as an umbrella.

Marko could not tell which way they were going, because the whole balloon was spinning round and round, so that the landscape spun in the opposite direction below. He glimpsed an Anglonian cowboy in a broad-brimmed hat, chivvying a small herd of cattle into an enclosure.

Halran yelled at him, then pulled the drop strings on three bags of ballast. Up they went again, this time so fast that Marko was conscious of the wind's downward rush.

After an endless time of seeing nothing but lurid lightning flashes and being deafened by thunder, they broke through the top again, not far below the upper overcast. Below them, Marko saw a solid mass of blackish clouds boiling like one of the volcanic hot swamps of northern Vizantia.

"We had better remain up here," said Halran. "Curse it, if I only knew my direction . . ."

By rapid stoking, they stayed safely above the storm for the next few hours.

Marko shivered with cold. Halran checked his remaining supplies of fuel and sand. He clucked apprehensively, glanced over the side, and squawked like a marsh tersor.

"Look!" he yelled, pointing downward.

Marko saw, through a rift in the clouds, the crawling, wrinkled surface of the Medranian Sea.

VIII.

Hours passed. The clouds began to break, both above and below. Setting Muphrid shot golden lances through the gaps, gliding the bag of the balloon and the underside of the overcast. Looking down, Marko cried:

"Doctor Halran! An island!"

Halran looked. In the crawling waste of leaden waters, half hidden by fracted scud, a darker mass appeared ahead.

Frowning over his home-made chart, Halran said: "A large one, Marko. I think the wind will carry us over it."

"Shall we land there?"

"We shall have to. Otherwise this storm will carry us far over the sea. When we run out of peat, we must descend willy-nilly. If I be not in error, that would be the cliff-girt isle of Mnaenn."

Marko shaded his eyes. "I see no cliffs. This isle—if it be an island—has broad beaches."

"Oh!" said Halran, peering in his turn. "You are correct, as nearly as my cursed eyesight can make it out. Besides, this island is much too large for Mnaenn."

"What is it, then?"

"Afka, I suppose, unless there be other islands in this part of the Medranian that I know not of. Afka lies south and east of

Mnaenn. Good gods, we must have flown right over Mnaenn without seeing it!"

"I've heard of Afka but don't know much about it. What's it like? We never go there, because the Afkans are said to be unfriendly to strangers."

Halran shrugged. "Not much more is known in Anglonia. The populace is said to be dark of skin and too proud to mingle with the lesser breeds. Well, we shall soon learn. Get ready to bring us down. I say, what's that?"

"What?"

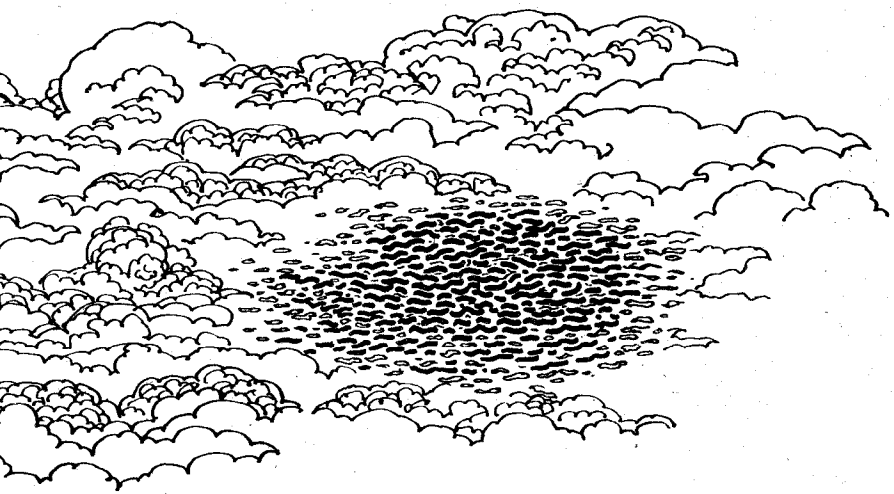
"It looks like a stupa forest. But we could not possibly have been blown clear to the Borsja Peninsula!"

"Are you sure that is the only place where those big trees grow, Doctor?"

"No one is ever certain, but we shall soon find out. Valve some more air, please."

The balloon settled gently to the mossy ground, between the curving beach and the looming forest. The trees were unmistakable stupas, although but a fraction of the size of those on the Borsja Peninsula. The latter reached a height of a thousand feet. On the other hand, these trees were far larger than the dwarf stupas of the civilized lands.

Marko and Halran were still folding and tying up the bag, when



men approached and surrounded them. These were big men, with skins of so dark a brown as to look black. Their kinky black hair was trimmed into fanciful shapes. They carried spears and crossbows. The leader, in a kind of scarlet toga, gestured and spoke threateningly.

After Marko and Halran had tried several languages between them, it was found that one of the spearmen spoke a little Vizantian. With this man as interpreter, the leader conveyed the word that the foreigners were to come with him.

"What about my balloon?" asked Halran.

"You will not long care what happens to it," said he of the toga. "Now march!"

The other black men formed a hollow square around the travelers. They marched in step, keeping rigid formation, to the leader's chant of "*Moja,* mbili, tatu, ine, *moja,* mbili, tatu, ine . . . ."

"What have you gotten us into now?" grumbled Marko.

"Oh, dear, oh, dear! Do not blame me; blame the storm. But I admit I was a fool, not to have landed as soon as the weather got thick. We may be doomed for all I know; these beggars have a bad reputation."

"Well, let's keep our eyes and ears open. Something may come up."

Halran sighed gustily and shook his head. "Ah, me, never to see my dear ones again!" Then he jerked up his head. "By Newton, that's curious!"

"What is?"

They had entered the forest and marched along a straight path. Among the trunks of the stupa trees, on all sides, ran a system of pipes, supported at eye level by posts. From the joints of these pipes, a gentle spray of water moistened the forest floor.

"So that is how they keep their woods from burning up!" said Halran.

"How do you mean?"

"You know, Marko, that the Borsja Peninsula is the only place, so far explored, that produces decent hardwood in quantity. The reason is the extreme dampness, with constant rain and fog. Since forest fires cannot get started, the trees can grow undisturbed for thousands of years—unless some greedy entrepreneur, like your Sokrati Popu, cuts them all down. So these people, finding that they had a good stand of hardwood, have taken measures to protect it, making Afka into a kind of artificial Borsja."

"I can tell you something else," said Marko. "They didn't find

these trees here. They planted them."

"Really! How do you know?"

"Look at those even rows! No natural forest ever grew in a formation like that."

Halran wiped his glasses. "By the gods, you are right! With my weak sight, I should never have noticed in this inadequate light. The Afkans must have an advanced technology."

Thereafter, the travelers had to save their breath for walking. Their captors, surrounding them with spears warily leveled, set a brisk pace. Both were weary and footsore when, over an hour later, they came to the end of the forest.

Ahead lay cultivated fields, from which Afkans were on their way home to supper. They marched in gangs, each under control of an overseer with a whistle.

In the twilight, the fields gave way to a perfectly square town. Houses of timber and plaster, of severely plain, square, monotonous design, were set on streets laid in a square grid pattern. An Afkan was lighting lamps at the street corners with a long-handled device.

"Not what one would call charm," said Halran. "It is like an overgrown barracks."

"At least," said Marko, recalling the tangled alleys of Niok and Lann, "it should be easy to find one's way around."

The escort stopped in front of a building, distinguished from the rest only by its greater size. A pair of sentries, armed with swords and crossbows, stood rigidly before the entrance. The lamplight gleamed on their polished bronzen cuirasses and helmets.

He of the toga went in. After a long wait, he returned with several others of his kind.

"Follow us," he said through the interpreter.

Inside, the building was bare and functional. The travelers were ushered into a large room. Black men sat impassively in chairs. Marko and Halran remained standing, each with a pair of spearmen to guard him.

For the next hour, the travelers were minutely questioned about their origin, their purpose, and the nature of Halran's flying machine. Their inquisitors at first all looked alike to Marko, the more so since they never allowed a flicker of expression to ruffle their dignity. By and by, however, he began to distinguish them. One man, a little shorter and stouter than the others, seemed to be an object of deference.

Then another black arrived. This was an elderly man in a white

toga, with a conical hat on his kinky gray hair. He spoke to the inquisitors and then, in good Anglonian, to the travelers.

"We can dispense with this clumsy interpretation," he said. "I am Ndovu, high priest of Laa. That—" (he indicated the stout man) "— is Chaka, the Kabaka of Afka. The others are his ministers. I was absent when you arrived but came as soon as I heard. Repeat, briefly, what you have told the Kabaka."

"Please sir, may we sit down?" said Halran. "I am ready to faint with weariness."

Ndovu nodded and spoke to the spearmen, who brought stools. When Halran had been through his tale once again, the high priest said: "It is plausible. You say this flying device is your invention?"

"Yes, sir."

"Hm. It is too bad that we shall have to kill a man of your gifts, Professor."

"*Oy*! What have we done to deserve this fate?"

"You have set foot on the sacred soil of Afka, that is what you have done. For hundreds of years, we have published abroad the fact that we want no contact with outsiders and that any who come here without special authorization are liable to death. You have aggravated your offense by not only coming here but also by inventing a device whereby others could easily do likewise, thus imperiling our isolation."

"Why are you so insistent on your precious isolation?"

"To preserve the purity of our blood. If outsiders were let in, sooner or later one would contract a liaison with one of our women. Our racial integrity would be threatened."

Marko spoke: "How long have we, sir?"

"Until morning. We do things here in proper order, and it will take that long for the courts to process your case. But see here, my man, it is for us to ask questions, not you!"

The high priest spoke to the guards, who began to hustle Marko and Halran out.

"Holy Father!" cried Halran. "At least you owe us—ah—spiritual consolation, don't you?"

As the guards hesitated, the high priest gave a faint smile—the first expression that Marko had yet seen on an Afkan face. "I suppose so. I shall visit you later this evening, after the supper you so inconveniently interrupted."

§ § §

When Ndovu came to their cell, he said: "I take it that the true

faith of Laa is not known in your barbarous land?"

"Indeed not, sir," said Halran. "Enlighten us, I pray."

"Well, in the beginning Laa created the heavens and the earth. He also created the first man and woman, named Kongo and Kenya respectively.

"For many centuries, the descendants of Kongo and Kenya dwelt happily in the land. Then some of the people fell into sinful ways. I do not have time for all the details, but suffice it to say that Laa cursed these sinful ones by bleaching their skins. Before then, all mankind had been black, like us.

"More time passed. Then the cursed ones, the paleskins, waxed in numbers. By a sudden onset, they overcame the virtuous blackskins and made slaves of them. For many generations, they forced the blackskins to labor at menial tasks.

"At last, Laa sent the captive blackskins a leader, named Mozo, to lead them out of captivity. Mozo warned the king of the paleskins that, unless he let Laa's chosen people go, the king's folk would suffer grievous chastisement.

"The king, however, did not believe this. He drove Mozo out with scorn and insults. As a result, his folk were afflicted with incursions of transors and other pests, drouth, epidemics, and other misfortunes. After seven of these plagues had befallen the paleskins, their king at last agreed to let Laa's folk go. So they went forth under the guidance of Mozo.

"Then the king repented him of having yielded to Mozo's threats and set out in pursuit with his army. When the blackskins came to the shores of the Medranian Sea, Mozo prayed to Laa, who parted the waters of the sea. Thus Laa's folk crossed over to Afka dry-shod. But when the king of the paleskins and his army sought to follow, the waters returned and drowned them all.

"Ere he died, Mozo called his people together and propounded a code of laws for them. Amongst these laws, besides the usual prohibitions of lying, theft, murder, impiety, and so on, he ordained that all Afkans must be efficient, energetic, and industrious. They must arm to the teeth and be ready at all times to defend themselves and the land that Laa had given them.

"The cursed ones had enslaved them, he said, because they had taken life too easily. In enjoying life, they had let the paleskins get ahead of them in organization and technology. This, he said, must never happen again. It is ordained that, the more a man gives up the pleasure of life in this world, the greater shall be his pleasures in Earth."

"You Afkans seem like a grimly puritanical lot," said Halran, "if you will excuse my saying so."

Ndovu beamed. "No apologies needed. What you say is high praise here. Now, Mozo also insisted upon the racial purity of the folk, if they wished Laa to continue to love and protect them. During their time of slavery, there had naturally been some mixture between the two races, so that many blackskins were actually of paler shades. Ever since, if a newborn infant betrays paleskin blood by its color, it is destroyed. Thus we have weeded out nearly all trace of the blood of the cursed ones, and we are determined to maintain this purity at all costs. Now do you understand?"

§ § §

The cell was clean, but the bars were stout and the lock unpickable, at least with any means the travelers had to hand. The guards in the corridor had no words in common with the prisoners and ignored their efforts at communication. Halran bemoaned his lot.

After a restless night, Marko and Halran were led out at sunrise, with their wrists tied behind them. At the scaffold, they found High Priest Ndovu awaiting them.

"I thought that such gifted outsiders as yourselves deserved spiritual consolation at the highest level," he said. "Let us join in a prayer to Laa, the merciful, the compassionate."

During the prayer, the executioner kept testing the edge of his ax with his thumb. Halran's teeth chattered audibly. Marko miserably felt that there was something he could say that would avert their fate, only he could not quite think what it was. Ndovu droned:

". . . and so, as your heads fall, may your souls fly to the realms above with the speed of a bolt from a crossbow—"

"Sir!" cried Marko. "Listen to me!"

"Yes, my son?"

"Look, you hold it against us for inventing the balloon, don't you?"

"Yes. I explained that."

"Well, if we invented something that would help you to keep outsiders away, wouldn't that make up for it?"

"Hm," said Ndovu. "What have you in mind?"

"If it works, will you let us go?"

"I cannot promise that; the cabinet and the supreme court would have to concur."

"Well, ask them."

The executioner spoke. "Holy Father, I cannot stand around all morning. I have my orders."

Ndovu said: "Well, I will grant you a one-day reprieve on my own authority; we are a just people. But this had better not be a ruse, merely to gain a few days of life." He spoke to the guards, who led Marko and Halran back to their cell.

When they were alone again, Halran said: "What is this, Marko? I hope you were not merely bluffing. If you were, they may find some lingering finish for us."

"I hope I wasn't, either. It was that last remark of his, about crossbow bolts."

"Well?"

"These people have the crossbow, just as ours do. It struck me that, if we could make an oversized crossbow, mounted on some sort of frame or pedestal, it could shoot bolts the size of spears, and much farther than any ordinary missile weapon."

"What were the purpose? These folk seem militaristic enough without our adding to their arsenal."

"Some of these supercrossbows, mounted around the coasts of this island, should discourage unwanted visitors."

Halran mused: "I seem to remember something in the old literature about such a device. It was called a 'gun' or a 'catapult'. As I remember, however, it discharged with a flash and a clap of thunder and hurled a ball of metal."

"We have none of these lengendary weapons, but the Afkans have plenty of good, strong wood to make a big crossbow from."

§ § §

Many days later, Marko and Halran stood again on the shore of Afka, watching a squad of soldiers inflate the balloon. The high priest said:

"I should have liked you to stay until the full-sized model was completed." He nodded towards a quarter-scale model, consisting of a standard Afkan crossbow on a pedestal, with pivots for training and elevating and a winch for cocking it. "In any case, be sure to tell the folk of the barbarian lands that we have this device, to discourage attempts to visit us." Ndovu smiled. "I have enjoyed our talks and the news you have brought. Luckily, I am deemed holy enough not to have my soul endangered by intercourse with accursed ones."

"Thank you, Holy Father," said Halran.

Ndovu continued: "Colonel Mkubwa is sure that, having grasped the principle of your device, he can, with the help of our

skilled craftsmen, complete the full-sized model himself. The Kabaka is anxious to get you off our sacred soil, lest you steal out and impregnate our women. It is a common belief that all paleskins are superhumanly lusty and incorrigibly lecherous."

"Now it is you who flatter us," said Halran.

When the balloon was filled, and Marko and Halran climbed into the basket, the high priest called: "Laa be with you!" and waved. The mild southeast breeze carried the balloonists off Afka towards Lann. Halran said:

"Thank Napoleon! Until the last minute, I was sure they would find some excuse to violate their promises and kill us."

"They must have a strict code of honor, as we do in Vizantia," said Marko.

"Or else they are serious about wanting us to spread the rumor of their secret weapon. I do not mind doing so; but we had better not reveal our part in its invention. I have never been strong for priests; but, of the Afkans, Ndovu seemed the most human. It would not do to tell him so, though. He wouldn't consider it a compliment."

Dear George,

Congratulations on a really super first issue. Hope it sells like crazy and you can increase the number of issues per year. This field needs good magazines, and I'm delighted to see one so good.

Was particularly impressed with the Sally A. Sellers story. Would you please send the enclosed on to her? I want to make sure if she's working on a novel, she thinks of us. Thanks.

Hope your holidays are pleasant.

Bests,

Judy-Lynn del Rey
Ballantine Books
New York NY

Praise from the dynamic Judy-Lynn is praise indeed.
—Isaac Asimov

Gentlemen:

Enclosed please find my check for a subscription to *Isaac Asimov's Science Fiction Magazine.* While I rather resent the use of Dr. Asimov's name without his talents, the stories in the first issue were excellent. I agree with the premise that there is always room for another science fiction magazine if the contents are what people wish to read. Keep up the good work.

Sincerely,

Allan B. Wheeler
Milwaukee WI

To which talents do you refer? I had an editorial in the first issue, and a story, and I did work in concert with George on the story selections. Fair enough?
—Isaac Asimov

Dear Dr. Asimov,

I picked up your first issue today at the Science Fiction Shop in Manhattan. I started reading it on the subway back to Brooklyn and became so engrossed that I almost missed my stop. Before I had finished the issue, I knew this was the magazine I had been waiting for. I sent in my subscription before I finished reading the whole magazine. Now that I have finished it, I can only say that

it was *GREAT!* I especially enjoyed your own story since I have served as a subject for numerous psychophysiology experiments on brain waves.

"On Books" is the best review column in a SF magazine that I have ever read. Keep it up.

I know that I will enjoy your future issues as much as this one. Thank you for an enjoyable experience.

Sincerely,

Linda Cavagnaro
Brooklyn NY

It is our ambition to cause many people to miss their stops, and their bedtimes, and their appointments.

—Isaac Asimov

Dear Mr. Scithers:

My compliments to the Chef and the kitchen. You have prepared one helluva fine magazine.

I especially enjoyed the different format for book reviews. The usual long and cynical reviews are so boring; it's a pleasure to find someone willing to write short, positive reviews about selected books worthy of attention. And I'm also happy that you won't be using serials. Reading half a story is more frustrating than eating half a peanut.

If I were to comment on the fiction, I might manage to bore you with superlatives and compliments. I couldn't even choose a favorite. But one comment quickly: Thank you for avoiding "black" science fiction. Encouraging worlds may not be common, but they sure are more engrossing than nightmares.

Keep the fires bright.

Thank you,

Janet B. Kinney
W. Palm Beach FL

I can't swear we'll forever forswear nightmares. An engrossingly excellent one may someday tempt us. However, George and I are essentially cheerful people and this will be reflected in the magazine as a matter of course.

—Isaac Asimov

Dear Mr. Scithers,

Several things impress me about *IA'sfm*, one of them being the

magnificent cover! Will you continue to vary the cover photo? I also like the puzzles. The first one I got lost in but the second was easier to catch on to, and I figured out both answers without even looking!

I like having a magazine devoted to shorter stories rather than serials and the like. Lots of shorter things are easier to read than a few longer stories and are easier to retell to others.

In fact there is only one thing I can't stand about *IA'sfm*. That stupid cigarette ad sitting smack dab in the middle of this magazine offends me so much that I won't subscribe until it's gone. The rest of the magazine I am very impressed with!

Sincerely,

Annette Lessmann
Concord CA

Both George and I are firm non-smokers, but if the magazine is to continue, the name of the game is revenue, alas.
—Isaac Asimov

Dear Mr. Scithers:

Responding to the Asimov editorial in your Summer 1977 edition, please send me direction as to the kind of science fiction you are looking for. SASE enclosed. I will immediately send to you all the rotten stories I will write based on them.

What a pleasure it was to find a new magazine peeking out at me from behind last month's *Women's Day* on the top shelf in the newsstand downstairs! Even if I never get anything from you but printed rejection slips (which, of course, the rotten stories I will submit will undoubtedly deserve), I wish you tremendous success. Know I've done my bit by insisting that Heavy Harv, the man who stands by the rack and stops us from flipping through the magazines without first purchasing them, purchase a larger quantity of the book than the single copy I was lucky enough to grab first.

Stephen Gross
Wilmington DE

Well, now, speaking to the person in charge of the newsrack (gently, but firmly) is one of the best ways to help.
—Isaac Asimov

Dear Editor,

I loved your magazine. The stories in it are of the best I've read. Keep it up.

Scott Bigger
Crookston MN

Letters don't have *to be brief, but there is a kind of briefness that speaks volumes. Thank you.*

—Isaac Asimov

Dear Mr. Scithers:

First, let me congratulate you on a first issue that I think exceeded most expectations. I for one was pleasantly surprised to find a really excellent mix of science fiction types and styles, and only a few disappointments.

John Varley's piece was one of the two best in the issue, and one of the better stories I have read in the past year or so. The protagonist's thoughts were a little too colloquial to suit me, but a minor blemish perhaps just increases the beauty of the story.

Other favorites were Herb Boehm's "Air Raid" and Sherwood Springer's "Scorch". Both stories were quite well done, with Boehm's piece the most empathic story I have encountered in quite some time.

The only weaknesses in the issue were the two pieces of minor effort that Asimov and Clarke threw your way—but I suppose the name on the cover is worth certain amount of pain on the inside.

Rick Wilber
Edwardsville IL

It is not our policy to use poor stories for the sake of a name on the cover. If it happens, it means only that we are honestly mistaken.

—Isaac Asimov

Letters to the Editor should be addressed to the magazine here at Box 13116, Philadelphia PA 19101. We're very interested in what you liked best in this issue, what second best . . . and if there's anything you actively disliked. But we're particularly interested in how well our newsstand distribution is working; it will be of great help to us if you would let us know what's actually happening out in the newsstands that you're familiar with.

—G.H.S.

Classified MARKET PLACE

The rate per word for Classified Ads is $1.00 each insertion, minimum ad $15.00—payable in advance. Capitalized words 40¢ per word additional. Space reservations close 1st of 3rd month preceding COVER date. Send order & remittance to R. S. Wayner, Classified Ad Manager, DAVIS PUBLICATIONS, INC., 229 Park Ave. South, New York, N.Y. 10003.

ADDITIONAL INCOME

NEED EXTRA INCOME? $210.00 WEEKLY POSSIBLE SELLING INFORMATION BY MAIL. SEND $2.00 FOR COMPLETE WORK-AT-HOME PROGRAM SATISFACTION GUARANTEED OR REFUND. ORDER NOW! TIMAZEE ASSOCIATES, 68-8 DREXELBROOK DRIVE, DREXEL HILL, PA 19026.

MAKE EXTRA MONEY. New booklet shows you how to make money in your spare time without working, $1.50. Wenzel Gifts, 648 Highland, Oak Park, Illinois 60304, Dept. DP10.

HOTTEST MAIL ORDER PLAN available. Outstanding profits. Details Bobby Lee, Pittsburgh Rd., Box 5037, Poland, Ohio 44514.

EXTRA income is yours, proven program. Free details. Jerry, 1023 82nd, Oakland, CA 94621.

BOOKS & PERIODICALS

THRUST—SF in Review—controversial inside sf magazine, $1.25, Thrust Publications, 2008 Erie #2, Adelphi, MD 20783.

FREE! list of 300 self-improvement books of low cost. Success, happiness, personality, cooking, bridge, confidence, etc. Thomas E. McDonald Enterprises, 1625 Wells, Dept. DP, Port Huron, MI 48060.

90% OFF all current hardcover bestsellers! Buy one or many. Unique shared purchase concept. Free brochure: Bestseller Exchange, Box 957, Brighton, Ontario, Canada.

BUSINESS OPPORTUNITIES

MAKE Magnetic Signs. Big profits. Details, Universal, Lenora, KS 67645.

$25.00 DAILY possible stuffing envelopes! Details Free. Service, Box 715-D, Lynbrook, NY 11563.

$30.00 HUNDRED Stuffing Our Circulars into Stamped Addressed Envelopes. Immediate Earnings. Beginners Kit $2.00. COLOSSI, 1433-61 Street, DC-9, Brooklyn, NY 11219.

HOMEWORK! BIG MONEY addressing, mailing envelopes. Exciting offer 10¢. Linco Services, 3636 Peterson, Chicago, 60659.

1000% PROFIT Bronzing Baby Shoes. Free Literature. NBC, Box 1904-DG, Sebring, FL 33870.

$3000.00 MONTHLY. Immediate income. Stuff envelopes at home. Information, send self-addressed stamped envelope. Cottage, Box 730-DFJ, Baldwin Park, CA 91706.

$500.00 profit stuffing 1,000 envelopes. Details $1.00 (Refundable). Elamco, Bel3337 D10, Waldo, AR 71770.

BUSINESS OPPORTUNITIES—Cont'd

"999 SUCCESSFUL LITTLE KNOWN BUSINESSES" information write, Gentry Distributors, Dept. DP Box 511, Pascagoula, MS 39567.

GUARANTEED $178.00 WEEKLY. Work one hour daily. Free Brochure. FAS, Box 13703, San Antonio, TX 78213.

$350 weekly mailing letters. Free details. Bronxville House, Box 311 D, Bronxville, NY 10708.

MAIL VETERINARY APPROVED PET WATERBEDS; to owners for big profits! Keller's, 1912 D West 71 Street, Los Angeles, 90047 "stamp"

$200 weekly possible mailing circulars. Immediate earnings. Complete setup. $2.00 Guaranteed! M/L Box 68011, Seattle, WA 98188.

MILLIONAIRES SUCCESS SECRETS! Guide to million dollar opportunities. Proven, tested plans! Free moneybook! Write: Impact, Box 117. Dorval, Quebec H9R-4N5.

HUGE profits by mail! Details 25¢. Aguero, 1810 Springfield, Laredo, TX 78040.

NOW! Make 2 to 3 times your cost on gift items, novelties, toys, 1001 others. FREE DETAILS. Lakeside Enterprises, 5093 South 5100 West, P.O. Box 76, Hooper, Utah 84315.

$$$ FOR YOU. Gigantic distributor's catalog over 1500 items lowest prices. $2.00 (refundable) Mail Order Discounts, P.O. Box 9159, Dept. 110, Metairie, LA 70055.

CABLE FM broadcast station. No investment! Excellent income! Unique details free. CAFM, Box 5516-GJ6, Walnut Creek, CA 94596.

SELL information by mail! 2,400% profit! Sax, Dept. R-2010, Milan, Ohio 44846.

HOW TO RECRUIT COMMISSION SALESPEOPLE! Free details! Success publications, 35 Interlachen Place, Excelsior, Minnesota 55331.

INDIVIDUALS, desiring ownership of profitable small manufacturing business. Many spare/full time opportunities presently available without investment. Write: Marks, 92-D9, Brighton 11th, Brooklyn, New York 11235.

HUGE profits! Hundreds of products at below wholesale. Jewelry, gifts, others. $2.00 brings giant catalog, refunded with first order. Crojen, Box 142-A, Fallbrook, CA 92028.

BORROW $25,000 interest free! indefinitely! Anyone! Free report: Executive 110, Box 368, Buford, GA 30518.

BUSINESS OPPORTUNITIES—Cont'd

START YOUR OWN PROFITABLE WHOLESALE BUSINESS AT HOME, Free details, Maria, Dept. DP-10, 410 10th Street, Brooklyn, N.Y. 11215.

BUY IT WHOLESALE

SAVE money! Buy low cost quality Christmas Gift Items (5) catalogs $3.00. Winchester Enterprises Inc. 2807 SS Hargrave Street, Phila., PA 19136.

DETECTIVES

POLICE SECURITY INVESTIGATIVE schematics and equipment listings. Quimtronix, Box 548-DV, Seattle, WA 98111.

EDUCATION & INSTRUCTION

UNIVERSITY DEGREES BY MAIL! Bachelors, Masters, PhD.s. . . . Free revealing details. Counseling, Box 389-EQA-10, Tustin, CA 92686.

ACHIEVE GOALS. Free details, Goals Northeast, IO, Box 3365, Stamford, CT 06902.

ELECTRICAL EQUIPMENT & SUPPLIES

GIANT Bargain Packed Canadian Surplus Catalogs $1.00. Etco Electronics Dept. DG, 183G Hymus Blvd., Pointe Claire, Quebec H9R IE9.

FOR THE HOME

ACRYLIC SPICE MATE. A unique COMBINATION, SALT SHAKER and PEPPER MILL all in one! You can adjust the grinder to course, medium or fine. Made of CRYSTAL clear acrylic, stands 8" high. $6.98, Ohio Res. include tax. DENNY'S HOUSE OF GIFTS, 615 South Miami St., West Milton, Ohio 45383.

FRANCHISE OPPORTUNITIES

FRANCHISE DIRECTORY nation's money-making franchises. Comprehensive list. Concise description, capital requirements, government and nongovernment assistance programs, evaluation checklist, and much more. 300 pages. $9.95 Moneyback Guarantee! American Business, 8404 C3-10 Stuhldreher N.W., Massilon, Ohio 44646.

GIFTS THAT PLEASE

SEND $5 for handbags, free catalog. Reing-Teitelbaum, 1165 East 54 Street, P.O. Box 130 Ryder Street Station, Brooklyn, New York 11234.

FREE! 3 distinctive gifts with first purchase. Send $2.00 for catalog. Satisfaction guaranteed. Bry Mar/Wilkins House, 129 Briarwood, Versailles, KY 40383.

HYPNOTISM

FREE Fascinating Hypnosis Information! Startling! DLMH, Box 487 Anaheim, CA 92805.

INVENTIONS WANTED

FREE information, INVENTOR'S assistance, Caveat! Wil-Bet Enterprises, DP-3, Box 89, Orchard Park, NY 14127.

MAIL-ORDER OPPORTUNITIES

$250 PER THOUSAND stuffing envelopes, free supplies, Rush stamped addressed envelope, Tri-Par Industries, Box 706, New York, NY 10010.

FREE CATALOG of DISTINCTIVE GIFTS by MAIL. FASTS ENTERPRISES, 2800 ALLWOOD, ABBOTSFORD, B.C. V2T 3R9.

MISCELLANEOUS

SOLAR energy, For you? Free details. Box 5367, AH, Austin, Texas 78763.

MONEYMAKING OPPORTUNITIES

$3 Hourly stuffing envelopes. Easy work, Details free. Feldco, Box 228 Ryder, Brooklyn 11234.

$1000 MONTHLY POSSIBLE, mailing commission letters. Information—Free! OPPORTUNITIES Box 721D, Lynbrook, NY 11563.

$250.00 profit/thousand possible—stuffing-mailing envelopes. Offer: Rush stamped addressed envelope: Universal-ADVS X16180 Fort Lauderdale, FL 33318.

$300.00 WEEKLY, Mailing Circulars. Write: McGUIRE, Box 144, Tacoma, WA 98412.

$30.00 HUNDRED STUFFING our circulars into stamped addressed envelopes. Beginner's Kit $2.00 Mustachi, P.O. Box 46D10, Brooklyn, NY 11219.

BIG MONEY EARNINGS, DOZENS of HOMEWORK OFFERS. FREE DETAILS. Rush stamped self addressed envelope. PETERSEN ENTERPRISES, 1030 10th Lane, Vero Beach, Florida 32960.

$250 per thousand stuffing envelopes. Free supplies, rush SASE, Mosely, Box 364, Seaford, DE 19973.

FREE REPORT! Money can set you free. Get The Answer! Patrice, 8724 G-2, St., Dept. A-2, Oakland, CA 94621.

HOW to make up to $3,600 just for furnishing us 24 names. Information supplied 50¢. Taco, Box 12781, St. Louis 63141.

ANNOUNCING! Fantastic new homework $$$$. Write: Regal, 10835 SE Powell Blvd. #35, Portland, OR 97266.

FREE information. Ten money-making methods. Good second income. J. Chapman, 4713 Esterbrook, Columbus, Ohio 43229.

$250 per thousand stuffing envelopes. Free supplies. Rush stamped envelope: Moseley, Box 364, Seafard, DE 19973.

MONEYMAKING OPPORTUNITIES—Cont'd

999 Successful Businesses you operate profitably. Free details, Holman, Box 15008, Phila., PA 19121.

EXTRA MONEY. Copyrighted report shows how you can turn a hobby into making money. Lists common household articles which may be worth many dollars. One hobby can win a trip to a choice vacation spot, or hundreds of dollars in cash. $2.00 #MO-56T, Orman Enterprises, Dept. SF, 22852 Lexington, East Detroit, MI 48021.

NEW plan reveals secret of envelope stuffing. $$$$. Write: JK Enterprises, 512 Ninth, Green Bay, WI 54304.

CHRISTMAS money. Illustrated information, five 13¢ stamps, refundable. Advariety, P.O. Box 5295, Sherman Oaks, CA 91413.

COLLECT names! Make $1-$5 each. Free details. Wayne, Box 52, New Albany, MS 38652.

FREE moneymaking and business opportunity ideas. Limited offer. Philips, Box 162, Monsey, NY 10952.

NEW! Stuff letters for $$$. Details free! Carlois, 1724 Kimberly, Klamath Falls, OR 97601.

SECOND income selling books by mail. Jones, D10, 145 West 14th Ave., Vancouver, B.C. Canada V5Y 1W8.

EXTRA! Big money in mail order. Information, Fourstar, 5764 Addison, Detroit, Michigan 48210.

HOW to make big money with your camera. Sell photos to newspapers and magazines. Send $1.50 to George Provost, Dept. DP1077, 4251 Springview, San Antonio, Texas 78222.

STUFF ENVELOPES, $250 per thousand. Free supplies. Rush stamped addressed envelope. L/L Enterprises, Box 226 D, Danville, AL 35619.

MAKE YOUR CLASSIFIED AD PAY. Get "How to Write A Classified Ad That Pulls." Includes certificate worth $2.00 towards a classified ad in this publication. Send $1.50 (includes postage) to R. S. Wayner, Davis Publications, Inc., Dept. CL, 229 Park Avenue South, New York, NY 10003.

PERSONAL

SINGLE? Widowed? Divorced? Nationwide introductions! Identity, Box 315-DC, Royal Oak, MI 48068.

JAPANESE introduction! Girl's photographs, descriptions, brochure, details. $1.00. INTERPACIFIC, Box 304-SC, Birmingham, MI 48012.

THE GREAT PARADE OF GIRLS, A FOREMOST MATRIMONIAL CATALOG brings 750 beautiful photos as YOUR LUCKY CHOICE to your home, all seeking marriage. 50 pages, details, mailed sealed for $2, by O.I.B., Box 893 Sta A Peel, Montreal, Canada.

ADULT products directory! $5.00, Box 4937 d, Yuma, Arizona 85364.

PERSONAL—Cont'd

JAPANESE Girls Make Wonderful Wives. We have large number of listings. Many interested in marriage. Only $1.00 brings application, photos, names, descriptions, questionnaire, Etc. Japan International, Box 156-AA, Carnelian Bay, CA 95711.

BEAUTIFUL Mexican-Oriental girls Needing American Boy-Friends. Free Details, "actual" photos. World, Box 3876-DC, San Diego, CA 92103.

DATES GALORE! Meet singles-anywhere. Call DATELINE, toll-free (800) 451-3245.

NEED FINANCING? INVESTMENTS? BETTER CREDIT? Send $3.00 for booklet of SOURCES! Free Co., P.O. Box 5025, Alexandria, VA 22305.

LATIN AMERICAN GIRLS appreciate their men. Let us introduce you to a dark-eyed, unspoiled beauty. Complete application package and photo selection $2.00: Maria Garcia, Box 80801D, San Diego, Calif. 92138.

ATHEISTS, join the legal struggle against religious suppression: AMERICAN ATHEISTS, Post Office Box 3756, Oak Park, MI 48237.

BEAUTIFUL MEXICAN GIRLS! Friendship, marriage. Photos information free! "Latins," Box 1716-DF, Chula Vista, CA 92012.

ADULT Pleasure Products—over 600 items! Giant catalog $1.00. Clifton's D-1068, Saugus, CA 91351.

COLLEGE DIPLOMAS. The very best! Perfect for display. Fools everybody. Free revealing information. Clinton, Box 28870, Livonia, Michigan 48151.

500 Ladies, 350 Men Photos Matrimonial Catalog, $1.00 Contactpartner: Box 12, Toronto, Canada M4A 2M8.

ADULT PRODUCTS. Giant Catalog. $1.00 (Refundable). Trader Jack, 1045 Tabor Ave., Fairfield, CA 94533.

"ADULT" Books-Magazines, 40¢ up. Free Brochures. (State Age). Bargain Books, Box 7041-AL, Richmond, Virginia 23221.

SWEDISH girls. Details, photos $1., Sweden International, Box 7425-DC, Chicago 60680, USA.

PRINTING, MIMEOGRAPHING & MULTIGRAPHING

WHOLESALE, Printing Office Supplies, Equipment, Free Catalog, Atlantic, DP-10, Box 1678, Florence, South Carolina 29503.

WANTED TO BUY

WANTED TO BUY—Science Fiction magazines from 1926 to 1960. Harry Bennett, 6763 Hollywood Blvd., Hollywood, CA 90028.

If you have the courage — mail this coupon, and

"Extra coupon on page 113."

ALFRED HITCHCOCK'S MYSTERY MAGAZINE
P.O. BOX 2640, GREENWICH, CONN. 06830

☐ Send me 8 issues of AHMM for $5.97
☐ Payment enclosed. ☐ Bill me.

☐ Send me 12 issues (1 year) for $8.97
☐ I enclose payment and receive 2 BONUS ISSUES (14 in all).

☐ Bill me. I forfeit the BONUS ISSUES.

name (please print)

address

city

state zip

Please allow 6 to 8 weeks for delivery of your first copy.

H7J053

you'll get more than you bargained for in all new stories presented by the master of suspense.

NOW IN ITS 20TH YEAR!

First published in 1957, ALFRED HITCHCOCK'S MYSTERY MAGAZINE, a family magazine, continues to entertain thousands month after month. You'll find in every issue at least ten new stories, including a novelette, each guaranteed to thrill you and chill you. And you'll delight in the famous Hitchcock twist ending.

Subscribe today! Your copies will be delivered to your doorstep.

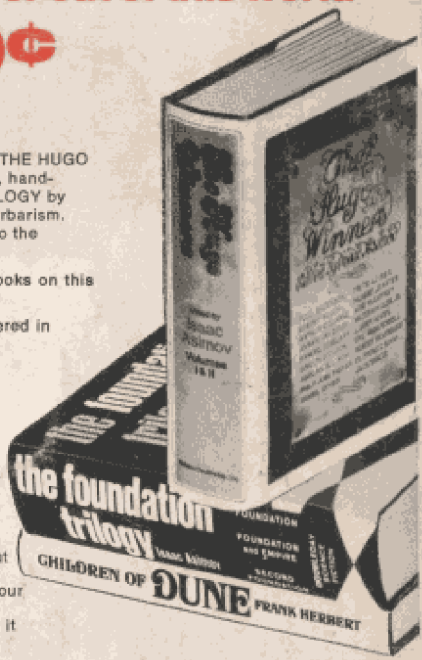
The very best reading in or out of this world

4 FOR 10¢ with membership

Choose any 4 books, including these science fiction greats: THE HUGO WINNERS, Volume I & II — 23 gripping short stories. A giant, handsome 864-page record of greatness. THE FOUNDATION TRILOGY by Isaac Asimov is an SF Classic that forecasts the return to barbarism. CHILDREN OF DUNE by Frank Herbert. The second sequel to the Hugo and Nebula award-winning *Dune*.

What a way to get acquainted. Browse through the list of books on this page and choose any 4 for just 10¢.

It's the most extraordinary sample of science fiction ever offered in one package.



Here's how the Club works:

When your application for membership is accepted, you'll receive your choice of 4 books for just 10¢ (plus shipping and handling). If not absolutely fascinated, return them within ten days—membership will be cancelled and you'll owe nothing.

About every 4 weeks (14 times a year), we'll send you the Club's bulletin describing the 2 coming Selections and Alternate choices. If you want both Selections, you need do nothing; they'll be shipped automatically. If you don't want a Selection, or prefer an Alternate, or no book at all, just fill out the form always provided, and return it to us by the date specified. We try to allow you at least ten days for making your decision. If you don't get the form in time to respond within 10 days, and receive an unwanted selection, you may return it at our expense.

As a member you need take only 4 Selections or Alternates during the coming year. You may resign any time thereafter, or remain a member as long as you wish. At least one of the two Selections each month is only $1.98 plus shipping and handling. Other extra-value selections are slightly higher but always much less than Publishers' Editions. Send no money. Send the coupon today.

7682. **Mindbridge.** By Joe Haldeman. Mind expanding space travel by the author of **The Forever War,** the 1976 Nebula winner. **Explicit scenes and language may be offensive to some.** Pub. ed. $8.95

9043. **The Star Trek Concordance.** By Bjo Trimble. A must-have large-format paperback with summaries of every episode and a complete lexicon of Trekkish terms. Pub. ed. $6.95

7625. **The 1977 Annual World's Best SF.** Donald A. Wollheim, ed. The best SF published during 1976 by Asimov, Knight, Varley and others. Includes Tiptree's **Houston, Houston, Do You Read?** Special Edition.

6221. **The Foundation Trilogy.** By Isaac Asimov. The ends of the galaxy revert to barbarism. An SF classic. Comb. Price $19.85

6320. **A World Out Of Time.** By Larry Niven. A black hole in space sends Jerome Corbell 3 million years into Earth's future where the ultimate battle of the sexes is raging. By co-author of **The Mote in God's Eye.** Pub. ed. $7.95

7635. **A Heritage of Stars.** By Clifford D. Simak. 500 years after Earth has reverted to a primitive society, one man is driven to reach for the stars. Pub. ed. $7.95

7773. **Children of Dune.** By Frank Herbert. Second sequel to the Hugo and Nebula award-winning **Dune,** this is the final volume of this outstanding SF trilogy. Pub. ed. $8.95

4735. **Gateway.** By Frederik Pohl. Travel on alien ships to distant parts of the universe—with no guarantee of return. By the author of **Man Plus.** Pub. ed. $8.95

8532. **The Hugo Winners, Vol. I & II.** Giant 2-in-1 volume of 23 award-winning stories, 1955 to 1970. Asimov introduces each. Pub. ed. $15.45

5041. **Star Wars:** From the Adventures of Luke Skywalker. By George Lucas. Life on a backwater planet can be dull, unless you become involved in an interstellar rebellion. Photos from the motion picture. Special Edition.

4770. **Llana of the Gathol and John Carter of Mars.** By Edgar Rice Burroughs. Excellent 2-in-1 volume in the Burroughs Mars series. Special Edition.

7906. **The Ophiuchi Hotline.** By John Varley. Cloning, alien invaders, and a mysterious message from the depths of space—all in this outstanding SF story. **Explicit scenes and language may be offensive to some.** Pub. ed. $8.95

Science Fiction Book Club 45-S119

Dept. MR159, Garden City, N.Y. 11530

I have read your ad. Please accept me as a member in the Science Fiction Book Club.

Send me, as a beginning, the 4 books whose numbers I have indicated below, and bill me just 10¢ (plus shipping and handling). I agree to take 4 additional books during the coming year and may resign anytime thereafter. SFC books are selections for mature readers.

Mr.
Mrs.
Miss _____
Please print

Address _____ Apt. ____

City _____ State _____ Zip ____

If under 18 parent must sign. Order not valid without signature.

_____

The Science Fiction Book Club offers its own complete hardbound editions sometimes altered in size to fit special presses and save members even more. Members accepted in U.S.A. and Canada only. Canadian members will be serviced from Toronto. Offer slightly different in Canada.