A NEW LOOK AT SPACE by Arthur C. Clarke

MACZ

Science Fiction Stories

- James Blish
- J.F. Bone
- Damon Knight

featured in July fantastic:

"Buy Me a Spaceship, DARLING!"



Most pretty girls ask for diamonds, furs or even a husband. But all Lora Merrick wanted from Morgan Blane was a space-ship—and she'd do anything to get it! She had just inherited the distant planet of Crispin—now all she had to do was get there. You'll be amazed by the incredible surprises in store for Lora and Morgan—way, way out on Crispin! Don't miss the CRISPIN AFFAIR, a new novel by Jack Sharkey coming your way in July FANTASTIC.

PLUS: You'll also enjoy THE COVENANT—a round-robin story by five top writers!

RESERVE YOUR COPY OF JULY FANTASTIC
... ON SALE AT YOUR FAVORITE NEWSSTAND JUNE 21 ... ONLY 35¢

AMAZING SCIENCE FICTION STORIES, Vol. 34, No. 7. July, 1960, is published monthly by Ziff-Davis Publishing Company, William B. Ziff, Chairman of the Boord (1946-1953) at 434 South Wabash Avenue, Chicago 5, Illinois. Second-class postage paid at Chicago, Illinois and at additional mailing offices. Subscription rates: U. S. and possessions and Canada \$3.50 for 12 issues; Pan American Union Countries \$4.00; all other foreign countries \$4.50.

GET READY FOR THE SPACE and SCIENCE ERA! SEE SATELLITES, MOON ROCKETS CLOSE-UP 🌈



... SEE THE STARS, MOON, PLANETS CLOSE UP 3" Astronomical Reflecting Telescope

Assembled and ready to use! 60- to 180-Power An Unusual Buy-Famous Mt. Palomar Type

Stock No. 85,050-HK.....\$29.95 Postpaid

WAR SURPLUS AMERICAN-MADE 7 x 50 BINOCULARS



Big savings! Brand new! Crystal clear viewing - 7 power. Every optical element is coated. An exoptical element is coated. An ex-cellent night glass—the size rec-ommended for satellite viewing. Individual eye focus. Exit, pupil 7mm. Approximate field at 1,000 yards is 376 feet. Carrying case included. American 7 x 50°s nor-

(Tex included)

cinating photos of moon!

mally cost \$195. Our war surplus price saves you real money. Stock No. 1533-HK.....only \$55.00 Postpaid

D-STIX CONSTRUCTION KITS



For Science Fans, Hobbyists Visualize your ideas. Crystallize your plans. Unique new D-STIX are ideal for "8-dimensional thinking." Colored wood sticks 3/2" thick and "easy-on" rubber joints approx. 3/2," diam, it together fast power of the color of the

tural members, shapes, models of all kinds. Ideal for interesting children in developing shapes, structures. Durable kits. Money-back guarantee.

Stock No. 70,209-HK (230 pcs)......\$3.00 Ppd. Stock No. 70,210-HK (370 pcs)......\$5.00 Ppd. Stock No. 70,211-HK (452 pcs)......\$7.00 Ppd.

TERRIFIC BUY! AMERICAN MADE! **OPAQUE PROJECTOR**

Projects illustrations up to 3" x 31/2" and enlarges them. At a second or negatives needed. Projects or negatives needed. Frojects charts, diagrams, pictures, photos, lettering in full color or black-and-white. Operates on 115 voit, A. C. current. 6-ft, extension cord and plug included. Operates on 60-watt bulb, not included. Approved by Underwriters' Laboratories, Inc. Size 12" x 8" x 4½" wide, Wt. 1 lb. 2 oz. Plastic case with bulbt-in handle.



Wt. 1 lb., 2 oz. Plastic case with built-in handle.

Stock No. 70,199-HK.....\$7.95 Postpald

BUILD A SOLAR ENERGY FURNACE



Build your own Solar Furnace for ex-Build your own Solar Furnace for experimentation — many practical uses, Easy! Inexpensive! Use scrapwood! We furnish Instructions. This sun-powered furnace will generate terrific heat—2000° to 3000°. Fuses enamel to metal, Sets paper affame in seconds. Use our Fresnel Lens—14"

diameter . . . f.1. 14" Stock No. 70,130-HK Fresnel Lens \$6.00 Ppd.

CLOSE OUT! MECHANICAL DRAWING SET



Regular Price \$18.00, Our Price Only \$8.00 Postpaid, American Postpaid. manufacturer couldn't compete with foreign imports—thus you get a terrific bargain, even far

below import prices. 16 handsome pieces in vel-vet-lined case. Nickel plated brass—precision American-made. We guarantee you'll be satisfied or money efunded

Stock No. 50,200-HK.....\$8.00 Postpaid

BARGAIN-PRICED STETHOSCOPES

Ideal for home craftsmen, hobbylsts, schools, children, Listen to running machinery. Check on hard-to-hear motor noises, leakage of gas, air or fluid. Pick up heart beats of animals, insect noises, other "unbearable"

sounds Stock No. 50,223-HK.....\$2.95 Postpaid Stock No. 50.270-HK DeLuxe Model \$5.95 Ppd.

Get FREE CATALOG "HK" 128 PAGES - OVER 1000 BARGAINS

World's largest variety of Optical Items. Bargains galore. War surplus—Imported—Domestic Micro-scopes. Telescopes. Satellite Tele-scopes. Infrared sniperscopes and scopes. Infrared sniperscopes and parts, Prisms, Lenses, Reticles, Mirrors and dozens of other hard-to-get Optical Items.



Write for Free Catalog HK

EASY PAYMENT PLAN AVAILABLE! DETAILS WITH CATALOGI

ORDER BY STOCK NUMBER . SEND CHECK OR MONEY ORDER . SATISFACTION GUARANTEED! EDMUND SCIENTIFIC CO., BARRINGTON, N. J.

AMAZING SCIENCE FICTION STORIES

REG. U. S. PAT. OFF.

Publisher

Editor

MICHAEL MICHAELSON

Editorial Director

CELE GOLDSMITH

Art Director

SID GREIFF

NORMAN M. LOBSENZ

JULY

1960

80

Volume 34

Number 7

SERIAL (Conclusion)

...AND ALL THE STARS A STAGE
By James Blish.....

NOVELET

SHORT STORIES

NOBLE REDMAN

ARTICLE

FEATURES

EDITORIAL 5
THE SPECTROSCOPE 137
...OR SO YOU SAY 139
COMING NEXT MONTH 60

¥

Cover: HARREL GRAY

ZIFF-DAVIS PUBLISHING COMPANY, One Park Avenue, New York 16, New York, William Ziff, President; W. Bradford Briggs, Executive Vice President; Michael Michaelson, Vice President and Circulation Director; H. B. Sarbin, Vice President; J. Leonard O'Donnell, Treasurer.





ONE of the things that constantly fascinates me about the march of science is the way in which it unblushingly reports developments which, only a short time earlier, it has attacked as "imaginings of science-fiction writers," or some similar phrase designed to lump s-f writers—and readers—in approximately the same category as Mongolian idiots.

For the record—and for your amusement and information—let's look over two such recent announcements:

1) An ion engine has been successfully tested at the National Aeronautics and Space Administration research center.

(An ion is an atom plus or minus one or more electrons, and thereby positively or negatively charged.) The engine ran for 50 hours, converting 58% of its fuel to energy (and this the scientists think can go up to 90%), and can probably push a rocket at 100,000 miles an hour.

2) And what about those stories where you can't open the door or the drawer or the cage unless your key can match the code of the lock? Fanciful, huh? Let me introduce Luther Simjian, a Connecticut inventor who has come up with a plastic or fiberboard card in which wires or a printed circuit are buried. One part of the plate is the lock. The other is broken off and is the key. To open the door you must close the circuit by making precise mechanical and electrical match.

If you have a really complicated plot, the inventor says you can break the key-lock (or lockey, whichever you prefer) into as many pieces as you have conspirators. All for one, and one for all!—NL



It was a big joke on all concerned. When you look back, the whole thing really began because his father had a sense of humor. Oh, the name fit all right, but can you imagine naming your son . . .

NOBLE REDMAN

By J. F. BONE

ILLUSTRATED by GRAYAM

A PAIR of words I heartily detest are noble and redman, particularly when they occur together. Some of my egghead friends from the Hub tell me that I shouldn't, since they're merely an ancient colloquialism used to describe a race of aborigines on the American land mass.

The American land mass? Where? Why-on Earth, of course-where would ancestors come from? Yes-I know it's not nice to mention that word. It's an obscenity. No one likes to be reminded that his ancestors came from there. It's like calling a man a son of a sloat. But it's the truth. ancestors came Earth and nothing we can do is going to change it. And despite the fact that we're the rulers of a good sized segment of the galaxy, we're nothing but transplanted Earthmen.

I suppose I'm no better than most of the citizens you find along the peripheral strips of Martian dome cities. But I might have been if it hadn't been for Noble Redman. No—not the noble redman—just Noble Redman. It's a name, not a description, although as a description his surname could apply, since he was red. His skin was red, his hair was red, his eyes had reddish flecks in their irisis, and their whites

were red like they were inflamed. Even his teeth had a reddish tinge. Damndest guy I ever saw. Redman was descriptive enough—but Noble! Ha! that character had all the nobility of a Sand Nan—.

I met him in Marsport. I was fairly well-heeled, having just finished guiding a couple of Centaurian tourists through the ruins of K'nar. They didn't believe me when I told them to watch out for Sand Nans. Claimed that there were no such things. They were kinda violent about it. Superstition—they said. when the Nan heaved itself up out of the sand, they weren't ready at all. They froze long enough for it to get in two shots with its stingers. They were paralyzed of course, but I wasn't, and a Nan isn't quick enough to hit a running target. So I was out of range when the Nan turned its attention to the Centaurians and started to feed. I took a few pictures of the Nan finishing off the second tourist—the female one. It wasn't very pretty, but you learn to keep a camera handy when you're a guide. It gets you out of all sorts of legal complications later. The real bad thing about it was that the woman must have gotten stuck with an unripe stinger because she didn't

go quietly like her mate. She kept screaming right up to the end. I felt bad about it, but there wasn't anything I could do. You don't argue with a Nan without a blaster, and the Park Service doesn't allow weapons in Galactic Parks.

Despite the fact that I had our conversation on tape and pictures to prove what happened, the Park cops took a dim view of the whole affair. They cancelled my license, but what the hell—I wasn't cut out for a guide. So when I got back to Marsport, I put in a claim for my fee, and since their money had gone into the Nan with them, the Claims Court allowed that I had the right to garnishee the deceaseds' personal property, which I did. So I was richer by one Starflite class yacht, a couple of hundred ounces of industrial gold, and a lot of personal effects which I sold to Abe Feldstein for a hundred and fifty munits.

Abe wasn't very generous, but what's a Martian to do with Centaurian gear? Nothing those midgets use is adaptable to us. Even their yacht, a six passenger job, would barely hold three normal-sized people and they'd be cramped as kampas in a can. But the hull and drives were in good

shape and I figured that if I sunk a couple of thousand munits into remodelling, the ship'd sell for at least twenty thousand—if I could find someone who wanted a three passenger job. That was the problem.

Abe offered me five thousand for her as she stood—but I wasn't having any—at least not until I'd gotten rid of the gold in her fuel reels. That stuff's worth money to the spacelines—about fifty munits per ounce. It's better even than lead as fuel—doesn't clog the tubes and gives better acceleration.

Well—like I said—I was flusher than I had been since Triworld Freight Lines ran afoul of the cops on Callisto for smuggling tekla nuts. So I went down to Otto's place on the strip to wash some of that Dryland dust off my tonsils. And that's where I met Redman.

He came up the street from the South airlock—a big fellow—walking kinda unsteady, his respirator hanging from his thick neck. He was burned a dark reddish black from the Dryland sun and looked like he was on his last legs when he turned into Otto's. He staggered up to the bar.

"Water," he said.
Otto passed him a pitcher

and damned if the guy didn't drink it straight down!

"That'll be ten munits," Otto said.

"For water?" the man asked.

"You're on Mars," Otto reminded him.

"Oh," the big fellow said, and jerked a few lumps of yellow metal out of a pocket and dropped it on the bar. "Will this do?" he asked.

Otto's eyes damn near bulged out of their sockets. "Where'd you get that stuff?" he demanded. "That's gold!" "I know."

"It'll do fine." Otto picked out a piece that musta weighed an ounce. "Have another pitcher."

"That's enough," the big fellow said. "Keep the change."

"Yes, sir!" You'da thought from Otto's voice that he was talking to the Prince Regent. "Just where did you say you found it."

"I didn't say. But I found it out there." He waved a thick arm in the direction of the Drylands.

By this time a couple of sharpies sitting at one of the tables pricked up their ears, removed their pants from their chairs and began closing in. But I beat them to it. "My name's Wallingford," I said. "Cyril Wallingford."

"So what?" he snaps.

"So if you don't watch out you'll be laying in an alley with all that nice yellow stuff in someone else's pocket."

"I can take care of myself," he said.

"I don't doubt it," I said, looking at the mass of him. He was sure king-sized. "But even a guy as big as you is cold meat for a little guy with a Kelly."

He looked at me a bit more friendly. "Maybe I'm wrong about you, friend. But you look shifty."

"I'll admit my face isn't my fortune," I said sticking out what little chin I had and looking indignant. "But I'm honest. Ask anyone here." I looked around. There were three men in the place I didn't have something on, and I was faster than they. I was a fair hand with a Kelly in those days and I had a reputation. There was a chorus of nods and the big fellow looked satisfied. He stuck out a hamsized hand.

"Me name's Redman," he said. "Noble Redman. My father had a sense of humor." He grinned at me, giving me a good view of his pink teeth.

I grinned back, "Glad to know you," I replied. I gave the sharpies a hard look and they moved off and left us alone. The big fellow interested me. Fact is-anyone with money interested mebut I'm not stupid greedy. It took me about three minutes to spot him for a phony. Anyone who's lived out in the Drylands knows that there just isn't any gold there. Iron, sure, the whole desert's filthy with it, but if there is anything higher on the periodic table than the rare earths, nobody had found it vet-and this guy with his light clothes. street boots and low capacity respirator-Hell! he couldn't stay out there more than two days if he wanted to-and besides, the gold was refined. The lumps looked like they were cut off something bigger -a bar, for instance.

"A bar! —a bar of gold! My brain started working. K'nar was about two days out, and there had always been rumors about Martian gold even though no one ever found anv. Maybe this tourist had come through. If so, he was worth cultivating. For he was a tourist. He certainly wasn't a citizen. There wasn't a Martian alive with a skin like his. Redman—the name fitted all right. But what was his game? I couldn't figure it. And the

more I tried the less I succeeded. It was a certainty he was no prospector despite his burned skin. His hands gave him away. They were big and dirty, but the pink nails were smooth and the red palms soft and uncalloused. There wasn't even a blister on them. He could have been fresh from the Mercury Penal Colony—but those guys were burned black—not red, and he didn't have the hangdog look of an ex-con.

He talked about prospecting on Callisto—looking for heavy metals. Ha! There were less heavy metals on Callisto than there were on Mars. But he had listeners. His gold and the way he spent it drew them like honey draws flies. But finally got the idea. Somehow. subtly, he turned the conversation around to gambling which was a subject everyone knew. That brought up tales of the old games, poker, faro, three card monte, blackjack, roulette—and crapshooting.

"I'll bet there isn't a dice game in town." Redman said.

"You'd lose," I answered. I had about all this maneuvering I could take. Bring it out in the open—see what this guy was after. Maybe I could get something out of it in the process. From the looks of his hands he was a pro. He could

probably make dice and cards sing sweet music, and if he could I wanted to be with him when he did. The more I listened, the more I was sure he was setting something up.

"Where is this game?" he asked incuriously.

"Over Abie Feldstein's hockshop," I said. "But it's private. You have to know someone to

get in."

"You steering for it?" He asked.

I shook my head, half puzzled. I wasn't quite certain what he meant.

"Are you touting for the game?" he asked.

The light dawned. But the terms he used! Archaic was the only word for them!

"No," I said, "I'm not fronting for Abie. Fact is, if you want some friendly advice, stay outa there."

"Why—the game crooked?"
"There it was again, the old fashioned word. "Yes, it's bowed," I said. "It's bowed like a sine wave—in both directions. Honesty isn't one of Abie's best policies."

He suddenly looked eager. "Can I get in?" he asked.

"Not through me. I have no desire to watch a slaughter of the innocent. Hang onto your gold, Redman. It's safer." I kept watching him. His face smoothed out into an expres-

sionless mask—a gambler's face. "But if you're really anxious, there's one of Abie's fronts just coming in the door. Ask him, if you want to lose your shirt."

"Thanks," Redman said.

I didn't wait to see what happened. I left Otto's and laid a courseline for Abie's. I wanted to be there before Redman arrived. Not only did I want an alibi, but I'd be in better position to sit in. Also I didn't want a couple of Abie's goons on my neck just in case Redman won. There was no better way to keep from getting old than to win too many munits in Abie's games.

I'd already given Abie back fifty of the hundred and fifty he'd paid me for the Centaurians' gear, and was starting in on the hundred when Redman walked in flanked by the frontman. He walked straight back to the dice table and stood beside it, watching the play. It was an oldstyle table built for six-faced dice, and operated on percentage—most of the time. It was a moneymaker, which was the only reason Abie kept it. People liked old-fashioned these games. They were part of the Martian tradition. A couple of local citizens and a dozen tourists were crowded around it, and the diceman's flat emotionless voice carried across the intermittent click and rattle of the dice across the green cloth surface.

I dropped out of the blackjack game after dropping another five munits, and headed slowly towards the dice table. One of the floormen looked at me curiously since I didn't normally touch dice, but whatever he thought he kept to himself. I joined the crowd, and watched for awhile.

Redman was sitting in the game, betting at random. He played the field, come and don't come, and occasionally number combinations. When it came his turn at the dice he made two passes, a seven and a four the hard way, let the pile build and crapped out on the next roll. Then he lost the dice with a seven after an eight. There was nothing unusual about it, except that after one run of the table I noticed that he won more than he lost. He was pocketing most of his winnings—but I was watching him close and keeping count. That was enough for me. I got into the game, followed his lead, duplicating his bets. And I won too.

People are sensitive. Pretty quick they began to see that Redman and I were winning

and started to follow our leads. I gave them a dirty look and dropped out, and after four straight losses, Redman did likewise.

He went over to the roulette wheel and played straight red and black. He won there too. And after awhile he went back to the dice table. I cashed in. Two thousand was fair enough and there was no reason to make myself unpopular. But I couldn't help staying to watch the fun. I could feel it coming—a sense of something impending.

Redman's face was flushed a dull vermilion, his eyes glittered with ruby glints, and his breath came faster. The dice had a grip on him just like cards do on me. He was a gambler all right—one of the fool kind that play it cozy until they're a little ahead and then plunge overboard and drown.

"Place your bets, -ladies and gentlemen," the diceman droned. "Eight is the point." His rake swept over the board collecting a few munit plaques on the wrong spots. Redman had the dice. He rolled. Eight—a five and a three. "Let it ride," he said,—and I jumped nervously. He should have said, "Leave it." But the diceman was no purist. Another roll—seven. The diceman

looked inquiringly at Redman. The big man shook his head, and rolled again—four. Three rolls later he made his point. Then he rolled another seven, another seven, and an eleven. And the pile of munits in front of him had become a respectable heap.

"One moment, sir," the diceman said as he raked in the dice. He rolled them in his hands, tossed them in the air, and handed them back.

"That's enough," Redman said. "Cash me in."

"But-"

"I said I had enough."
"Your privilege, sir."

"One more then," Redman said, taking the dice and stuffing munits into his jacket. He left a hundred on the board, rolled, and came up with a three. He grinned. "Thought I'd pushed my luck as far as it would go," he said, as he stuffed large denomination bills into his pockets.

I sidled up to him. "Get out of here, buster," I said. "That diceman switched dice on you. You're marked now."

"I saw him," Redman replied in a low voice, not looking at me. "He's not too clever, but I'll stick around, maybe try some more roulette."

"It's your funeral," I whispered through motionless lips.

He turned away and I left. There was no reason to stay, and our little talk just might have drawn attention. They could have a probe tuned on us now. I went down the strip to Otto's and waited. It couldn't have been more than a half hour later that Redman came by. He was looking over his shoulder and walking fast. His pockets, I noted, were bulging. So I went out the back door, cut down the serviceway to the next radius street, and flagged a cab.

"Where to, mister?" the jockey said.

"The strip—and hurry."

The jockey fed propane to the turbine and we took off like a scorched zarth. "Left or right?" he asked as the strip leaped at us. I crossed my fingers, estimated the speed of Redman's walk, and said, "Right."

We took the corner on two of our three wheels and there was Redman, walking fast toward the south airlock, and behind him, half-running, came two of Abie's goons.

"Slow down—fast!" I yapped, and was crushed against the back of the front seat as the jock slammed his foot on the brakes. "In here!" I yelled at Redman as I swung the rear door open.

His reflexes were good. He

hit the floor in a flat dive as the purple streak of a stat blast flashed through the space where he had been. The jockey needed no further stimulation. He slammed his foot down and we took off with a screech of polyprene, whipped around the next corner and headed for the hub, the cops, and safety.

"Figured you was jerking some guy, Cyril," the jockey said over his shoulder. "But who is he?"

Redman picked himself off the floor as I swore under my breath. The jockey would have to know me. Abie'd hear of my part in this by morning and my hide wouldn't be worth the price of a mangy rat skin. I had to get out of town-fast! And put plenty of distance between me and Marsport. This dome-this planet-wasn't going to be healthy for quite a while. Abie was the most unforgiving man I knew where money was concerned, and if the large, coarse notes dripping from Redman's pockets were any indication, there was lots of money concerned.

"Where to now, Cyril?" the jockey asked.

There was only one place to go. I damned the greed that made me pick Redman up. I figured that he'd be grateful to the tune of a couple of kilo-

14

munits but what was a couple of thousand if Abie thought I was mixed up in this? Lucky I had a spaceship even if she was an unconverted Centaurian. I could stand cramped quarters a lot better than I could take a session in Abie's back room. I'd seen what happened to guys who went in there, and it wasn't pretty. "To the spaceport," I said, "and don't spare the hydrocarbons."

"Gotcha!" the jock said and the whine of the turbine increased another ten decibels.

"Thanks, Wallingford," Redman said. "If you hadn't pulled me out I'd have had to shoot somebody. And I don't like killing. It brings too many lawmen into the picture." He was as cool as ice. I had to admire his nerve.

"Thanks for nothing," I said. "I figured you'd be grateful in a more solid manner."

"Like this?" he thrust a handful of bills at me. There must have been four thousand in that wad. It cheered me up a little.

"Tell me where you want to get off," I said.

"You said you have a spaceship." he countered.

"I do, but it's a Centaurian job. I might be able to squeeze into it but I doubt if you could. About the only spot big

enough for you would be the cargo hold, and the radiation'd fry you before we even made Venus."

He grinned at me. "I'll take the chance," he said.

"Okay, sucker," I thought.
"You've been warned." If he came along he'd damn well go in the hold. I could cut the drives after we got clear of Mars and dump him out—after removing his money, of course. "Well," I said aloud, "it's your funeral."

"You're always saying that," he said with chuckle in his voice.

We checked out at the airlock and drove out to the spaceport over the sand-filled roadbed that no amount of work ever kept clean. We cleared the port office, drew spacesuits from Post Supply, and went out to my yacht. Redman looked at her, his heart in his eyes. He seemed overwhelmed by it.

"Lord! she's beautiful!" he breathed, as he looked at the slim polished length standing on her broad fins, nose pointed skyward.

"Just a Starflite-class yacht," I said.

"Look, Cyril," he said. "Will you sell her?"

"If we get to Venus alive and you still want to buy her, she'll cost you—" I hesitated, "twenty-five thousand."

"Done!" he said. It came so fast that I figured I should have asked for fifty.

"The fuel will be extra," I said. "Fifty munits an ounce. There's maybe ten pounds of it."

"How far will that take me?"

"About ten lightyears at cruising speed. Gold is economical."

"That should be far enough," he said with a faint smile.

We drew the boarding ladder down and prepared to squeeze aboard. As I figured it, we had plenty of time, but I hadn't counted on that nosy guard at the check station, or maybe that character at the south airlock of the dome, because I was barely halfway up the ladder to the hatch when I heard the howl of a racing turbine and two headlights came cutting through the night over the nearest dune. The speed with which that car was coming argued no good.

"Let's go," I said, making with the feet.

"I'm right behind you," Redman said into my left heel. "Hurry! Those guys are out for blood!"

I tumbled through the lock and wiggled up the narrow passageway. By some contortionist's trick Redman came through the hatch feet first, an odd looking gun in his hand. Below us the turbo screeched to a stop and men boiled out. blasters in hand. They didn't wait-iust started firing. Electrostatic discharges leaped from the metal of the ship, but they were in too much of a hurry. The gun in Redman's fist steadied as he took careful aim. A tiny red streak hissed out of the muzzle-and the roof fell in! A thunderous explosion and an eve-wrenching burst of light filled the passageway through the slit in the rapidly closing hatch. The yacht rocked on her base like tree in a gale, as the hatch slammed shut.

"What in hell was that?" I yelped.

"Just a low yield nuclear blast," Redman said. "About two tons. Those lads won't bother us any more."

"You fool!—you stupid moronic abysmal fool!" I said dully. "You're not content to get Abie on our heels. Now you've triggered off the whole Galactic Patrol. Don't you know that nuclear weapons are banned—that they've been banned ever since our ancestors destroyed Earth—that their use calls for the execution of the user? Just where

do you come from that you don't know the facts of life?" "Earth," Redman said.

It left me numb. Any fool knew that there was no life on that radioactive hell. Even now, spacers could see her Van Allen bands burning with blue-green fire. Earth was a sterile world—a horrible example, the only forbidden planet in the entire galaxy, a galactic chamber of horrors ringed with automatic beacons and patrol ships to warn strangers off. We Martians. Earth's nearest neighbor, had the whole history of that last suicidal war drummed into us as children. After all, we were the cradle of Galactic civilization even though we got that way by being driven off Earth -and feeling that almost any place would be better than Mars. Mars iron built the ships and powered the atomics that had conquered the galaxy. But we knew Earth better than most, and to hear those words from Redman's lips was a shock.

"You're a damn liar!" I exploded.

"You're entitled to your opinion," Redman said, "but you should know the truth when it is told to you. I am from Earth!"

"But-", I said.

"You'd better get out of here," Redman said, "your Patrol will be here shortly."

I was thinking that, too. So I wiggled my way up to the control room, braced myself against the walls and fired the jets. Acceleration crushed me flat as the ship lifted and bored out into space.

As quickly as I could, I cut the jets so the Patrol couldn't trace us by our ion trail, flipped the negative inertia generator on and gave the ship one minimal blast that hurled her out of sight. We coasted at a few thousand miles per second along the plane of the ecliptic while we took stock.

Redman had wedged himself halfway into the control room and eyed my cramped body curiously. "It's a good thing you're a runt," he said. "Otherwise we'd be stuck down there." He laughed. "You look like a jack in the box—all coiled up ready to spring out."

But I was in no mood for humor. Somehow I felt that I'd been conned. "What do I get out of this?" I demanded.

"A whole skin—at least for awhile."

"That won't do me any good unless I can take it somewhere."

"Don't worry," Redman

said. "They don't give a damn about you. It's me they want, turn on your radio and see."

I flipped the switch and a voice came into the control room-"remind you that this is a Galactic emergency! The Patrol has announced that an inhabitant of Earth has been on Mars! This individual is dangerously radioactive. A reward of one hundred thousand Galactic munits will be paid to the person who gives information leading to his death or capture. I repeat.—one hundred thousand munits! The man's description is as follows: Height 180 centimeters. weight 92 kilograms, eyes reddish brown, hair red. A peculiarity which makes him easily recognized is the red color of his skin. He is armed with a nuclear weapon and is dangerous. When last seen he was leaving Marsport spacefield. Starflite class yacht, registration number CY 127439. He has a citizen with him, probably a hostage. If seen, notify the nearest Patrol ship."

I looked at Redman. The greed must have shone from me like a beacon. "A hundred grand!" I said softly.

"Try and collect," Redman said.

"I'm not going to," I said and turned three separate plans to capture him over in my head.

"They won't work," Redman said. He grinned nastily. "And don't worry about radioactivity. I'm no more contaminated than you are."

"Yeah?—and just how do you live on that hotbox without being contaminated?"

I asked.

"Simple. The surface isn't too hot in the first place. Most of the stuff is in the Van Allen belts. Second, we live underground. And third we're protected."

"How?"

"Where do you think this red skin comes from? It isn't natural Even you should know that. Actually we had the answer to protection during the Crazy Years before the blowup when everybody talked peace and built missiles. A bacteriologist named Anderson discovered it while working with radiation sterilized food. He isolated a whole family of bacteria from the food that not only survived, but lived normally in the presence of heavy doses of radiation. The microbes all had one thing in common—a peculiar reddish pigment that protected them.

"Luckily, the military of his nation—the United States, I think they called it, thought that this pigment might be a useful protective shield for supplies. Extracts were made and tested before the Blowup came, and there was quite a bit of it on hand.

"But the real hero of protection was a general named Ardleigh. He ordered every man and woman in his command inoculated with the extract right after the Blowup —when communications were disorganized and commanders of isolated units had unchallengable power. He was later found to be insane, but his crazy idea was right. The inoculations killed ten per cent of his command and turned those who lived a bright red, but none of the living showed a sign of radiation sickness received the after thev extract.

"By this time your ancestors—the Runners—had gone, and those who stayed were too busy trying to remain alive to worry much about them. "Double A" vaccine-Anderson for named Ardleigh—was given to every person and animal that could be reached, but it was only a small fraction of the population that survived. The others died. But enough men and animals remained to get a toehold on their ruined world, and they slowly rebuilt.

We had forgotten about you Runners-but it seems you didn't forget us. You sealed us off-forced us to remain on Earth. And by the time we were again ready for space, you were able to prevent us. But we will not be denied forever. It took an entire planet working together to get me on Mars to learn your secrets. And when I got here, I found that I wouldn't have time to learn. We had forgotten one simple thingmy skin color. It isn't normal here and there is no way of changing it since the extract combines permanently with body cells. So I had to do the next best thing—obtain sample of your technology and bring it to Earth. I planned at first to get enough money to buy a ship. But those creeps in Marsport don't lose like gentlemen. I damn near had to beat my way out of that joint. And when a couple of them came after me, I figured it was all up. I could kill them of course, but that wouldn't solve anything. Since I can't fly one of your ships yet. I couldn't steal one—and wouldn't have time to buy one because I was pretty sure the Patrol would be after me as soon as the rumors of a red man got around. You seethey know what we look like

and its their job to keep us cooped up—"

"Hmm," I said.

"Why do they do it?" Redman asked. "We're just as human as you are." He shrugged. "At any rate," he finished, "I was at the end of my rope when you came along. But you have a ship—you can fly—and you'll take me back to Earth."

"I will?" I asked.

He nodded. "I can make it worth your while," he said.

"How?" I asked.

"Money. You'll do anything for money." Redman looked at me soberly. "You're a repulsive little weasel. Cyril. and I would distrust you thoroughly except that I know you as well as you know me. That's the virtue of being hu-We understand other without words. You are a cheap, chiseling, doublecrossing, money-grabbing heel. You'd kick your mother's teeth out for a price. And for what I'm going to offer you, you'll jump at the chance to help us-but I don't have to tell that. You vou already."

"What do you mean—know already?" I said. "Can I read your mind?"

"Do you mean to tell me—" Redman began, And then a

peculiar smile crossed his face, a light of dawning com-"Why no," prehension. said, "why should you telepathic-why should you? And to think I kept hiding—" he broke off and looked at me with a superior look a man gives his dog. Affectionate but pitying. "No wonder there were no psych fields protecting that dice game-and I thought—" he started laugh.

And I knew then why the Patrol had sealed Earth off. Mutated by radiation, speeded up in their evolution by the effects of the Blowup, Earthmen were as far ahead of us mentally as we were ahead of them technologically. To let these telepaths, these telekinetics — and God what else—loose on the Galaxy would be like turning a bunch of hungry kelats loose in a herd of fat sloats. My head buzzed like it was filled with a hive of bees. For the first time in years I stopped thinking of the main chance. So help me, I was feeling noble!"

"Just take it easy, Cyril," Redman said. "Don't get any bright ideas."

Bright ideas! Ha! I should be getting bright ideas with a character who could read me like a book. What I needed was something else.

"If you cooperate," Redman said, "you'll be fixed for life."

"You're not kidding," I said.
"I'd be fixed all right. The
Patrol'd hound me all the way
to Andromeda if I helped you.
And don't think they wouldn't
find out. While we can't read
minds, we can tell when a
man's lying."

"Have you ever heard of Fort Knox?" Redman asked.

"Fort Knox—Fort Knox—fourknocks! the thought staggered me.

"The gold I had came from there." Redman said.

Fourknocks! Sure, I'd heard of it. What citizen hadn't? They still tell stories of that fabulous hoard of gold. Tons of it buried on Earth waiting for someone with guts enough to go in and find it.

"All your ship will hold," Redman said. "After we ana-

lyze its principles."

"Five tons of gold! Six million munits! So much money! It staggered me. I'd never dreamed of that much money. Redman was right. I would kick my mother's teeth out if the price was right. And the price—I jumped convulsively. My arm brushed the control board, kicking off the negative inertia and slapping the axial correction jets.

The ship spun like a top! Centrifugal force crushed me against the control room floor. Redman, an expression of pained surprise on his face before it slammed against the floor, was jammed helplessly in the corridor. I had time for one brief grin. The Patrol would zero in on us, and I'd have a hundred thousand I could spend. What could I do with six million I couldn't use?

Then hell broke out. A fire extinguisher came loose from its fastenings and started flying around the room in complete defiance of artificial gravity. Switches on the control board clicked on and off. The ship bucked, shuddered and jumped. But the spin held. Redman, crushed face down to the floor, couldn't see what he was doing. Besides—he didn't know what he was doing-but he was trying. The fire extinguisher came whizzing across the floor and cracked me on the shin. A scream of pure agony left my lips as I felt the bone snap.

"Got you!" Redman grunted, as he lifted his head against the crushing force and sighted at me like a gunner. The extinguisher reversed its flight across the room and came hurtling at my head.

"Too late!" I gloated mentally. Then the world was fill-

ed with novae and comets as, the extinguisher struck. The cheerful thought that Redman was trapped because he didn't—couldn't—know how to drive a hypership was drowned in a rush of darkness.

"When I came to, my leg was aching like a thousand devils and I was lying on a rocky surface. Near-terribly near-was a jagged rock horizon cutting the black of space dotted with the blazing lights of stars. I groaned and rolled over, wincing at the double pain in leg and head. Redman was standing over me, carrying a couple of oxygen bottles and a black case. He looked odd, standing there with a load in his arms that would have crushed him flat on Mars. And then I knew, I was on an asteroid.

"But how did I get here?"
"Easy," Redman's voice came over my headphone.
"Didn't anyone ever tell you an unconscious mind is easier to read than a conscious one?"
He chuckled. "No," he continued, "I don't suppose they did—but it is. Indeed it is." He laid the bottles down, and put the box beside them. "I learned how to operate the ship, stopped the spin, and got her back into negative inertia before the Patrol found me.

Found this place about an hour ago—and since you began to look like you'd live, I figured you should have a chance. So I'm leaving you a communicator and enough air to keep you alive until you can get help. But so help me—you don't deserve it. After I played square with you, you try to do this to me."

"Square!" I yelped. "Why you—"The rest of what I said was unprintable.

Redman grinned at me, his face rosy behind the glassite of his helmet-and turned away. I turned to watch him picking his way carefully back to where the yacht rested lightly on the naked rock. At the airlock he turned and Then he waved at me. inside. The lock squeezed closed. There was a brief shimmer around the ship—a briefer blast of heat, and the vacht vanished.

I turned on the communicator and called for help. I used the Patrol band. "I'll keep the transmitter turned on so you can home in on me," I broadcasted, "but get that Earthman first! He's got my money and my ship. Pick me up later, but get him now!"

I didn't know whether my message was received or not, because Redman didn't leave me any receiver other than the spacesuit intercom in my helmet. It was, I suspected, a deliberate piece of meanness on his part. So I kept talking until my voice was a hoarse croak, calling the Patrol, calling—calling—calling, until a black shark shape blotted out the stars overhead and a couple of Patrolmen in jetsuits homed in on me.

"Did you get him?" I asked. The Patrolman bending over me shrugged his shoulders. "They haven't told me," he said.

They hauled me back to Marsport, put my leg in a cast, ran me through the lie detector, and then tossed me in jail for safekeeping. I beefed about the jail, but not too loud. As I figured it I was lucky to be out of Abie's hands.

Two days later, a Patrolman with the insignia of a Commander on his collar tabs showed up at my cell. He was apologetic. I was a hero, he said. Seems like the Patrol caught Redman trying to sneak through the asteroid belt on standard drive and blasted him out of space.

So they gave me the reward and turned me loose.

But it didn't do me any good. After taxes, it only came to twenty thousand, and Abie grabbed that before I could get out of town. Like I said, Abie's unforgiving where money's concerned, and Redman had taken him for over thirty kilos, which, according to Abie was my fault for lifting him and getting him out of town. After he got my twenty kilos he still figured I owed him twelve—and so I've never made it back. Every time I get a stake he grabs it, and what with the interest, I still owe him twelve.

But I still keep trying, because there's still a chance. You see, when Redman probed around in my mind to learn how to run the spaceship, he was in a hurry. He must have done something to my brain, because when he left me on that asteroid, as he turned and waved at me. I could hear him thinking that the Patrol would not be able to stop hyperships. and if he made it to Earth his people could emigrate to some clean world and stop having to inject their kids, and while they couldn't make the grade themselves, their kids could crash the Galaxy without any trouble. I got the impression that it wouldn't be too much trouble to empty Earth. Seems as though there wasn't many more than a million people left. The red color wasn't complete protection apparently.

And there's another thing. About a month after I got the reward, there was a minor complaint from Centaurus V about one of their officials who disappeared on a vacation trip to Mars. His ship was a Starflite class, Serial CY 122439. Get the idea?

So I keep watching all the incoming tourists like you. Someday I figure I'm going to run into a decolorized Earthman. They won't be able to stay away any more than the other peoples of the Galaxy. Old Mother Earth keeps dragging them back even though they've been gone for over a thousand years. Don't get the idea they want to see Mars. It's Earth that draws them. And it'll draw an Earthman's kids. And I figure that if I could read Redman's mind. I can read theirs, too even though T haven't read thought since. It figures, does it not?"

Hey! Hold on! There's no need to run. All I want to do is collect a fifty year old bill—plus interest. Your folks owe me that much.

THE END

"L" IS FOR LASH

By WILLIAM F. TEMPLE

Back from the depths of Venus, the killer came with his grisly retinue. He was primed for revenge. But revenge is never uncomplicated.

I USED to tell myself the day I took a drink before breakfast, I'd quit drinking. When I had lost my fear that that day would come, it came.

I poured a second neat bourbon and carried it back to the bedroom. The coins were still laid out on the bedside table in two lines at right-angles. In short an "L."

They were lined up with precision, as neatly as I would have arranged them myself. And must have arranged them. It was a dozen years since Tony Rizzio had vowed to get me. That was when the window stops went on and the new Ferrers thief-proof lock made the door impassable to anyone without a key—or a hatchet.

I had the only key. No one had used a hatchet in the

night—not on my door. The safety-chain was still in place. The stops held the windows to a two-inch gap. Who did I know who was only two inches wide—or less?

I'm a ritualist. Every night I checked the safeguards in the same order. Every night, last thing, I emptied the small change from my pockets onto the bedside table. Then I would arrange it neatly, not in lines but in piles: largest coins at the bottom, smallest on top.

As I had done last night. I recalled it—I'd been middling sober.

The whiskey was awash in the glass. My hand was unsteady. I was scared. Somnambulism—that's how it began with my old man. In the night he did the craziest



things. Then the walking dreams became walking night-mares. Then the nightmares became reality, and he saw things that couldn't be—but were.

As I saw now.

Delirium tremens is a terrible end. I saw a man go out that way. My father.

I drank half the whiskey and brooded over the rest of it. I knew I oughtn't to touch even that much again, but I wanted to, so I looked at the "L" and brooded over that instead.

That had a fear association also. Somewhere far down among the forgotten things a connection had been made. A cotton-thin thread was tugging at something reluctant to move. Or something my conscious mind was reluctant to let move.

But I had to know.

I strained to achieve recall, like Marcel Proust . . . And all at once it came up like a fish that had relinquished the fight.

"L" was for Lash.

Lash, who was killed forty years ago on Venus. I was responsible for sending him there. He anticipated Rizzio by some thirty years in promising to get me because I had got him.

Of the memory-pictures beginning to float into my mind, one now sprang into sharp focus. They were taking him from the court after sentence. I happened to be, by design, idling nearby, in a doorway. I knew it would be the last chance to see him. I hoped he wouldn't see me.

He didn't, at first. The beefy cop he was handcuffed to dragged him across the sunhot sidewalk like an unwilling dog on a chain. But suddenly Lash dug his heels in and stopped the muscleman with a jerk, turned his handsome head, stared at me without surprise. He'd sensed my proximity—he always had a kind of sixth sense.

He slipped his free hand over his other wrist and the handcuff sprang open. He could open cuffs as simply as though they were safety-pins. He came striding back to me grinning like a devil.

"Hey, hold it, Lash!"

The cops came pounding after him, the beefy one drawing his needle-gun.

Lash stopped, not a foot from me. His pale, ice-green eyes looked straight into mine. There was a mad humor in them But when he spoke, it was in a controlled, confidential whisper.

"Au revoir, Freddy."

That was all he said—in words—before the cops pounced and hauled him off again. But I had known "Lash" Leroux too long to miss the implication in this tone. I had heard him use it to another. The quiet, friendly whisper was a warning of death.

He had told me he would see me again and kill me.

Lash had some strong qualities. He never broke a promise to do good—or ill. He could be as tough as a spaceman or as sentimental as an adolescent girl. He had no book-learning, but he was quick and clever with brains, tongue, and hands. Too clever with his hands, at last.

There was no criminal record in his family and sometimes I wondered if it were mere chance he developed the way he did. We met in our 'teens at a convention of amateur magicians. His sleight-of-hand was the hit of the show. He was interested in a knife-throwing trick I'd cooked up. I threw the knife. It stuck quivering in the target. Then, in a flash, the target was bare again.

I was fascinated by the way he could palm and vanish a genuine, long-barrelled sixshooter. The thing was too big —it was impossible.

We traded—my knife trick

for his gun trick. And our friendship began.

He turned professional. He combined a spectacular escapologist act, all brazen showmanship, with a gently witty and unobtrusive pick-pocket act he mainly reserved for cabaret. They were two different kinds of show-off. The loud and the quiet. Two sides of the same character.

At what moment that character yielded to temptation I can't pinpoint. But I remember the moment our friendship ended—for me. It was when I saw in the paper he'd been arrested for murder. And there was the whole story of the double life of Lash Leroux of New Orleans.

The fingers that lifted wallets for fun in nightclubs had been lifting them for profit in subways. The fingers that opened handcuffs for effect had been opening bank safes for their contents. A bank guard had got in the way. The fingers that could work miracles with an antique six-shooter pulled on the trigger of a modern needle-gun. The guard was dead.

Lash Leroux's hands had run away with him.

Whether it was subconscious fear that I might go the same way, or whether it was a moral reaction, I don't know, but a week later I quietly joined the police force.

About the same time, Lash broke jail single-handed—the police had underestimated his way with locks—and fled the country.

How I became undercover man, located him in Paris, where he committed another murder, became one of his "Party," as he called his gang, and witnessed a further and most strange murder in London, and finally persuaded him back to the States where I betrayed him in his home town of New Orleans... is not this story.

Nor is this the story of Marcelle, the Parisian girl who was infatuated with him, who came back with us to the States. whom perhaps he She loved. shot herself through the heart the day before his trial. She was as unstable as nitro-glycerine, a poseur, an exhibitionist, with one hell of a death wish. She would have shot herself sometime, anyhow.

But she was another reason why Lash had promised to meet me again.

They made me a Detective-Lieutenant because of the Lash affair. But that's where promotion stopped and where my drinking began—because of the Lash affair.

My wife left me, because of the drink.

The same cause alienated my daughter, which was tragic, because I missed her far more than I missed my wife.

I lost a few friends, too, before eventually I lost my job. But two stuck by me, both younger cops—one British.

I dragged my gaze from the "L" of nickels and dimes and came to a couple of decisions. I locked the whiskey bottle away: I would not touch it until this mystery was solved. I visa-phoned my one American pal, Captain John Peters, and caught him at home before he left for the office.

He was twenty years younger than I and had changed somewhat from the greenhorn I'd taken under my wing. But he remained my friend. He grinned at me from the visa-screen, the aftershave lotion still wet on his chin. "Morning, Fred. What's with you?"

"You could do me a favor, Jack."

"Any time, pal. Fifty bucks enough?"

"Not that kind . . . Look, in the old days I used to bore you plenty with the Lash Leroux case. Remember it?" His grin went almost as fast as my vanishing knife.

"I remember it," he said, slowly. "You didn't bore me any."

"The case was closed in '97. If you could dig out the file, dust it off, let me go through it in your office . . ."

"Sorry, Fred. That file's hot. The case has been reopened. Why your sudden revival of interest in it?"

I stared at him for a moment, then countered anxiously: "What's the force's sudden revival of interest?"

He rubbed his damp chin. "You'll keep it quiet?"

"Who've I got to blab to?" I asked, bitterly.

"Okay. Five big-scale bank robberies. One killing."

"What?"

"They had the Lash signature on them. No trace of entrance or exit or anything to show how the job was done. Except the killing, of course—needle-gun. The 'L' sign left clearly in each instance."

"You mean," I said, "like this one?"

I stood aside so that he could see the bedside table behind me. In the long moment before he whistled his surprise, I thought again that Lash had been a fool to sign his crimes. Always that "L"

formed of any handy objects—in Paris it had been the murdered man's coat buttons, torn off. Lash had the inevitable vanity of the artiste. He wanted to be sure no-one stole the applause for his clever tricks.

"We-ell," said Peters hesitantly. "What's been happening?"

"All I know is I woke up and found that there. Thought I might have done it myself in my sleep. But now I guess not."

"No, Fred, you didn't do it. From the evidence it seems that somehow Lash is back from the dead, back from Venus, and back in business in the old style. It's his style, all right. Nobody else would begin to know how. A mystery on the side is—where's he been for the last forty years?"

"I don't know. Has he been seen?"

"No. Look, if he broke into your room last night, why didn't he wake you—and kill you?"

"Because the cat wants to play with the mouse first," I said. "Lash likes to linger over his pleasures, and revenge is his favorite pleasure."

"From now on you'll get police protection. I'll fix it."

"You want your men killed, too? Keep them away from me. If you want to do something for me, let me have a look at that file."

Peters thought for ten seconds. "See here, I'll smuggle it out while the Chief's at lunch. Meet you at a quarter after one in Graff's—I'll fix a private room. You can have the file for a half-hour—that's the limit."

"That'll do fine, Jack."
"See you, then."

Graff's was a long-established eating place near the precinct. Peters and I used to feed there a lot in the old days. Today I got there punctually but Peters had beaten me to it. He was in a back room supping soup. He reached a case from under the table and extracted the file.

"There you are. While you are refreshing your memory, d'you mind if I eat?"

"Go ahead."

In a few minutes I was blind to him, to Graff's, to the whole world of 2037. The old photographs—some police, some not—refashioned in my mind's eye a three-dimensional picture of Lash as a young man, as I had known him.

The black hair, smooth and dark as ebony, with its Mephistophelian widow's peak. The straight nose, just a trifle too

sharp. The pale green eyes. Lips thin and level, saved from severity but somehow not from cruelty by a humorous curl at the corners. Chin bluish and dimpled and resolute.

Handsome to a degree. Marcelle was but one among many who'd lost her heart to him.

Apart from the too pointed nose he had, facially, only one other slight blemish. And that was through no fault of nature, but of mine.

Spiritually, he was blemished beyond cure.

I skimmed through the reports of his trial, ignoring the passages where I came on the scene. Then concentrated on the accounts of the crash of the *Triad*.

The *Triad* was a convict ship carrying nearly a hundred convicted murderers to the Venusian settlement. Capital punishment had long since been abolished, but penal servitude for life meant doom in hell, anyway.

Venus was the unpleasantest known place in the universe. That is, what was known of Venus, which amounted in those days, comparatively, to the area of a fly speck on a pool ball. Today, the area was quite twice that size.

Under the canopy of carbon

dioxide the heat and humidity made a Turkish bath seem like an ice-box. For heavy work, oxygen masks were necessary, and the life of a convict was all heavy work.

The cloud belt began at ground level and visibility was never more than a few yards. There had been a number of calculated probes of the planetary surface. The results were dishearteningly similar. They may have been continual bad luck, but the law of averages would indicate Venus had nothing to offer on the surface but sand and water, mixed—a vast and unbounded sea of quicksand.

It was quicksand which swallowed the *Triad* when it unaccountably crash-landed some thousand miles from the tiny Venus Base, which had been given solid foundation at an uncalculated price of blood and sweat.

For deep under the wet sand was bedrock. To reach it and anchor piers to it was an ordeal Dante might have used for his *Inferno* if he could have imagined it.

The slave labor was recruited from the world's convicted murderers, of which there was no shortage. The crime graph showed a steep rise after World War II and it never had leveled off. Peters

felt pretty strongly about that and we'd had some pretty rough arguments. Sometimes he'd raised me to the pitch of wanting to kill him, which was paradoxical, because the viewpoint I was defending was that nobody ought to kill anybody. Killing was murder. Execution was murder.

Back to the Triad.

Venus Base picked up a wild radio message from the captain saying that the ship was getting out of control, wasn't decelerating fast enough and would overshoot the Base. Which it did, in complete silence, for the radio ceased abruptly in mid-word. Radar recorded its course, extrapolated it beyond the horizon, and a rough crash area was calculated.

Helicopters fluttered about there, semi-blindly, scanning the area and finding nothing solid.

So—*Triad*, its crew and living cargo, were presumed dead and buried.

Forty years' continued silence apparently endorsed the correctness of that verdict.

But Lash had been among the departed. And Lash had returned.

He gazed at me from his photographs, sullenly, cynically, cheerfully, cockily, inscrutably. There were a number of duplicates. I slid one in my pocket. Peters didn't see. He was con entrating on a leg of chicken. He wouldn't have seen, anyway. My sleight of hand was still slick enough.

I read through latest reports. Three bank robberies in New York City, one in Pittsburg, and one—almost the clincher—in Lash's own New Orleans. Total haul, some two million dollars in small bills. The guard was killed in Pittsburg.

An inaudible crow—but loud, nevertheless, to those who had ears to hear—sounded in the background of all three: "Now you see it—abracadabra—now you don't. And, ladies and gentlemen, the seals. you'll observe, are still intact."

I tossed the file back to Peters.

"Satisfied?"

I nodded. "Lash—no doubt about it."

He fished out a regulation type needle-gun and slid it across the table. "I've signed it out for you. Now, take it, Fred. Please. He'll come gunning for you. You've got to defend yourself."

I examined it curiously. It had been a long time since I last touched one. The pattern hadn't changed in half a century. There was no need for it to. It was the most efficient lethal small arm conceivable. One needle, fully charged, would kill a man even if it only entered his leg. The magazine held twenty needles. The battery in the butt, held enough power to charge three full clips.

I slipped it into my pocket. Peters gave a little sigh of surprise and relief, "Thought you'd throw it back at me with another of your sermons on the sanctity of life. Perhaps now the finger's on you, you're beginning to see it from my angle."

"An eye for an eye, Jack? That's Lash's creed—not mine."

Peters shrugged. "Don't let him get the drop on you, that's all. If you'll take my advice—and I'm sure you won't—you'll blow. Out of town. Better—out of the country. I could fix a rocket hop to Europe, where you could get lost. What about it?"

"I'm not running anywhere."

Peters looked at his watch. "I've got to run, anyhow. The Chief'll be back in five minutes." He grabbed up the file. One of Lash's photos fell out. Peters studied it for a moment. "Not easy to imagine

what he looks like now, at sixty-five. Wonder if he kept his hair?" He replaced the photo. "Bye, Fred. Keep in touch."

He hurried out. I hadn't had any lunch, so I rang for Graff and ordered. While I waited, I also studied Lash's photo and tried to visualize his present appearance. My guess was that, unlike me, he would have kept most of his hair but there'd be no black in it now. I wondered what kind of physical shape he was in.

Then I took out the gun and examined it minutely. Yes, the circuit was still pretty much the same. If I tapped the battery at the two points I'd found from experiment years ago, I could transform the weapon from a killer to a mere stunner.

That's what I'd done to my own, when I had a right to carry one. Unfortunately, it was only a few days before I'd been fired as a drunk, and after that the force wasn't interested in my ideas, humanitarian or otherwise.

I went back to my apartment. I'll admit after I opened the door I took a few eagle looks before I went in. But no one was hiding under the bed and I heard no ticking from a planted bomb.

I had nothing much to live

for, but it seemed I didn't want to die yet.

I got to work and took most of the sting out of my gun. As I was putting the tools away, musical chimes sounded faintly, like a muffled clock striking four. But it wasn't yet even three o'clock. The chimes weren't telling me the time. They were telling me someone was standing outside my door, someone who had rung unconsciously.

Precious few visitors came to Apartment 313 nowadays. Those who did rang the official doorbell also. This one didn't. He just stood there.

I pocketed the gun and tiptoed over. I stared out through the panel of one-way, bullet-proof glass set in the door, and my heart bounded like a scared rabbit.

For Lash was staring back at me through the panel as though it were clear glass.

I was struck by his unearthly pallor. His face was as bloodless as that of a corpse.

Then I was struck again, with delayed action, by the realization that it was the young Lash of the photographs looking at me. His hair was still thick and black. Not a wrinkle showed. He hadn't aged a day since that menacing: "Au revoir, Freddy."

Binyon's line went through

my mind: They shall not grow old, as we that are left grow old.

I felt I needed a drink. Or a friend at my side. Or both.

The stout door, with the Ferrers triple lock, the two bolts and the chain, stood between me and this apparition. But could it keep a ghost out?

It could not. While I stood there, frozen, the lock clicked thrice and was open. The only key was still in my pocket. One after the other, the two bolts slid back, pulled by an invisible hand. Lash used to employ an electro-magnet for that trick, but he wasn't doing so now. The bolts were of a non-magnetic alloy.

Then the padlock on the chain flipped open as though it were an automatic mechanism. The chain dangled loosely. The door slowly opened.

Lash stood there, neatly dressed in a pearl-grey suit that obviously was as real as my own. His hands were in his coat pockets. I felt the old vitality radiating from him. If he were a ghost, he was a live one.

The eyes, green as primitive glass, contained that frightening glint of mad humor.

"Hello, Freddy," he said, softly, as though he were glad

to see an old friend he wanted to kill.

I backed away, and he came after me at a saunter, never taking his eyes from me or his hands from his pockets.

Suddenly, the door slammed behind him, though no one had touched it and there was no draft. Click, click, click went the lock. And the bolts slid home.

I licked my lips and drew my gun.

"Stay where you are." My voice was raven-hoarse.

He stopped. He withdrew his hands and showed me them—empty. "And nothing up my sleeve. Really."

"What do you want?"

"Your life, Freddy, your life."

I kept the gun aimed at his heart.

"Get out of here or I'll have yours."

"You've had it once, Freddy—remember? You can't take it again."

He took a step towards me and I fired.

He was right. I couldn't take his life in a literal sense. My principles forbade me to kill anyone, even a murderer. I shifted my aim so that the needle would strike him only in the shoulder. The electric shock would merely stun him.

Then I could call Peters and have Lash shipped back to Venus—this time, it was to be hoped, to the Base.

In the event, it was I who was stunned. My hand was trembling, but not all that much. The needle should have reached its mark. Instead, it zipped over Lash's shoulder and stuck in the door.

Before I could fire again, the gun forced itself from my hand and leaped towards Lash like a friendly puppy. He caught it by the barrel, tossed it half a turn, the butt fell into his palm, and then I was covered by my own gun.

"Sit down, Freddy. I'm in no hurry. You can have ten minutes of grace to think up some last words for me to cherish."

I retreated to my desk chair. He came and sat on the edge of the desk, looking down at me. Then his gaze shifted to the framed photograph of my daughter.

"Ah, the Lady Anne."
He laid the gun on the desk.

picked up the photo.

"You were a late-flowering old shrub, weren't you? But I congratulate you on the flower. The kind of girl Marcelle and I might have had, if you had allowed us the chance. She looks a bit like Marcelle, don't you think?"

"I don't know. I don't remember Marcelle very well."

"You surprise me. I should have thought her face would haunt you. You're a man with a conscience—almost *the* conscience. Isn't she on your conscience?"

"No. She killed herself."

He set the photo down carefully. "Are you fond of your daughter?"

"None of your business."

"But it is, Freddy. We're practically engaged. I'd say you were my future father-in-law—except for the fact that you haven't any future."

Fear spread through my system like a rapid poison. I tried to keep my voice calm. "What are you talking about? What do you know about Anne?"

"Everything. Why she'll have nothing to do with you, especially since her mother died. Seems that you're a real devil in drink. Me, I don't drink. I'll make her happy."

"If you so much as talk to her again, I'll kill you," I said, violently.

He stared at me. The luminous eyes were unnatural in the paper-white face.

"So we've touched on an emotional spring," he murmured. "H'm." Then he shook his head with mock sadness. "You have a deplorable mur-

derous streak in you, Freddy. We'll have to get it out of your system . . . I perceive in that top drawer at your elbow you're preserving a souvenir from our early days. Maybe you still feel sentimentally about me, after all . . ."

I looked at the drawer. It was shut. I was angry and confused.

"The knife, Freddy, the old throwing knife. Take it out."

I took it out, and some detached part of my mind wondered why I had kept it all these years. Another part wondered how Lash knew it was there.

Lash said: "I'm the man with the X-ray eyes these days. You can't hope to pull the wool over them any more, Freddy. I see through brick walls. I walk through them, too. No one can stop me from seeing or getting anything I want. Would you like to try?"

He stood up, walking across to the bookshelves, turned, faced me

"Let's do our famous act once more, Freddy, for old time's sake. Only this time I'm not wearing a cork waistcoat."

He took up the routine stance, chest thrown out, hands on hips. I hesitated, rose, balanced the knife on my palm. "That's it. Roll of drums," said Lash.

I aimed for the bicep of his gun arm and threw. The blade sped true, then banked like a plane and stuck at an angle in the spine of *Airless in Aristarchus*.

For the first time, Lash laughed. It was the boyish laugh—cocky as Peter Pan's—that I first heard at the long-ago convention. Invariably it followed his most difficult tricks.

"Aren't I smart?" it boasted, but in an oddly attractive, innocent way. It made you feel indulgent. "He's a smart kid, all right," you thought. "But only a kid, showing off."

I looked at the knife, then at Lash's laughing face, and again memory started tugging at something important in the depths. I wanted time to bring it to the surface. Death must be postponed even at the cost of pride. I must play on his weakness, flatter his vanity, keep him talking about himself...

"How do you do it, Lash?" I asked, with fake respectful admiration. Yet it wasn't all fake. These strange effects had me baffled.

"A knack I picked up on Venus," he smiled, sauntering back to his perch on the desk. "From the Roys," he added, as though that explained everything.

"The who?"

"Why should I trouble to explain? You're about to die, old friend, and the Roys won't interest you beyond the grave."

"They seem to have interested *you* beyond the grave. How come you rose from the dead?"

"Didn't. Didn't die, though I might look as pale as death. So would you after forty years and not a sunbeam in any of 'em. No silver linings in the Venusian clouds, Freddy. Plenty of Roys in them, though. Not that those myopic asses at Base even dream they're there."

"Roys are-creatures?"

He looked at me for a long moment. "Aren't we all?" But he had left something else unsaid.

"Humanoid?"

"Physically and mentally—their *psi* powers are peculiar to themselves." The knife came turning in the air from the bookshelf and stuck quivering in the desk top between us. "And to certain gifted pupils," added Lash, with a smirk.

I stared at the trembling knife and suddenly the mem-

ory surfaced, I almost blurted it out, but Lash had begun talking freely so I decided to sit back and let him talk. With one reservation: I would not now believe more than half he said.

He talked on, either forgetting or extending my period of grace.

"When I think of Man's landing on Venus I grin and compare it to a fly landing on my uncle's bald head. It can be brushed off as easily. The difference is that the flv knows he won't be allowed to stick around for long. But Man is Mr. Big-head. He came, he saw, he'll conquerhe thinks. The truth is, he came, he never saw, he'll never conquer. A whole civilization lives in the clouds around him, and all he sees is barren guicksand. Because it's all he's permitted to see.

"Sure, there's plenty of quicksand. Covers half the planets, in patches. The probe rockets never hit solid ground: the Roys deflect them at will, as easily as I deflect a knife or a needle. But I'm a minor operator. When a group of Roys act in concert, they can take over the controls of a full-size spaceship.

"Like the Triad . . .

"They just wanted to look it over out of curiosity. It didn't interest them for long—they've little use for machinery. They soon tossed it into the quicksand, complete with passengers—bar two. Me and the Captain. They kept me as a sort of pet. I amused them with conjuring tricks. They thought I was cute. But they amused themselves with the Captain. He became a human guinea-pig. What he suffered before . . . Never mind.

"On the other hand, they adopted me. I became one of them. Still am. I'm going back when I've finished what I came here to do. Your execution figures high on the agenda."

I shrugged, "Another couple of years, and you'd have found I'd have done the job for you on hard liquor. What kept you so long, Lash?"

"It hasn't been all that long, for me. My time-scale has changed. When the Roys made me one of them, they made a thorough job of it. They know more about the relationship of mind and body than Man will ever know. They can rejuvenate body cells by psi forceit's simply a matter of rearrangement. Their own cells or another's-it makes no difference. I look and feel only twenty-five. As long as I stay with them. I can be almost immortal."

"Almost?"

He laughed, flipped the knife with a forefinger and set it swaying again. "Let's face it, Freddy, they *could* get tired of me one day."

I yawned. "I don't doubt it. I'm getting tired of you already. Liars bore me."

He gripped the knife-handle, stopped it in mid-swing, and stared murderously at me across it.

"Just what do you mean by that, Freddy?" he asked, softly.

"I mean that you've been telling me a pack of lies. For one thing—"

"Yes? For one thing?"

"You're not Lash Leroux. I've never seen you before in my life."

He wrenched the knife from the desk-top and began beating its handle against his palm with a steady rhythm and without taking his piercing eyes from mine.

He said, still quietly: "And, my friends, this gentleman is perfectly correct. So he wins a big see-gar." His tone changed suddenly, became razor-edged. "How did you know that?"

My yawn had materialized largely from fear. I wasn't one per cent as relaxed as I tried to appear. Sure, I'd had this little trump up my sleeve, but I doubted if it would much affect the outcome. My neck was still in jeopardy. And for some illogical reason I wished to keep on breathing.

"You're holding the evidence in your hand."

His eyebrows rose. He held the knife up by the blade. "This?"

"I missed the cork waist-coat only once," I said. "The drummer was tight—fell into the bass drum just as I was throwing. I let go a moment too soon. The knife flew high. Lash escaped with a scar along the side of his jaw. It was thin but deep—a life-long blemish. I noticed it again in his photo only today. You don't have that scar."

He exhaled audibly and slowly.

"I'm a fool, Freddy, a plain fool. I've given myself away over nothing at all. I've already told you the Roys can rearrange body cells by psi force. Suppose I tell you that their psi facial surgery could have removed that scar in one minute flat?"

"I shouldn't believe you. I can't swallow that immortality stuff."

"H'm. Again, ladies and gentlemen, this gentleman is perfectly correct. All right, so I was drawing the long bow—about that. But about nothing

else. Skipping that, the Roys are everything I said they were, believe me. I'm half-Roy myself. I haven't all their powers, but I have some. And I am Lash Leroux. I'm Lash, son of Lash."

"I was beginning to suspect that. So Lash married a Roy."

He smiled twistedly, "Let's say my mother was a Roy."

"And, of course, it was your father who was adopted by the Roys. Where is he? Why didn't he come himself?"

The young Lash began digging at the desk-top with the point of the knife, not looking at me.

"He's dead," he said, presently.

"They got tired of him?"

"No. He got tired of himself. He died . . . from boredom. And frustration. You killed him slowly, Freddy. You cut him off from most everything he called life. There's no excitement, no crime, no theaters, no audiences, no ambition, no beauty, no sun, no color among the Roys. And no women."

"No women? But you just said—"

"No women as Earthmen know women. There are females—gray and featureless as the clouds. Mere breeding animals. They have *psi* powers

stronger even than the men but no intelligence to speak of, no character of their own. They're little more than machines through which the male Roy re-creates himself. The son inherits most of his father's characteristics but nothing from the mother save the strain of psi power. I'm my father again."

"Not quite," I said. "I can't see you dying from ennui."

"True. But then, I wasn't brought up on Earth. I can live on Venus satisfactorily enough, but not alone. I'm enough my father to want a real woman. I've come to Earth for one."

"So you didn't come just to kill me and avenge your father?"

"No, although that I shall do. I promised him I would. I want to, anyhow, because of the suffering you caused him ... And because of Marcelle."

His eyes wandered to the photo of Anne and he stopped digging. After a moment of silence, he said: "I'm reprieving you for one week. Then I shall collect Anne, kill you, and return to Venus—with Anne. No-one on Earth can stop me. Lock her in the deepest dungeon under the moat and I shall take her whenever I choose. Love laughs at lock-smiths, you know."

He stood up and I stood up at the same time. Anger had driven out fear and I was fighting mad. My hands went for his throat. They never reached it. All strength went out of my arm muscles and my arms fell limply to my sides as though they were stuffed with straw.

"You can't do a thing about anything, Freddy," said Lash, softly. "Except worry. And suffer a little. A week of mental torture before execution will help to even the score. I'm glad I learned your girl meant so much to you. I'm sorry to tell you she doesn't feel the same way about you. Never mind. After seven days you won't have to worry about anything any more. Au revoir, Freddy—again."

He turned his back on me, walked towards the door. There was a gun and a knife on the desk beside me and I couldn't reach a finger towards them. They were useless, anyhow. I'd already tried them against him when I could handle them.

The door unfastened itself at his approach, obediently swung open. And—

A blond, tough-looking young cop appeared in the opening. His blue eyes were cool and the needle-gun he held was as steady as a becalmed boat.

"You're not going anywhere, Leroux," he said, confident and easy. "Just raise your hands."

Lash began to raise only one of them. The needle-gun flipped into it straight from the cop's hand—exactly in the way I had myself been disarmed. The gun hissed and spat a shining needle into the cop's throat. He jerked like a puppet with twisted strings. The last breath went from his lungs and he collapsed heavily, half in and half out of the doorway.

Lash stepped over him, still carrying the gun. He went from view without looking back.

I took a couple of strides after him, realized the futility of it, turned back to the visaphone. I couldn't dial, so I raised my foot and jammed it against the fire alarm button.

The fire station controller flashed into sight.

"There's no fire," I said.
"But there's murder. This is
Waldorf 12002. Get me connected to Greenwich 333, extension 57, Detective-Captain
Peters. Don't ask questions.
Seconds count. This is life or death."

The controller was no fool and wasted no time. But the

few moments were long ones before the screen gave me a head and shoulders view of Peters with his lighter halfway to his cigarette.

"Jack!" The flame stopped short of its destination. "Lash is here—I'm at home. He's just leaving this building. He looks like a young man, like his photo. Can you have him tailed?"

"I have a man watching the place—"

"You had a man. He's dead —in this room. Lash shot him. Before heaven, Jack, I told you not to give me protection. I was afraid this would happen. Send an ambulance . . . Now, Jack, listen. Have Lash followed if you can—just to find where he's hiding out. But make your men understand they've got to keep their distance—he's armed, for one thing. Above all, they mustn't attempt to grab him. If they do, they'll commit suicide. I'll explain later. Now, get things moving."

He looked shocked and puzzled, but nodded, the unlit cigarette bobbing, and snapped me off.

I waited, thinking there was plenty to explain later. That Lash wasn't really Lash, for instance.

I lit a cigarette myself and

picked up the gun on the desk.

From the narrow windowgap came a scream of jammed brakes and then a heavy, metallic crash like Thor smiting his anvil. I thrust the gun in my pocket and blundered to the window. Down in the street the traffic hum was subsiding and pigmy shouts floated up. As the window was unopenable, I had to press the side of my face against the glass and squint to see what was happening along the street. I saw enough and was glad I couldn't see all that clearly.

I turned away, shaking with anger and fear. Savagely, I crushed out the cigarette, wishing it were Lash's life I was extinguishing. Now I really was identifying the son with the father. He'd been right. He was Lash, all over again.

Peters re-appeared on the visa-screen.

"Fred? There's a patrol car on your street. They spotted Lash right away. He took a cab. They're following—going to hand over to another car on Forty-first. Anyhow, that's the plan. But it might get fouled up—their radio's gone dead."

"So have they, I'm afraid," I said, somberly. "They collid-

ed head on with a bus two minutes ago. A helluva smash. They're trying to get 'em out down there now, but it looks bad. Sorry, Jack—I shouldn't have put you on Lash before you knew what you were up against."

Peters was silent, absorbing this new shock.

"It was Lash, almost certainly," I added.

He looked at me, uncomprehending.

"I mean, he caused the smash, Jack. He'll do the same thing again if he's followed. Call the hounds off—for their sake. I mean it. Don't do a thing till I come and see you."

"You'd better come quick, then. I want to know what this is all about. The Chief—"

"I'll come as soon as I can. I've an even more urgent call to make first. Is that ambulance coming?"

"Uh? Yeah. But Lash-"

"Forget him," I snapped, impatient and angry. "Forget him till I come."

I shut the visa off. It flashed as he rang me again, but then I was stepping over the poor guy in the doorway and getting the hell out of it. The street was pretty jammed up but I grabbed a cab down a side street and gave an address in the Bronx.

I was taking a chance she'd

be in. But it was even riskier to phone: for then, if she were in, she'd likely make a point of being out when I called.

I hadn't seen her in two years but the phone directory said she still lived there. So did the card on the apartment door, when I reached it. I rang.

She opened the door eagerly, smiling. The smile died a quick death when she saw me. She was looking older than she should have looked. There were shadowy half-moons under her eyes. Her cheeks were a bit puffy. But her hair-do was immaculate and she was dressed to impress whoever she expected.

"I've got to see you, Anne."
She regarded me stonily.
"About what?"

I showed her the photo of Lash, "About him."

Her lips parted a little in surprise, then turned down in contempt. "Been doing a little police work? Aiming to get your old job back? Please keep out of my affairs, father, dear."

She tried to shut the door. "He's wanted by the police. On the level," I said.

She looked me in the eyes, searchingly.

"Even if it's true," she said, after a moment, "you can't stop anything. You're not go-

ing to ruin any more lives, if I can help it."

"For murder," I said, as if she hadn't spoken. "Let me in, Anne. We've got to talk."

She went slowly pale. We knew each other well enough to know when the other was speaking truth. She turned and wandered back into the room, leaving the door ajar. I shut it behind me.

"He wants to marry you?"
"That's what he said."

"What became of Roger Howard? Thought you were engaged to him?"

"He found a nice, normal girl—the kind he really wanted,"

"What does this one call himself?"

"Don't you know? How did you get his photograph?"

"What's his name, girl?"
"Tony Fenton."

"Fenton's not his name and this is not his photograph. You'd better sit down. I've a story to tell you, and it's some story."

I knew Peters was waiting impatiently for me, so I told the story pretty badly and that way it sounded sheer dementia. All of the time she just sat and looked at me. She made no comment, spoken or unspoken.

I finished: "So you see how

it is. If the police don't get him within a week, he'll come for you. I'm aiming to see he doesn't get you."

Silence.

"What do you care who gets me?" she said, presently, in a small, tired voice.

"I care plenty."

"You care only about liquor. You cared nothing about me before. And nothing about mother—not even enough to go to her funeral."

"When it's too late, it's too late," I said, half to myself.

"So he's coming for me at the end of the week? He's supposed to be coming for me this afternoon, any time now. We were going uptown—"

"Let's get out of here," I said, abruptly. "You'd better pack a week-end bag in a hurry. You can't stay here."

"Are you afraid to wait and repeat in front of him what you've been telling me?"

"For Pete's sake, Anne, don't you believe me? I'm cold sober. I'm not out of my mind. D'you think I've made up five bank robberies, two murders and a car smash that was murder, too? I want you to come to Central Homicide with me right now. They can verify what I say. If you refuse to come, they'll pick you up anyhow. They want to know all you can tell them about Lash."

She shrugged and reached for a bag, "That's not much," she said, beginning to throw things into it. "Only met him three weeks back. He's a nicelooking guy, with charm and intelligence, and he seemed to like my company enough to want to marry me. After two abortive engagements-you smashed one and I the other -it seemed like third time lucky. He said he came from New Orleans, was on vacation, and worked in a bank."

"He worked in a bank, all right," I said. "Where did you meet him?"

"Across the street, in Spiro's chop-house. He asked me up to his apartment for a drink."

"And you told him you never touched the stuff because your father was a drunken bum, and so was his father before him."

"Exactly," she said, shutting the bag.

"The leading question is, where's his apartment?"

"It's--"

There were muffled sounds inside a big, old-fashioned cabinet against the wall. It was big enough to contain a crouching man.

"—directly above this one," she finished, with a startled side-glance at the cabinet.

I was startled, too, not least to learn that I stood within feet of Lash's hide-out.

I jerked a thumb at the cabinet, and whispered: "Who's in there?"

She gestured with open palms to convey that she knew no more than I.

I cocked my gun and started for the cabinet. I was surprised when she seized my arm.

"No, please," she whispered. "Let's just get out."

I stared at her. She was anxious and pleading. But I had to know who was in there. I freed my arm and yanked the cabinet door.

No-one was inside. There was merely a pile of old magazines, half-a-dozen whiskey bottles—one full, one half-full, the rest empties—and a shelf of assorted glasses.

The bottles were lined up in the form of an "L." So were the glasses.

Anne gave a little sob and looked at me wildly. Her distress seemed to tear something inside me.

I put my gun away and said, gruffly: "You were right. Let's just get out."

The bottles silently conveyed revelations and confirmations to both of us. To Anne they confirmed that Lash was the PK-endowed murderer I'd said he was and revealed the cruelty of his humor. Also his lack of love for her. A man who loved her would not humiliate her before her hated father.

They revealed to me the fact that Lash was somewhere nearby, probably in his apartment above and equally probably aware of all we'd said. And confirmed my growing suspicion that Anne had interited the strain of weakness from my side of the family. Perhaps alcoholism runs in the blood. Or maybe most thawed characters under stress take to drink.

By this sardonic prank, Lash had intended to hurt us both. Certainly he'd hurt Anne. But my own reaction was a wave of compassionate love for my daughter. I felt closer to her than ever before.

In that moment of protective love was born simultaneously a cold decision: Lash must be killed.

A new pragmatic principle displaced the theoretical old. As Wilde didn't quite say, each man will kill for the thing he loves.

We got out, silently, and met nobody on the way.

I phoned Peters from the nearest call-box, told him where Lash almost certainly was—or was a few minutes back.

I added: "But I doubt if he'll be seen there again. He must know we've left and where we're heading. I'll take a bet he's watching us right now—somehow."

Peters was worried. "Come straight to the Chief's office, Fred. We'll be waiting. Watch it, though, all of the time. Or you mightn't get here alive."

"I think it'll be all right. He could have killed us up in the apartment if he'd wanted to. No, Lash is like his old man—he'll do his best to keep his promises. And he promised to kill me in a week's time. That'll be the dangerous day... If I don't kill him first."

I hung up while he was wondering at this volte face.

We reached the Chief's office unharmed, having detected no signs of being followed.

Peters' Chief of Detectives was, surprisingly, plump and placid. He reminded me of the calm center of a cyclone. Also of an effigy of Buddha—the same lowered eyelids, the faint and benign smile of a being indulgent of man at his best and worst.

Peters feared his anger but it was impossible to imagine him angry. This, I thought, was the sort of man Anne deserved for a father.

Peters, nail-bitingly on edge, jerkily performed introductions.

The Chief, murmuring like someone half asleep, said: "I have been looking forward to hearing your story—both of you. Do make yourselves comfortable."

Even if Peters were immune, we found the relaxed mood subtly infectious. No doubt the Chief had found it the most efficient way to get accurate information. Instead of confused and incomplete statements, through haste and nervousness, he got all the facts from us coherently and quietly.

There was only one interruption: a report that a gingerly conducted investigation of Lash's apartment had proved negative: he'd gone and left not a clue behind.

"Never mind," commented the Chief, genially. "We'll catch up with him before long."

He sounded so assured, I believed him—for the moment.

When we'd finished, he said: "By far the most important fact arising from this is that our little base on Venus is surrounded by invisible and

practically omnipotent enemies. The personnel must be warned. I shall advise that the base be abandoned for the time being. For it's momentarily in real danger of extinction. Later, perhaps, we can come to terms with the Roys. But we'll need a plan."

"Then you accept, sir, that the Roys really exist?" asked Peters, frowning. "We've only the story of a psychotic as evidence. Lash is a born romancer—he had already admitted lying—"

"The true psychotic never admits that any part of his dream-world is fantasy," cut in the Chief, equably, "Lash is no more mad than the average showman. When you're as experienced as I am, Captain Peters, you'll recognize the click when jigsaw pieces of evidence fit. Off the record, irreconcilable behavior of Venusian probe rockets has been bothering the space boys for years. So has the old mystery of what happened to the Triad. It ties up with a mystery of today: why a police car should suddenly pull out to the wrong side of the road and smash headlong into a perfectly visible oncoming bus. The answer's the same: the controls were taken over by a psi-functioning mind. Do you doubt, Captain, from the accumulated evidence, that Lash has one?"

"No, sir."

"Is it what you would describe as a human mind?"

"Er—not exactly."

"Then that admits the existence of a non-human mind. A Roy, for instance. I suggest, Captain Peters, that you learn to distinguish between real and unreal problems. A very real problem on which you might legitimately expend some thought is where we are going to herd, and usefully employ, our convicted killers when the Venus Base has shut down."

Peters gulped, and I began to see why he was afraid of his boss.

"When you've solved that problem," the Chief, continued, calmly and inexorably, "you might give me your explanation of how young Lash Leroux came here from Venus, when all ships from the convict settlement are thoroughly combed for stowaways, impostors, and excess baggage. And offer your theory as to how he intends to 'natch'-to use the ancient vernacular-this young lady here and take her back to Venus."

"Maybe-um-"

"You haven't given it a

thought, Peters, and that's the truth. When are you going to start earning your pay?"

Peters was silent, a shattered soul. I was sorry for him. And glad that when I was in the force I had no Chief remotely like this one. But Peters was my friend and loyalty brought me galloping to the rescue.

"Have you given it a thought, Chief? What's your answer?"

The Chief turned his implacable smile in my direction.

"Pardon me, but I ask the questions in this office. You don't mind?"

"I do mind. I'm concerned to know how you propose to protect my daughter."

"So am I."

"Flattered, I'm sure," said Anne. "I hope you're also giving some thought to preventing my father's murder."

"Oh, I am, my dear, young lady. He should take Captain Peters' advice—hop to Europe and lose himself there."

"And me?" asked Anne.

"You stay here. You're the bait in the trap. Lash has got to come and get you. Your father's no use as bait. Lash can kill from a distance, without coming. Your father's best chance is to make the distance too great to be effective."

"I'll go with my father," said Anne, which sent a warm little glow through me, besides surprising me a lot, if the others not at all.

The Chief shrugged. "In that case, I'll hand you over to the European police."

Peters was put out. "Just a minute, sir. Leroux has killed three of my men—our men. I feel strongly about it. I'm sure you do, too. We owe those men something. It's up to us to get their murderer."

"That's a very nice sentiment, Captain," said the Chief. "I'm sure you mean well. I'm equally sure you're overlooking that in the attempt to get him we'll certainly lose more officers. Including, maybe, your goodself. And if we do get him, at last, we'll find it impossible to hold him."

"You're so right," I said.
"No jail could hope to hold
Lash for long. He can open
any lock by mind-power, paralyze any man who attacks
him, jam the mechanism of
any gun turned on him—or
divert its bullets."

"A bomb?" said the Chief, speculatively.

"It's likely to boomerang back in the laps of those who threw it. He's the most dangerous criminal who ever walked this earth. Nobody and nothing will be safe until he's dead."

Peters gave me a wry look.
"Any suggestions, Fred?
For killing him, I mean."

"It may be possible to catch him by surprise. If he knows a gun is aimed at him, he can jump it. But suppose he doesn't know?"

"An ambush?" asked Peters.

I shrugged. "I guess he can see around too many corners for that to rate a chance. I was thinking of some kind of automatic trap, with no visible giveaway. Say he's breaking into a bank vault. He has to get through steel grilles. If a high tension electric current was passing through them, and he touched one, he'd be a dead duck, psi or no psi."

"It's an idea," said the Chief. "I have an idea, too—that he doesn't work alone. Only one man actually caught him at work, and that man's beyond reporting what he saw. But from a consideration of logistics, I'd be inclined to say Leroux works with a small gang. That lessens the chances of success. One of his men might touch the grille first. Then the trick would never work again."

"True—and you're probably right about the gang," I said. "Lash, Senior, always

operated with what he called his 'Party.' Once Junior had demonstrated his powers, he could have rustled up a gang with no trouble. Another 'Party' to be reckoned with. By a program of assassination they could conceivably take over the country."

"As you head the list of victims in this country," said Peters, "no-one's going to blame you for getting the hell out of it. Don't waste any time, Fred. I'll fix the trip, like I said. We'll have all rocket-ports and sea-ports watched to see you're not followed. We'll see he doesn't get out of the country."

The Chief murmured: "The security measures are pretty tough on Venus. I'm still wondering how he slipped through them. However, don't worry too much. We'll make the States as airtight as we can. Okay, Peters, take over and do the best you can."

Peters did a good job on getting us out of the country quickly and inconspicuously next day. Our disguises were light but effective. Although we traveled in the same rocket, we sat apart and pretended we had nothing to do with each other. I was Matt Parkinson, newspaperman. She was Miss Moore, school-

teacher, visiting England under the exchange system.

Up there in the rocket, so high above the Atlantic that it was night at noon, I glanced along the aisle at Anne. Then I looked out at interplanetary space. I wondered if there was any real hope that she would escape abduction and the misty hell far away in that outer darkness.

Lash was still too much of an unknown quantity. There was an over-plus of x's in the equations. Fear and frustration so depressed me that I came near to ringing for a drink. But somehow I stuck it out, dry, for another hour, and then we reached Gatwick, the rocket-port for London.

Peters' plans, concocted under pressure, went as smoothly as automation.

At the 'copter port on the South Bank of the Thames. two seemingly civilian cars awaited us and conveyed us individually and discreetly across the river to New Scotland Yard. They were Flying Squad cars. And there my old pal, Richard Trevelvan, received us in his office. It was a Superintendent's office—and he was a Superintendent. I'd known him when he was Sergeant Trevelvan.

He owed me nothing but his

life. He wouldn't let me forget that.

Every Christmas for years we'd exchanged visa-phone greetings across the Atlantic, so I was prepared for his gray hair and he for the scantiness of mine.

He gave us both a warm double handshake, and said: "Jack Peters told me the whole story. Amazin', isn't it? Whiskey?"

And was shaken when we both refused.

"Tea, then," he said, and pressed a button.

Amid the tea-cups we chewed over plans for Anne and I hiding out—for at least a week.

We agreed that London was too crowded. You just couldn't watch everyone who, intentionally or not, brushed against your elbow. Better somewhere off the beaten track, somewhere so isolated that no-one need know we were there. Out of sight, out of mind—maybe.

"It so happens," said Trevelyan, "that I'll be fifty next month and retiring on a pension. I've a little retreat in the country all fixed up and ready to walk into. I've been counting the days." He flung something metallic on the desk. "There's the key. You're welcome."

Anne said :"You're a much nicer man than my father, Richard."

"Who isn't?" I said. "But it's certainly swell of you, Dick."

"Not at all. The cottage wants warming up. And you might fix the well-winding—it sticks..."

He told us about the place and arranged to drive us down there when evening fell. There were very few other houses in the vicinity, but security would be tighter if we got there after dark, unseen.

"Once inside, stay put," he advised. "There's a stock of canned and bottled stuff, but we'll take some fresh food with us. Rations for a fortnight, anyhow. By the way, there's no phone: you're really on your own."

"If Lash does run us to earth," I said, "a phone won't help. I doubt if a couple of tanks would, either. It's best we go it alone. That way, nobody else can get hurt. I'd prefer it."

Trevelyan looked at me silently. We'd shared a tough spot once before and I knew he wanted to be at my side in this one, if only for the possible chance to repay. But he was scared I thought he might be in the way. I had only to give him the ghost of a hint of

an invitation...But I remained silent, too.

I didn't want him killed. Anyhow it was my fight.

"All right, then, that's that," said Trevelyan, briskly. "Now we've the afternoon to kill. I'd like to show you around town but it would be wiser to keep off the streets. For all its reputed glamor, the Yard's a pretty dull sort of hole, I wonder—"

"There's always the Black Museum," I said. "Anne's never seen it, and I should like to have another mosey around."

"Anything for a laugh," said Anne.

We spent an absorbing couple of hours in the Museum among the relics of famous crimes and criminals. There was the bizarre, the ingenious, the crude, the brilliant, the horrible, and—to Anne's surprise—the humorous.

Trevelyan took an object from a glass case and passed it to Anne. It was a needlegun, pretty much the same in appearance as the current regulation pattern. But it was forty years old.

"That's a memento of the case which first brought your father to London," he said, while she looked it over curiously. "The original Lash Le-

roux killed a man named Lucas with it—"

I snatched it roughly from her and said equally roughly: "You might spare her the details, Dick."

He colored, "I'm sorry, Anne, it slipped my mind that you were sort of engaged to—"

"Forget it, Richard, please," she said, transferring her curiosity to me.

I avoided her regard. "Here, take the thing, Dick. Stick it back among the other antiques. Like me, it belongs to the dusty past. Sorry I blew my top. I get mad sometimes when I think of the evil that man did—and caused."

Trevelyan tactfully switched our attention to Charlie Peace's dark-lantern.

He remained so scrupulously tactful that he never mentioned Lash again that day. He talked of anything but him as we drove through the evening from London to his cottage. The last we saw of him was the red tail-lights bobbing and dwindling slowly in the dark as he piloted his car back along the rough track which was the only thread connecting us with civilization.

The prime result of this studied avoidance was to magnify its subject in our imagi-

nation. Lash assumed the aspect of the frightful fiend that close behind doth tread. The darkness pinched out the dying embers of the taillights. Anne and I were isolated in this almost uninhabited area of the Bronze Age wilderness of Salisbury Plain.

It was as though the phantom Lash grew until he brooded like Satan over the ancient Plain and we two specks of vulnerable mortal flesh on it. And his sardonic whisper seemed to carry on the night wind: "I am coming for you . . . I am coming for you both . . ."

I sensed the mocking presence and stared uselessly out at the night, seeking its location,

I think I fully realized then that there could be no safe hiding place from Lash. I doubted that he could actually read minds but his supernormal faculties would enable him almost to smell our trail. No secret document was a secret to him.

At length, as I gazed, I could discern occasional tiny patches of pale white light creeping silently along the unseen horizon, in the direction of Stonehenge. For a moment I envisaged, idiotically, a prehistoric torchlight procession

of priests on its way to a human sacrifice on the Slaughter Stone.

Then it dawned on me that I was seeing cloud reflections from passing automobile headlights on a road somewhere beyond the horizon.

Very distant, those lights were. But not nearly so distant as the lights of New York, which seemed to my exiled soul to be shining in some other world altogether.

Deliberately, I closed the door on the night's menacing shadows.

Inside, there was a rosy glow from pink-shaded oil lamps. Glossy book-jackets reflected it from pink-washed shelves that were white in daylight. The green carpet was like a sun-warmed lawn. Armchairs offered friendly hollows. Anne occupied one, looking thoughtfully, chin on fists, at the chromium handles of a cocktail cabinet.

I pulled the handles. The doors came apart with the faint squeak of new furniture. Bottles behind bottles...

"Get thee behind me," said Anne, with a smile. But there was a tremor in her voice.

I said, too casually: "Not even a night-cap?"

She shook her head. I closed the cabinet.

"This week," I said, "we're

on trial for our lives, in more than one way. We'd better try to stick together. Alcoholics Anonymous, Salisbury Plain Section, membership, two. Propping each other up."

"Whenever the thirst comes on," she said, "we must start talking. And keep talking. We might even talk ourselves out of it."

So we did a lot of talking, and no drinking, for six days. Sometimes it rained so hard we couldn't go out. Sometimes the sun shone brightly and we were afraid to go out, in case we were seen. However, so far as we could tell, no living things except sheep and birds came near us.

In this space of time I came by a daughter and Anne gained a father.

We found each other, with humor and compassion. And, strangely, though we had anticipated that the tension of waiting would mount with each succeeding day, in fact it eased off. Mutual understanding, forgiveness, tolerance, respect—these gave us security deep inside.

Now we could face the world. We could even face creatures from another world.

But not entirely unarmed. I spent an hour alone in my bedroom rewiring the needle-

gun battery, returning its output to lethal level. My forgiveness failed to extend itself to Lash Leroux, and I knew none could be expected from him.

Execution Day dawned sunny. All day not a cloud formed in the sky. Not even one as big as a man's hand.

The day wore on. We talked, read, smoked, and lazed as usual. I may have smoked a little more than usual.

In the late afternoon, as the sun swelled, sank, and reddened slowly but perceptibly, hope came that there might be a reprieve after all.

We were sitting on the porch, waiting for the sunset.

I said: "You never know, Lash might be dead this minute. Jack's Chief is a pretty capable guy, I'd say. So is Jack."

"So is Lash," said Anne, quite composedly.

"I used to be," I said. "And right now I'm feeling a lot more like I used to be. If Lash comes, he'd better tread carefully."

Anne shaded her eyes, looking into the sun.

"Then he'd better tread carefully," she said, still composedly. "Here he comes."

My mouth went dry inside. I wasn't quite master of my-

self yet, after all. As I tried to see what she saw, my hand crept into my pocket and fingered the safety-catch of my gun.

The thing was like a cannon-ball flying in slow motion towards us out of the sun. A globe, small with distance, black against the light. The Plain reached hugely around us, silent and empty as a desert.

The globe grew, eclipsed the sun, and with a long sigh of displaced air curved down and landed on a patch of bare chalk, thirty yards off. It looked like an uncorded, silvered balloon.

We sat very still and watched. We could have gone back in the house and locked the doors and it would have been as effective as trying to hide in a paper bag.

This big globe was obviously a spaceship, though it had no blisters or antennae. Doubtless there were other ways of seeing and hearing. It was, therefore, a mild surprise to see that, when the doorway manifested itself, the gangplank which slid out was conventional in design.

Lash sauntered down it, smiling easily. He waved. "Hello, there."

He wasn't wearing his pearl-gray suit now, but a

close-fitting tunic and narrow pants—all black.

He came toward us. "Lovely evening, isn't it?" he called.

I stole a glance at Anne. She was watching him impassively. I let him come within five or six yards, then pulled my gun and said: "That's near enough. Just stay where you are."

He shrugged and obeyed.

"Like my new suit?" he asked, in a conversational manner. "There was a black mask which went with it, but I've lost the darn thing. However, you get the idea—executioner's garb?"

"You always liked to dress up," I said, and could have bitten my tongue. The appearance, the manner, the voice, totalled a hypnotic weight of suggestion. I told myself again: Lash is dead.

"Anne likes a good dresser—don't you, my love?" He winked at her.

"I think white suits you best," she said, thoughtfully. "A well-cut shroud would be ideal."

"Let's not be morbid, Anne. And was that a nuance of antagonism? Has love turned to hate so soon, Annie?"

"I'm afraid I never loved you. I thought you represented security, heaven help me!" Lash laughed aloud. "And you were never more right! I'm going to keep you in security, Annie, never fear. You'll be as secure on Venus as—as a bank. You know how secure banks are. By the way, I cracked three more in the States while you've been away on vacation. My old galleon here is jam-packed with treasure I've bought to take home. Bought legitimately, you understand: I steal only money."

"What have you bought, Lash?" I asked.

"Oh, bright, gay, amusing things we don't have on Venus. But my father used to tell me about them. I always wanted to own some."

"Such as?"

"Well—bicycles, guitars, harmonicas, games, jewelry, paintings, train-sets, movie cameras, projectors, good clothes, vulgar clothes, jazzsets, bongo drums, trumpets, conjuring tricks, candies, fruit, phonographs..."

Though I tried to stem it, pity was creeping back. He must have had a pretty lonely and gray sort of childhood on Venus. No pals to play with. Nothing to stir his imagination except his father's tales of Earth and of his spoilt youth.

"Didn't you have any toys?" asked Anne.

He sensed our stifled sympathy, frowned and took a sudden pace back as though he were afraid of being contaminated.

"My father gave me all I I wanted," he said, sharply.

"Except pocket money to spend," I said.

"And except a mother," said Anne, quietly,

Lash's face seemed whiter than ever in the evening light.

"Your phoney father killed my real mother," he said, in a strange, shrill voice. "And left me only one of these."

He jerked a thumb over his shoulder, although he had not looked around.

Two grotesque figures were shambling down the gang-plank. They were naked and clay-colored and looked, indeed, as though they had been molded from clay by the inexpert hands of a child.

They looked Neanderthal in their lumpiness and coarseness. Deep-set, unintelligent eyes were embedded under the overhang of prominent brows which retreated to a minimum step of frontal development. Their heads were almost flat.

They crouched as they walked. Their long arms dangled, ape-like.

Women something like them must have walked with similar gracelessness across this Plain a hundred thousand years ago.

I remembered Lash, friend of my youth, and his keenness for a pretty girl. I could not imagine the degree of desperation which had driven him to mate with a creature resembling these.

"May I introduce my cousins?" said Lash, in a visetight voice. "They'll be your bridesmaids. Anne. They'll escort you to your home and prepare you. They'll be as devoted to you as they are to me. They'll fetch and carry for you, as they have done for me. They're my own little family Party. They brought me here in this globe from Venus merely by psychokinesis. That idea never occurred to father. but then, his wits left him early, poor man. He lost the power to think creatively. He lived in cloudy dreams of the past-"

"Lash," I said, changing my aim, "tell your cousins to go back. Now. Or I shall kill them."

"Are you a complete fool?" he asked. "Their psi power is immeasureably greater than mine. Don't try their patience. Let me tell you something. Over thirty guided missiles were fired at us in one salvo from the eastern sea-board—a

farewell salute from the States. My dear cousins deflected them all. We've had a warm welcome from England, too. The English know we're here, and they'll be after us again. And they'll hit no one but themselves."

Before I could do a thing, Anne stepped quickly down from the porch and along to Lash. She looked straight into those green eyes.

"If I promise to go back with you, will you promise not to harm my father? I'm told you keep your promises."

"Anne!" I cried.

Lash laughed jeeringly, then suddenly seized her and flung her round him into the arms of the repulsive Roys. I watched, furious and helpless. If I fired at the Roys, they would only deflect the needle, possibly into Anne. I did not fire, because of that—and because of another reason.

Lash had spun round with the impetus of his action and was facing Anne now, with his back to me.

He said: "Not a very convincing self-sacrifice act, Anne. A gamble you couldn't lose because you'd already lost. You're quite aware that you'll have to come with me, like it or not. Nothing could stop me taking you."

"And nothing could make

me a good wife to you," said Anne, steadily, "except mercy for my father. If you kill him, then you'll get no mercy from me. I'll make your life such a hell that you'll have to kill me, too."

He said, unmoved: "You're still trying to gamble without having any chips, you dumb female. What the hell do I care what you think of me? To me you're just another toy to take back. You were merely a means to an end. Do you still think it was an accident we met? I took an apartment near you and got acquainted with you to pump you about your father. I wanted to find out what would hurt him most before I killed him. I found out."

She looked past him and smiled at me.

"Thanks to you, Lash, we found out, too."

I smiled back at her, then carefully aimed at the back of Lash's head. My finger tightened on the trigger—then became stiff as iron, immovable. My whole body was paralyzed at the same time. I was frozen in the act of aiming.

Lash turned around, casually.

"I've still got eyes in the back of my head, Freddy, you know."

I knew, and had expected

detection. But the other thing I'd expected hadn't happened, and I began to feel anxious about it.

Lash went on: "Even if I'd wanted to, I couldn't have promised Anne not to kill you. Because that would mean breaking an earlier promise—to my father, to kill you. And now, Anne, as you're so close to your father these days, I'm sure you'll wish to be with him when he dies."

Anne gave a little cry and tried to break away from the Roys. It was sheer impossibility. At once she was as helpless, voiceless, motionless as myself.

"By his own hand," said Lash.

Controlled by a mind other than mine, my hand slowly brought the gun back, raised it, pressed its muzzle against my right temple.

"Like Marcelle," said Lash, softly, with hatred in his eyes.

My voice was screaming silently. It's all gone wrong! I've lost! Curse your Marcelle-Mother fixation, you maniac! Oh, Anne, Anne—

"Wait a moment," said Lash. "Justice must be truly poetic. Marcelle shot herself through the heart."

My arm lowered itself, swung slowly out and turned

inward to point the gun at my heart.

And I stopped screaming inwardly and waited with every thought frozen.

"Good-bye, Freddy," said Lash.

Of itself, my finger pulled the trigger.

Zip!

Lash rocked back on his heels, his mouth an O, a bare quarter-inch of the needle protruding from his forehead, the rest deep in his brain, unloading its terrible voltage.

Yet still his wrecked mind fought for life. The needle began to withdraw itself with dreadful slowness. A bead of blood grew, broke, ran down his white face.

Then he collapsed. And his grip on me died as he died.

The Roy women thrust Anne aside and with queer animal, whining sounds came in a shambling run to their fallen master. They crouched over him, plucked the needle out, nursed him, trying to bring consciousness back.

But it was too late.

Half sobbing, half yammering, they looked up at me, seeking guidance as always from the male. Witless creatures who could have snapped my spine with mind-power—if they had been directed to.

I was sick, confused, direc-

tionless myself. Scarce knowing what I was doing, I pointed to Lash, to the ship, to the sky, telling them to take him away, back to where he belonged.

They carried him tenderly between them to the gangplank and up it. The door closed behind them.

The big red ball of the sun, resting on the far horizon, made another big red ball of the ship. Then as the sun began to sink into the earth, the ship began to rise from it. Steadily it accelerated into the deepening blue of the sky.

Anne had returned silently to my side. We gripped hands and watched the ship vanish high in the northeast.

Then he went back into the cottage. The big room was on the shadowed side. We lit the lamps, and I told her of the strange murder of the man Lucas in London long ago. It was a unique story.

Lucas had been one of the original Lash's Party. He had a beautiful wife. Lash charmed her from him. Lucas was a violent, jealous man. Lash coolly needled him into attempted murder—of Lash, with Lash's own gun of Lash's own design. A trick gun. It spat its needle backwards into the face of the firer.

But only Lash knew that at the time.

I was there, shockedly looking down at the body, and heard Lash's sardonic verdict: "Suicide."

"Murder," I said.

Was I then also condemning myself for what I had done now?

"No, there's no parallel," said Anne. "You didn't force him to try to kill you. It was wholly his idea. You tried to escape from him. You didn't kill him."

I ran my fingers through what was left of my hair and my palm came away sweaty. My lips were dry as desert sand.

I got up suddenly and yanked open the doors of the cocktail cabinet.

"No," said Anne, again.
"That's how it began before.
You've got a second chance. If
you can beat it now, you'll
never have to fight it again."

I kicked the doors shut. The bottles rattled and shifted. For a crazy moment I was scared they might juggle themselves into an "L."

I turned away and sighed. "Talk about irony! It was Lash who taught me the vanishing six-shooter trick. And so I was able to switch guns in the Black Museum. And so I was able to kill his son."

"You didn't kill him," repeated Anne, firmly. She knew she would have to go on saying it firmly, over and over, in the future.

"I'd do it again," I said.

It was almost dark. The pale lights were beginning to creep along the horizon again. Presently some detached themselves and crept over it and began heading our way.

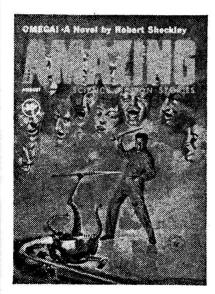
"The armed forces to the rescue," I said. "Or maybe just the police. Perhaps Dick Trevelyan and his boys. A bit late in the day."

They still had a long, rough way to come across the Plain.

THE END

COMING NEXT MONTH

OMEGA! a new novel by Robert Sheckley, headlines the August issue of AMAZING.



In this first installment of a two-part story, you will meet Will Barrent, exiled to a criminal planet for a crime he cannot remember committing. Barrent fights for his life and his sanity as he threads his way through the strange and evil culture of Omega.

Among the short stories will be H. B. Fyfe's "Fee of the Frontier," in which three young men—and one somewhat older and wiser—pay the price of man's progress; and an ironic commentary on man's devotion to ideologies, Algis Budrys' "For Every Action."

The August AMAZING will be on sale at your newsdealer on July 12.

Another wry tale of the good and future life. Any resemblance to actual persons or events is purely coincidental.

PENANCE DAY IN MODERAN

By DAVID R. BUNCH

So THE announcement went out by leaflet from Central that early-season day: ANNUAL SERVICES OF PENANCE—BRING TEARS.

It was just coming April when we moved through our fortress Walls and on out to the parade grounds of green plastic—all the great Stronghold masters for solemn procession assembling. The vapor shield was white that day, with narrow strips of red strung through the sky, which strips we were reminded were of the ancient color of blood. And some of us could remember, though our blood is pale green now as, driven by our ever-last hearts, it hammers through our fleshstrips nourish not only the fleshstrips but also to lubricate the new-metal alloy 'replacements' and the joints hinging flesh to steel. For we are of Moderan, you see, where the fleshstrips are few and played down and the 'replacements' of new-metal alloy are the bulk of our bodily splendor.

We were a strange crew under a strange vapor shield that day, with the tin birds up from Central filling the ersatz sky, and the trees popping out of the yard-holes and bursting forth tin leaves of bright green as we passed. We hobbled toward the east, plopplip-plap over the glistening plastic, sometimes in ragged order by twos, for we were supposed to be in procession. but more often in huddles and lumps and knots of great masters fumbling toward the we struck rough east ground, for we were not good

at walking. Sometimes I wondered if Central did not do this each year just to humiliate us, and also to renew our faith in our Strongholds, for out of our Strongholds we, the great ones, are nothing.

I walked by Stronghold 9. when I was properly in procession, for I am Stronghold 10. Stronghold 9 is situated my nearest most-adjacent enemy, and it was strange to be there so friendly-walking him. steel elbow to steel elbow, each with our tears dangling and jiggling in little plastic bags swung down from our newmetal hands. He was taller than I, but not so massive, and for one flesh-strip tingling moment of purest hate I felt sure that if it came to a standup go between us I could take him down with my two bare hands. But that was silly, of course, because we do not war that way in Moderan. It's always just a matter of lying back at our panels and letting go with the launchers, seeing the walking doll bombs roll, hearing the Honest Jakes scream by and letting the high-up weird shrieking Wreck-Wrecks home down to the kill. So when the moment passed and I did not hate him closely, or want to take him down with my two bare hands. I said. "Greetings. Stronghold 9. In next week's war I have some surprises for you. My Corps of Experimentation, you know-" I left it dangling, and he turned to me a sour face that was made more gruesome because it included a flesh-strip nose, a big and what was surely a family hallmark one that he had elected to keep. Most of us had long ago elected to take the new-alloy all-metal nose, because it was usually better shaped, withal more efficient and obviated cleaning problems. His little new-metal eyes fixed on me with unmasked hate. "So that's why you have such a small bag of tears for the Day of Penance," he suggested, his voice toned to ridicule. "On the Week Atonement, instead of making tears, you prepared a blaster!"

"My bag of tears is adequate," I said. "I am adequate in all things, as you know. And considerably better than adequate in those things on which we are scored."

He turned away and burned, seethed with a rage, I knew, because I had told him right. I was the acknowledged mean-master of our province, my Stronghold with more major wars certified in the Book of Wars than any other

Stronghold in our sector. Each year I received the Medal of Wars with my Stronghold number on it and the year engraved in gold. I dangled the latest one carelessly as we walked. "Next week," I said as though talking to nothing in particular, "next week!"

Then we were caught in a jumble of masters as we hit rough ground again, straining hard in our hinge joints to walk with metallic precision. but finding it hard to go at all in our flesh-strips and steel parts, being not really designed for walking but more designed for sitting in war rooms of Strongholds and pressing the buttons of launchers. When we unscrambled I was walking by Stronghold 2.

Stronghold 2 was a very young master, as such things are reckoned in Moderan. He had not had his flesh-strip ratio firmed and his Stronghold awarded him longer than ten years. But we had had some dandy wars in that time. he and I, and he was certified in the Book as a comer. He was about my size and build, and I liked the open look of his face and the way his wideset new-metal eyes regarded all things with a stare of reliable hate. A man to count on. But though I did not hate him more than the good clean necessary hate of our times. I decided to give him the needle. iust for fun. "Greetings. Stronghold 2," I said. "Next week I expect to have my new blaster ready to go on the line. It's a really new breakthrough in pulverization. My Corps of Experimentation, you know-" I let it dangle for awhile, while he walked chewing his thoughts. on "Let's see," I said after a bit, pretending to ruminate, "I believe-yes, I'm sure-thev've assigned you and me to a Go. Next week."

He turned those wide-set good eyes at me and said in a level voice, "We war, I know—next week."

"Yes. we war." Then I nudged his chest flesh-strip sharply with the point of my steel elbow in a friendly way and said. "You have not much to lose. You are a young Stronghold and have much tradition. They probably assigned you to me and my new blaster because they want your plot smoothed down for a proposed museum of trees."

"When they make yardholes for trees in the plot where my Stronghold stands," he said, "your Walls will be not even remembered dust." He looked at me full and steady with his new-metal eyes then. "I thought we could get along," he said, "have nice wars and all. I see I was fooled. But I guess this new invasion principle I've worked out—" And he left it there, hanging. We hobbled on in silence, toward the east. I liked this guy.

When we arrived at the place of the ceremony. I found I was alongside Stronghold 20, an ancient man of no more than passable record at war, and I, by hurrying, had just time to threaten him firmly with my new blaster. Then the ceremony started, and a most humiliating thing it was, as always. A little point-face man in a black robe, who was reputed to be able to live with ten per cent less flesh-strip than Stronghold master, got up and told us the long dreary story about why the sky had red stripes for this day, what red blood was, how lucky we were not to have it, and all the tedious dull details of how we had come safely through a time when love and all the unreliability of it had tried to dominate man's thinking. Then it was just a matter of listening to recordings of hate music for what seemed hours on end and between record changes hearing the little guy in the black robe rant at us about our duty to start the spring season, truly the beginning of the year, off with some really significant blasting.

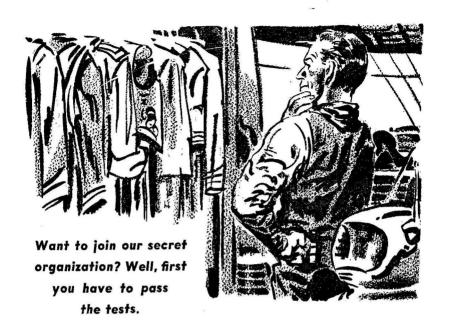
When last strident the jumping note of the hate music had died away into the red-striped vapor shield and the embarrassing silence had settled over the vast amphitheater it was time for the most earnest act of our humiliation. We were to march. single file, to the central dais where stood a tall black vessel and deposit our tears there. We went in the reverse order of our rank for the past year of blasting, which put me in our overall humiliation proudly last, as I alone had the War Medal for my greatness. It was an awesome and proud moment when I stood alone on the platform in all my past accomplished glory and dumped in my plastic bag of tears, as a symbol that even I, as man can never be, had not been perfect. The ceremonial tears, manufactured to exacting specifications in our Strongholds as an act deepest humility, were a kind of penance for things we hadn't done, blasters we hadn't come up with, invasions we hadn't made.

When the last of my tears had trickled into the vessel. the point-face man, enraptured now, standing by a control box at a far wall, pressed a button which caused a dark figure of truly magnificent features of reliability and hate to rise slowly out of the black vessel as though floated from terrible degradation on our penance tears. Then a second button was pressed to blast him high-skyward into the white, red-striped vapor shield as a symbol of our risen hopes and dedication to being better haters. It was, as always, the solem high moment of our humiliation and penance, ending on a note of hope for our atonement and greater worthiness in war. Now we had before us of the day's events only the tedious and vexing hard walk home. which we, now that the ceremony was over, could do as stragglers.

On the way back I plotted to walk for awhile with most of the Stronghold masters I hadn't walked with on the way over. I dangled my War Medal nonchalantly and told them in an offhand way of my new blaster (which I didn't really have at all) and talked of the good wars we had coming up with each other. Some shuddered noticeably in their flesh-strips and 'replacements' while the others bluffed it out and told me of new blasters they were about to come up with and new theories of invasion and breaching of walls. All of us were bluffing. I felt sure, but it was a good idea and didn't hurt a thing to exchange threats on this day, and withal I felt this had been a really successful pilgrimage of tears and truly a good sendoff for the great spring season of war.

THE END





MEMBERSHIP DRIVE

By MURRAY F. YACO

ILLUSTRATED by GRAYAM

THIRTY million miles out, vision networks. He kept the Keeter began monitoring vigil for two sleepless days the planet's radio and tele- and nights, then turned off the

receivers and began a systematic study of the notes he had taken on English idioms and irregular verbs.

Twelve hours later, convinced that there would be no language difficulty, he left the control room, went into his cabin and fell into bed. He remained there for sixteen hours.

When he awoke, he walked to a locker at the end of his cabin, opened the door and carefully selected clothing from a wardrobe that was astonishing both for its size and variety. For headdress, he selected a helmet that was not too different in design from the "space helmets" he had viewed on a number of television programs. It would disappoint no one. Keeter reflected happily, as he took a deep breath and blew an almost imperceptible film of dust from the helmet's irridescent finish.

Trousers and blouse were a little more of a problem, but finally he compromised on items of a distinct military cut; both were black and unembellished, providing, he hoped, an ascetic, spiritual tone to temper the military aura.

Boots were no problem at all. The black and silver pair

he wore every day were, by happy coincidence, a synthesis of the cowboy and military footgear styling he had observed hour after weary hour on the pick-up panel in the control room.

He placed the helmet carefully on his head, took time to make sure that it did not hide too great a portion of his impressively high forehead, and then walked leisurely to the control room.

In the control room he checked the relative position of two green lights on the navigation panel, shut off the main drives, clicked the viewscreen up to maximum magnification and took over the manual controls. A little less than two hours later, at 11:30 A.M. Eastern Standard Time, he landed smoothly and quietly near the Jefferson Memorial in Washington, D. C.

Watching from a port in the airlock, Keeter was impressed with the restraint of the reception committee. Obviously, the entire city had been alerted several hours before his arrival. Now, only orderly files of military equipment could be seen on the city's streets, converging cautiously toward the gleaming white hull and its lone occupant.

He opened the airlock and stepped out on a small platform which held him a full hundred feet above the grass covered park. He watched as an armored vehicle approached within shouting distance, then stopped. Telling himself that it was now or never, he raised both arms to the sky, a gesture which spoke eloquently, he hoped, of peace, friendship and trust.

Later that afternoon, behind locked doors and sitting somewhere near the middle of an enormous conference table, Keeter nonchalantly confessed to an excited gathering of public officials that he had landed on the planet by accident. It was not, he implied, a very happy accident.

"I didn't know where the hell I was," he explained carelessly, in excellent English that awesomely contained the suggestion of a midwestern twang. "Some kind of trouble with the ship's computor—if you know what a computor is." He supressed a yawn with the back of his hand and continued. "Anyway, the thing will repair itself by morning and I'll get out of your hair. Too bad I had to land in a populated area and stir up so much fuss, but from the ship this place looked more like an abandoned rock quarry than a city. Now, if it's okay with you, I'll get back to the ship and—"

A senator, Filmore by name, at the opposite end of the table jumped to his feet. "You mean you had no intention of contacting us? My God, man, don't you realize what this means to us? For the first time, we have proof that we're not alone in the universe! You can't just—"

Keeter called for silence with an impatient wave of his hand. "Come, come, gentlemen. You're not the only other humanoid race in the galaxy. We don't have time to call on every undeveloped race we happen to run across. Besides. I never did like playing the role of 'the mysterious alien who appears unannounced from outer space.' Primitives always require so much explanation."

"Primitives!" exploded the senator. "Why, of all the impudent—"

The senator was quieted by a colleague who placed his hand over the offended man's mouth.

The presiding officer at the meeting, a General Beemish, arose and addressed the visitor. "We realize that from your point of view this planet has not exactly achieved the cultural or technological level of your, er, homeland—"

"You said a mouthful," agreed Keeter, who was now cleaning his nails with the pin attached to a United Nations emblem that somebody had stuck to his tunic earlier in the day.

"Look," said the general, gamely trying again. "We're not quite as unsophisticated as you seem to think. There are three billion persons on this planet—persons who are well fed, reasonably well educated, persons who owe allegiance to only one government. We're making great strides technologically, too. Within a decade, we'll be established on the moon—our satellite. Why, even our school children are space-minded."

"Sure," said Keeter, who had turned in his chair and was now staring out the window. "Nice little place you got here. Say, is there a bathroom around this place. I gotta—"

Someone showed the visitor to a bathroom where to everyone's astonishment he proceded to remove his clothes and leisurely shower. The meeting was adjourned for thirty minutes. When he had finished his shower, he dressed, walked back into the conference room, waved a cheery good-bye, and before anyone realized what was happening, he had unlocked the door

from the inside and closed it behind him.

For a full thirty seconds, no one said anything. Then suddenly someone managed to gasp, "My God, what'll we do?"

"There's nothing we can do," said General Beemish. There were tears in his eyes.

Keeter walked all the way back to the ship. It took him an hour and forty minutes. Long enough, he hoped, for someone to have scooted ahead and notified the military personnel guarding the area to keep hands off.

No one attempted to stop him. He boarded the ship, made himself something to eat, walked to a stock room and pocketed a defective transistor from an unemptied disposal tube in a corner. Five minutes later he reappeared on the platform outside of the airlock. Fifteen minutes later he was delivered in a military staff car to the conference room he had left barely two hours before.

Everyone was transfigured by his reappearance. Beemish looked especially radiant as Keeter sat down at the table, pulled the transistor from his pocket, and stated his business quickly.

"Look, it's probably no use

asking, but I need a repair part for that damned computor. Something's wrong with the automatic repair circuits, and I don't feel like staying up all night to find the trouble." He held the transistor toward them at arm's length. "Frankly, I don't think you'll have much luck reproducing it, but I thought I'd ask anyway—"

"May I see it?" asked Beemish, leaning forward and eagerly stretching out a hand.

Keeter seemed to hesitate for a minute, then shrugged his shoulders and dropped the transistor into the general's sweating palm.

Three persons got up from the table and crowded around Beemish, trying to get a look at the alien product.

"Well," said Keeter. "What do you think? If it's too far advanced for you, don't hesitate to say so. I'll just get back to the ship and start working."

"Not at all, not at all," said a small, white haired man who had finally wrested the transistor from Beemish. He squinted at the thing through a pocket magnifier. "We'll have it for you by morning, I'm quite sure."

"I'm not quite so sure," said Keeter, yawning, "but I need the sleep anyway. See you here at eight in the morning." He yawned again, got up from the table and walked out once more through the door.

When Keeter reappeared in the morning, Beemish ushered him into the conference room with a hearty clap on the back. When everyone was seated, he pulled a small jewel box from a pocekt and handed it ceremoniously to Keeter.

"I already ate breakfast," said Keeter, setting the box on the table.

"No, no, no," groaned Beemish. "That's not food—open it up, man!"

Keeter lifted the box to eye level, squinted at it suspiciously for a moment, then sniffed it. "You're sure—"

"Yes, yes," shouted a dozen impatient voices, "open it, open it up!"

Keeter shrugged and opened the box. Twelve tiny, identical transistors lay gleaming on a bed of black velvet.

"Well?" said Beemish, eagerly.

"Hm-m," answered Keeter.
"What do you mean, hm-m," asked Beemish nervously.

"I mean it's a silly damn way to pack transistors."

"But-"

"But they look like they'll do the job," said Keeter, snapping the lid closed. The sighs of relief were heard in the corridor.

Keeter pushed his chair back from the table and stood up. "I realize that I've put you all to a lot of trouble, and I'd like to offer some kind of payment for your services, but frankly, gentlemen, I don't know how I can—"

"Oh, you can, you can," interrupted Beemish excitedly. "What I mean to say is that if you really want to, you can."

"How?"

"Why, er, you could provide us with a small amount of information." Beemish looked definitely nervous.

"Be more specific, general." Keeter was beginning to look grim.

"Well, we were thinking—I mean, it would be nice if you'd agree to have a friendly chat with some of our people. For instance, an hour or so with our physicists, then maybe a half hour with a few sociologists, and perhaps the same amount of time with the senator's committee—"

Keeter closed his eyes and sighed. "Okay, okay, boys, but let's make it quick. Also, let's keep it to twenty minutes for each inquisition. Come on, when do we start? Now?"

The scientists were the first

—and the easiest. He gave them just enough information to whet their appetites, just enough to plant the suggestion that it took a great deal of tolerance and patience on his part to hold an interview with such backward people.

"Gentlemen, I'd love to explain the principle of the neutrino drive, but frankly, I don't know where to begin. You—you just don't have the mathematics for it." He didn't bother to add that neither did he.

"Yes, of course, I'm sure I understand what you're getting at. My God, why shouldn't I? Even a child could understand those equations."

"You call that a representation of the mass-energy constant? No offense, old man, but I'm afraid you're going to have to start all over again. Invention doesn't take the place of research, you know."

The social scientists were next:

"As I explained a moment ago, we are heterosexual and live an organized community life, but not in any cultural context that could be explained by the term. You might say that our cultural continuum (although the term for us is quite meaningless) is a function of an intricately struc-

tured social organism, with institutional coordinates that are largely internalized. Do you follow me gentlemen?" They certainly did not.

But the senator's committee, as usual, got the information it wanted.

Senator Humper: Now, young man, you claim that your base is on one of three inhabited planets of Aldebaran. You also claim that in the known universe there are twelve hundred or more inhabited worlds, all welded together in a kind of super United Nations. Did you or did you not state as much? Keeter: Uh-huh.

Humper: Well, now it appears that we're getting some place. Tell us, how does each planet manage to qualify for —er—membership in this organization?

Keeter: Why, they have to pass the test, of course.

Humper: Test? What test?

Keeter: The Brxll-Hawkre-Gaal test. We administer it to anybody who seems to be qualified.

Humper: Er—tell us, young man, just exactly what sort of test is this? An intelligence test?

Keeter: Yes, you might call it that, although it has a number of sections. Actually,

Gaal has divided it into three parts.

Humper: I see. Well, what kind of parts?

Keeter: Well, let's see. First there's the fuel test.

Humper: Fuel test?

Keeter: Let me explain, all very simple really. Let's take the case of a planet that seems to be qualified for Federation membership in every respect but one. They don't have interstellar flight. Now—since membership imposes duties requiring commercial, diplomatic and scientific intercourse between member worlds, the applicant must be able, within a comparatively short time, to engineer its own transportation. Follow me?

Humper: Yes. Yes, go on.

Keeter: Well, since the biggest technological stumbling block for most planets in such a situation is the development of the necessary fuel, we'll help them along. In other words, we give them the fuel test; we supply a sample quantity of Z-67As—our standard thermonuclear power source. If the applicant, working with the sample, is able to reproduce the fuel in quantity, then that's it. They've passed that portion of the test.

and at the same time have developed the means for interstellar flight. Follow me?

Humper: Yes, of course. Now how about the second part of the test?

Keeter: Oh, yes, that's the weapons section.

Humper: I'm sorry, I'm afraid I didn't hear you. I thought you said weapons.

Keeter: I did. You see, it's a matter of self defense. There are a number of primitive worlds that have developed interstellar flight, but have not achieved the cultural and social levels that would qualify them for membership. As a result, they become rather nasty aboute this exclusion, and devote themselves to warring against any Federation ship that comes within range. You'd call them pirates, I think. Anyway, the Federation Patrol keeps them pretty well in hand, but occasionally, the Blues -that's our nickname for them since all their ships blue—do manage to waylay a ship or raid a Federation planet. So naturally, every ship must carry suitable armament; standard equipment is an R-37ax computor missile even more complicated for an applicant to manufacture than the reactor fuel. Therefore we provide a sample missile along with our blessings. The rest is up to the applicant.

Humper: And the last part of the test?

Keeter: Oh, that's genetic. We require a specimen, a womfrom the applicant's world. She's taken to a Federation laboratory, evaluated genetically, physiologically, psychologically. Our people are able to extrapolate the future racial —and to some degree cultural-development of the entire planet after about two weeks works. Needless to say, the entire process of testing is painless: the subject is made as comfortable as possible. And after the test period, the specimen is returned as quickly as possible to her home world.

Humper: Well, now, don't you think—after what you've seen of us—that we might possibly qualify, at least qualify to take the test? I'm sure you'll be surprised—

Keeter: Oh, no you don't! I've fulfilled whatever obligation I had by answering your questions. That was the agreement, remember? Information in exchange for the transistors. Now, gen-

tlemen, if you'll excuse me—

Keeter allowed himself to be delivered back to the ship in a staff car. Beemish and several others were on hand to see him off. He shook hands all around — a custom which amused him immensely, since the same act meant something tremendously different in most other parts of the universe.

Back in the ship, he walked to his cabin, stripped off his clothes, showered, ate, dressed again. Going into the control room, he checked a number of detectors, found no evidence that any Blues were hunting for him, left the control room and walked back to a supply room.

Here, he selected a plastic vacuum solenoid from a rack, hefted it in one hand for a moment, then deliberately let it drop to the floor. He picked it up, squinted at it, then walked out to the airlock.

General Beemish was delighted. Everyone was delighted. "No trouble at all," said Beemish, who had already made a phone call that had galvanized two thousand scientists and technicians into action. "We'll have it for you in no time."

"I certainly hope so," said

Keeter. Some of the flippancy had left him, and it was apparent that this new bid for assistance was causing him considerable embarrassment -for a short time, anyway. "Yes sir," said Beemish, grinning. "Glad to be of help, in fact, we're flattered that you'd let us, primitive as we are, help at all. We primitives don't often have an opportunity to do this sort of thing, you know." Beemish believed in rubbing while the rubbing was good.

The solenoids, forty in all, were delivered the following morning. They were packaged in a small black box lined with velvet. This time Keeter made no comment about the packaging. Instead, he rose from his chair in the conference room. tucked the box under an arm. addressed the group. "Gentlemen, I'd like you to know just how much I appreciate this favor. Evidently, I misjudged your level of technology, and for this I apologize. I don't know how I can repay you for this latest favor. but if you'd like, I'll be glad to formally submit your planet's application for Federation Membership as soon as I return to Aldebaran.

"When will that be?" asked Senator Humper unceremoniously. "Oh, about ten of your years, at a guess."

"Ten years! My God, man. Can't you do something sooner?"

"Well—I suppose, I could administer the first two parts of the test myself. Why, yes, I suppose I could drop off your samples and your specimen at the Federation branch laboratory in Andromeda—."

"Wonderful!" shouted Beemish. "When do we begin?"

He was genuinely awed when three weeks later they began loading enormous quantities of Z-67As into his ship. He did not check the stuff, but had no doubts that it was, atom for atom, identical to the sample of fuel he had given them.

The R37Ax computor missiles arrived the same after-There were noon. hundred of them. He selected one at random and had it taken into the ship's laboratory. Here, he ran a number of routine tests. The missile was not identical to the sample! They had made a number of improvements in the circuitry! Keeter reflected grimly that a race such as this would probably be able to deduce a launching and firing system for the thing, would probably have the planet ringed with launching stations within weeks. If the Blues *had* picked up a trace of him, he reflected, they would be atomized before they got within half a million miles of the planet.

The specimen for genetics, which he had almost forgotten about, arrived an hour before he was scheduled to depart. He was stunned again. She was undoubtedly the most attractive woman Keeter had ever set eyes on.

"Oh, I'm so excited," said the young lady, in a voice slightly suggestive of the virgin on the way to the sacrifice.

"I'm excited, too," said Keeter honestly.

In the control room, Keeter set a course for Arcturus. He then tripped a lever which fed a month's supply of the earthmen's fuel into the ship's almost empty reaction chambers. Another lever fed 50 computor missiles into 50 completely empty launching racks.

He checked the detectors, but found no trace of the blue ships of the Federation Patrol. Keeter allowed himself the luxury of a sigh. It was a long way to Arcturus, a long, lonely way—even for a hardened pirate, he reflected sadly. Then he remembered that that was why he had asked for the girl.

THE END

A NEW LOOK AT SPACE

By ARTHUR C. CLARKE

FOR much of this century, a popular subject of debate has been "Will man ever be able to reach the Moon and planets?" It is strange to think that, this question is now as completely dead as the once equally discussed "Will we ever be able to release atomic energy?" For today no one seriously doubts that manned space flight will be under way on a large scale before another ten years have passed; indeed, a recent survey published by the House of Representatives Select Committee on Astronautics and Space Exploration —an eminently sober body put the first lunar landing in the early 1970's.

It follows, therefore, that the "how" of space-flight, which has been so thoroughly described in countless books (fictional and otherwise) and dozens of movies (good, indifferent, but mostly bad) has lost much of its interest to the imaginative mind. The mechanics of space-flight can now be taken for granted, and it is not utopian—indeed, it is merely being realistic—to consider some of its possible results and implications.

Foremost of these is the impact which the new science of astronautics will make upon our society when it comes of age. We have one analogy to guide us, for the century which will end with the spaceship began with the airplane—and the conquest of the air provides many parallels with the conquest of space. But like all analogies, it must not be pushed too far.

The airplane gave us easier access to places already inhabited, already—in most

cases—well-known. It did not, except in a very limited sense, open up wholly new realms, or take us to the utterly unknown regions which the manned rocket will. When the first spaceship settles in the soundless fury of its braking jets upon the surface of the Moon, the final frontier will have been attained and humanity will face its greatest opportunity—and its greatest challenge.

Our ancestors were able to colonize the far places of this world with no more than a few simple tools and their own physical strength. It will be very different on the Moon and planets, for on not a single one of them could an unprotected man survive in the open for more than a few seconds. All the bases we establish in space will have to be totally enclosed, provided with their own atmosphere, and protected against extremes of heat or cold—and frequently both.

Some of the technical problems involved in planetary colonization will be quite as difficult as those which will have to be overcome in the conquest of space itself, though they will be a good deal less glamorous. It is interesting to note that many have already been solved in the Arctic and Antarctic, during the establishment of the IGY stations and the setting up of Thule Air Force Base in the frozen wilderness of Greenland.

When we can look up at the shining face of the Moon, and know that we have kinsmen there looking back at the far more brilliant Earth-then. will surely. commence change in mental attitudes exceeding that which took place in Renaissance times, when the windows of the mind were thrown open and western man began to realize the extent and wonder of the world in which he lived.

Our century must see annother such expansion of horizons, as the global outlook we have scarcely yet attained has to give way to the astronomical one. How swiftly that change occurs will depend upon facts which, at the moment, can be only partly predicted.

Perhaps, the problems of establishing a self-contained settlement on the Moon will be so great that only a handful of scientists will ever live there. Even if this proves to be the case, the effort will have been worth while. There are entire fields of scientific research which will be revolutionized when it is possible to carry out experiments under

low gravity, and in the absence of an atmosphere.

Above all, the Moon will be an ideal site for an astronomical observatory; instruments larger than any so far built on Earth could operate there at undreamed-of efficiency, giving sharp, clear images undisturbed by the air-tremors which we can never avoid down here at the bottom of our turbulent, dust-and-moisture-laden atmosphere.

It is also perfectly possible that even the bleak and airless Moon may one day support large human populations, living under conditions which, after all, will not be more artificial than those which the Manhattan cliff-dweller takes for granted. Whether this happens or not depends upon what the explorers of the next generation discover on our satellite.

It seems unlikely that a world whose surface area equals that of the African continent will possess absolutely nothing of value to that ingenious exploiter, *Homo sapiens*. If anyone doubts this, let him recall that a hundred years ago the United States Congress could see no point in acquiring Alaska.

Even if we virtually by-pass the Moon as a permanent settlement possibility there will still remain the mystery and the promise of the planets. It is true that they are a good deal further away, but, as the very first Russian space probe demonstrated, they are little more remote than the Moon in terms of rocket fuel, which is what really matters. Quite probably, Mars and Venus will be reached within a decade of the first lunar landing.

It is possible that the development of a really effective atomic-propulsion system may open up the entire Solar System in one swoop, for by the standards of nuclear energy the power requirements for flight to the remotest planets are quite trivial. A slight hydrogen bomb liberates enough energy to carry a million tons to Pluto—and back!

The colonists of Mars and Venus may have an easier task than the explorers of the Moon, for even an unbreathable atmosphere is in some ways better than none. As a very long-term project, it is quite conceivable that by the large-scale use of atomic energy we may be able to modify planetary environments suit our needs, so that it will eventually be possible to do away with spacesuits pressurized bases.

In all these speculations, one

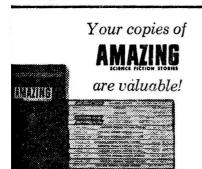
great enigma remains to tantalize us. Will we discover, on any of the planets, races which may match—or even surpass—our own in intelligence or achievement?

It can be said at once that all the astronomical evidence is against this, but we cannot be sure, and it would be wise to keep an open mind on the subject. There are certainly very good reasons for expecting to meet some forms of life on Mars, though we have too few facts even to guess what they may be.

If there is intelligence elsewhere among the planets, our first meeting with it will be the most important event in the history of our race, changing forever the very foundations of our philosophies and religions. But it seems un-

likely that this first contact with our equals, or our peers, will occur during the exploration of the planets of this sun. Perhaps that is just as well; it may be some centuries yet before man is morally and psychologically ready for such encounters.

The opening up of the new frontiers in space will bring with it skills and knowledge which will change the face of many worlds besides our own. Let us hope that with the knowledge will come wisdom: with achievement, humility. There is much in the history of this Earth of which we have little to be proud. Will this still be true of the histories yet to be written, on the virgin soils of the new worlds that now wait for Man? THE END



Keep them neat... clean...ready for instant reference!

Now you can keep a year's copies of AMAZING SCIENCE FICTION STORES in a rich-looking leatherette file that makes it easy to locate any issue for ready reference.

Specially designed for AMAZING SCIENCE

Fiction Stories, this handy file—with its distinctive, washable Kivar cover and 16-carat gold leaf lettering—not only looks good but keeps every issue neat, clean and orderly. So don't risk tearing and soiling your copies of AMAZING SCIENCE FICTION STORIES—an exciting source of reading enjoyment. Order several of these AMAZING SCIENCE FICTION STORIES volume files today. They are \$2.50 each, postpaid—3 for \$7.00, or 6 for \$13.00, Satisfaction guaranteed, or your money back. Order direct from:

JESSE JONES BOX CORP.

Dept. A Box 5120, Philadelphia 41, Pa. (Established 1843)

Conclusion

...AND ALL THE STARS A STAGE

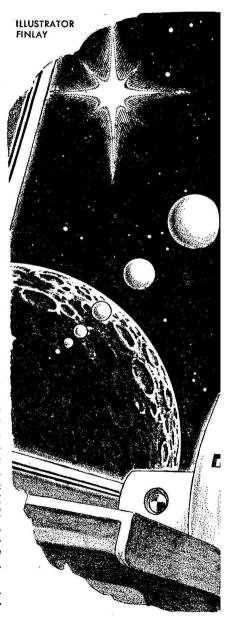
By JAMES BLISH

This novel will be published in the fall by Signet Books under the ttile "Crab Nebula."

SYNOPSIS

Jorn Birn was a typically dispirited male on a planet somewhere in the Crab Nebula when the strange thing happened: He got a job. Birn's planet was a matriarchy. Control of sex selection had produced an oversupply of men who, instead of cooperating to rule their world, split into cliques and were dominated. by their women folk. Men lived in drab barracks, ate poor food. wore shoddy clothes, and comforted themselves by wearing basilisks on their wrists as fumiliars.

All this changed when Helminth Ertak, the male director





of the Interstellar Expeditionary Project, hired Jorn as one of the crew slated to test a faster-thanlight drive. Birn liked everything about the job—including the rigorous training—except the unalloyed hatred and disgust he seemed to draw from one of Ertak's aides, the beautiful Ailiss O'Kung.

The IEP became a life-saving, rather than a research project, when it was discovered that the planet's sun was going nova, A crash program built a spaceship fleet calculated to save 250,000 of the planet's inhabitants. But those not chosen to make the flight to seek another planet learned of the secret locations of the spaceships. They attacked them. In the battles that followed many of the spaceships were damaged. Only 30 escaped, a pitifully small number. After six years in space the hope of making a planetfall waned. Jorn Birn, navigator on the fleet flagship Javelin, is torn by the guilt and fear that affect all of the survivors: Why were they chosen by Fate to live when billions on their home world died? Tensions on shipboard grow to a breaking point, when Ertak's voice booms through the ship: HANDS. "ALL STAND BY FOR PLANETFALL."

CHAPTER 7

FOR a ship's computer to pick out a possibly likely system and sound a preliminary warning of this kind was not unique;

it had happened twice before in the fleet as a whole—though never to the Javelin—but both these incidents had proven to be false alarms. All the same, since the event was novel to the Javelin herself, it created an almost undiluted ecstasy of excitement.

Since Ertak had issued his Yellow Warning One to all hands, the excitement was not confined to the crew. Even before human observers were able to examine in detail what the computer thought it had found, everyone on board the Javelin was looking at his neighbor, thinking, Maybe, maybe we have reached our unknown goal; maybe this is It.

After his first look at the tapes and at the star itself, however, Kamblin was puzzled.

"It's certainly an intensely luminous star," he said, "as most stars go—especially only three light years away from it. Its absolute luminosity appears to be about sixty, and its surface temperature is upwards of 15,000 degrees. That's by no means as big a sun as the model the computers are set to scan for."

"I don't see how they could have made a mistake," Jorn said, frowning. "They shouldn't have been fooled by so simple a thing as the comparative nearness of the object."

"Well, no," Kamblin agreed.
"They're also supposed to search
for planets, and the tape says
this star has at least one. We
have to bear in mind that very

large brilliant stars, like our old one, are pretty rare, and they aren't necessarily the only type which might bear planets suitable for us. Even back home, from the lunar observatory, it was possible to detect four faint nearby stars, each of which had at least one planet-like companion; so actually planets must be relatively common."

"In other words, if the computer has made a mistake," Ailiss said, "we hope it's a happy accident."

"You could put it like that." "We'll close in," Ertak decided. "But cautiously. Birn, I want a tangential approach, arriving at right angles to a radius of the total system at a distance of about a light year. Thereafter we'll spiral inward, making sure we don't miss any planets on the way; if we do make a landing. I don't want anybody on the back of my neck that I'm unaware of. Ailiss, begin to scan for patterned electromagnetic disturbances of any kind and keep at it until further orders. If the computer thinks there might be an inhabitable planet here, it may very well be inhabited as well . . . Dr. Kamblin, you have that expression of mild indigestion again. Any comments?"

"Nothing serious. But at the rate this star is burning its hydrogen, it can't be much more than a thousand million years old. There's a question in my mind as to whether any of its planets can be far enough

along in their evolution to support life in any form."

"That will wait upon inspection. What else?"

"I think a light year is unnecessarily far out. A sun this small couldn't support a solar system much larger than half that diameter."

"Quite so; thus we rule out starting inside a planetary orbit without being aware of it. Proceed, Mr. Birn."

By the time the Javelin was within a light year of the bluewhite sun, the fever had percolated thoroughly through the crew and the standbys, thence down to the passengers. Jorn, however, was beginning to feel familiar harbingers of letdown, which he supected were shared by several other officers. It had now become visible that the star did indeed have planets —the computer estimated a total of ten. This was promising enough, and yet at the same vaguely disappointing. After all, the system they had quitted had 116. All but two of those, or three counting the home planet, had been utterly hopeless from the view of human usefulness. To find so much smaller a number of planets here seemed to cut the odds for one hospitable even finding world below the point of credibility.

"Let's not prejudge the case on so little evidence," Ertak said abruptly to no one in particular. "We will see what the actual situation is very shortly. Ailiss, any detectable redundancy anywhere in the electromagnetic spectrum?"

"No, Director, just solar noise so far."

"Well, keep scanning; that's not significant at this distance. To all hands: We are now preparing to enter this system. Yellow Warning Two is now in effect."

There was the beginning of a muted stir throughout the Javelin, as battle gear and drop ships began to be readied. Jorn, going for his own gear, wondered how Ertak had been so quick to detect the first faint stirrings of defeatism among his officers; on most occasions he had shown himself to be next to no psychologist at all. Maybe Ailiss had done it for him

In any event, the die was cast. The *Javelin* was beginning her slow, circuitous drop toward the blue-white sun.

Excerpts from the Grand Log, as broadcast by the Javelin in the course of exploration of System IEP #3:

"The most distant planet of this system is at a distance of 6,720 million miles from its primary, with an orbital period of 610 years. It is quite dark, with some whitish streaks not parallel to its equator, its diameter is 10,000 miles and it is accompanied by two small moons. One is 250,000 miles from its primary, with a period of 24 days and a diameter of 30

miles. The second, 5,000 miles out, has a period of four hours and a diameter of three miles. It is presumed by Dr. Kamblin to be a captured comet. No landings attempted.

"The next planet inward, at a distance of 2,500 million miles, has a period of 420 years and a diameter of 33,000 miles. It is dark and moonless. No landings attempted.

"The next, obviously the first to be detected by the computer, is a gas giant of 110,000 miles diameter, at a distance of 4.500 million miles from the primary and with a period of 265 years, and close approach reveals the methane-ammonia-hycommon drogen pattern for worlds of this size. It is thermally quite hot, though not self-luminous in the visible spectrum. It has six large moons, the largest 4000 miles in diameter and with a deep but thin atmosphere, and 17 small ones ranging from 10 to 160 miles in diameter. No landings attempted on the moons as yet.

"Between this world and its nearest neighbor inward there is a wide gap which has defied explanation and presumably is responsible for the computer having described this nine-planet system as having 10 planets. The next planet is 850 million miles from its sun, 40,000 miles in diameter and with a period of 30.5 years. It is accompanied by seven small moons and one of about 3900 miles diameter. This large moon is 800,000 miles from its

planet. The planet itself presents a speckled appearance, as though it had many high, snow-clad mountain chains, although this is obviously impossible. No landings,

"The next world is a small high-albedo gas giant 450 million miles from its primary, with a diameter of 15,000 miles and a period of 12.25 years. It has two small moons and exhibits the usual methane-ammonia-hydrogen characteristics. No landings.

"Inside the orbit of this world there is a highly unstable and not very dense belt of meteoric and planetary matter with wide gaps and many members which fail to conform to the orbital plane of the system as a whole. The total amount would make up a planet about 3000 miles in diameter, and the belt probably represents such a planet, torn apart (or prevented from forming) by the gravitational force of the biggest of the gas giants. It is not so widespread as to represent a serious hazard to navigation.

"The most interesting objects in the system are twin planets, each 7000 miles in diameter, of considerable density, and exhibiting extensive (though not chemically identical) atmospheres. One is 90 million miles from the primary and has a period of 285 days: the other is 67 million miles out and has a period of 224 days. The planet at 90 million miles is of especial interest and will be reported on in detail: the other is too hot to support life except at the poles, and even there only for half the year, as the planet has a pronounced axial tilt.

"Finally, there is a very high albedo planet with a diameter of 4,100 miles, going around its primary in 81 days at a distance of 30 million miles. It appears to have been melted into a smooth ball, and is surrounded by a slight haze spectroscopically identified as composed of vaporized metals, predominantly heavy radioactives. It is of remarkable density and has a high eccentric orbit."

There was no doubt about it now. The third world, even seen from just outside its atmosphere. was wholly inhabitable. In contrast to the second planet, the air showed no detectable carbon dioxide, and hence no greenhouse effect would exist to run up the surface temperature. Thermocouple studies showed that to be intolerably torrid all the same at the equator, all year round-for the planet had no axial tilt, and hence no seasons—but there were cool poles, and two "temperate" zones for which a better adjective would be "balmy". The spectroscope also showed the air to be somewhat low in oxygen; but in view of the prevailing planetwide, eternal summer, this was not a real disadvantage. At least nobody on this world would have to expend any energy just keeping warm.

"In any event it appears to be this one or none," Kamblin concluded. "Does anybody want to enter a demurrer?"

"Well . . ." Jorn said hesitantly.

"Yes, go ahead, Jorn."

"I've been thinking, it's kind of enervating to live where it's warm-to-hot all the time-and I think we've all had a full enough dose of hot weather over the last five years on our own planet to last us a long time. What about the biggest satellite of the giant planet? That planet radiates a lot of heat, enough so the satellite is tolerably warm around the equator even at night. And this sun is plenty bright enough to give it enough light to raise crops by-- even though the days might be pretty dim to our eyes."

"Interesting," Ertak said. "I'm against it but I can't think why; it may be only emotional. Dr. Kamblin?"

"I have two objections," Kamblin said. "To begin with, the reason why that planet is hot is that it has a core of collapsed atoms, and it's generating a small amount of energy by the red giant or deuterium-hydrogen reaction." He got up and went to the blackboard, where he wrote:

$_{1}D^{2} + _{1}H^{1} \rightarrow _{2}He^{3} + gamma$

"In fact it's not really so much a planet as it is a spoiled star, what we call a 'grey ghost'. Note the last term in the expression; it means that on any of those moons we'd be getting much more hard radiation than would be good for us, especially genetically. The other reason is, that satellite isn't massive enough to hold its atmosphere long enough to be a permanent home for a whole race. Even in a brief thousand million years, I estimate that it's lost about half of it."

"We could always migrate to the third planet when it got too thin for us," Jorn said. "But of course I didn't know about the radiation hazard; I withdraw the suggestion."

"Nevertheless, Mr. Birn, you have made an important point, even if inadvertently," Ertak said. "Where life can exist, life will arise—the forests below us now are proof enough of that—and a high radiation level means a high mutation rate and high evolutionary pressure. We had better keep a close eye on that satellite, and explore it the moment we've consolidated the present world—explore it in force."

"Hmm," Kamblin said, "Very true; a disquieting thought."

"Now: The next problem is to select a landing place. We will need one big enough for the Javelin."

"Excuse me, Director, but why not boats first?" Ailiss said.

"Because we have no need to be that cautious here," Ertak said. "A boat can't carry enough apparatus to make all the necessary tests; they're useful primarily for scouting actively hostile planets. The Javelin herself is the only laboratory at our disposal of sufficient size and resources to get a significant number of samples and process them thoroughly."

"Why risk throwing away four or five people?" Dr. Chase-Huebner agreed. "Especially when even their return unharmed couldn't be considered definitive? Landing the whole ship is much more economical procedure in the long run."

"Very good," Ertak said. He picked up his microphone.

"TO ALL HANDS: THERE WILL BE NO YELLOW WARNING THREE. REPEAT, THERE WILL BE NO YELLOW WARNING THREE. BOAT CREWS, DECOMMISSION ALL BOATS AND ASSEMBLE AT LANDING STATIONS. YELLOW WARNING FOUR WILL GO INTO EFFECT IN ONE HOUR. ALL HANDS STAND BY FOR LANDING."

The landing site looked ideal, even after they were safely down on it. It was a broad plain beside the western shore of a huge body of water which, since it was both fed and drained by rivers, could safely be assumed to be fresh. Farther to the west there was a solid wall of virgin forest, marching unbroken for hundreds of miles into the foothills of a long and very high mountain range.

"Now we sit," Ertak said firmly. "I know everybody has his nose pressed to the ports, or would if we had any ports. But I want everyone to bear the fate of the *Kestrel* at the very front of his mind. We are going to make especially exhaustive bac-

teriological tests—and we are not going to miss any other tricks, either. The standbys will suit up and go out in rotation to collect samples; first man to disembark will be selected by lot. And nobody comes back into the ship without spending one full hour in the airlock under live steam at sixteen atmospheres, until Dr. Chase-Huebner's prepared to certify this planet as clean."

That took two weeks, and her certification was well hedged with conditions. "I can't rule out long incubation periods," she reminded the Director. "Some forms of viral cancer, for instance, take five or six years to incubate; and some bacterial diseases, like leprosy, may take as long as fifteen. But I assume that you don't expect any world to be completely free of disease—that would be demanding the impossible."

"No, of course not. What I want to rule out are galloping, uncontrollable, wild-fire plagues—like what happened to the Kestrel."

"There aren't any in our immediate area," Dr. Chase-Huebner said promptly. "But warn everybody to watch out for dirty wounds. There's a soil bacterium that's close to identical with gangrene."

Ertak shrugged his titanic shrug. "Expectable. That kind of thing we can cope with. All right, ladies and gentlemen, we will prepare to pitch camp."

There was an instant clamor

among the officers, which Ertak silenced, after a moment, with a sour grin and a wave of his hand.

"Calm down, please. I know everyone's got shipboard fever, but I assure you that you'll all be satisfied. We don't need volunteers; this is to be a foray in force from the very beginning. I want a fortified encampment covering roughly a hundred acres, centered on the ship herself. That will call for more work from you all than you'll find you're able to do. The passengers will remain behind for the time being, and the ship will be staffed on a skeleton basis by the standbys; they had the fun of being first out, now comes the time for them to pay the fee. I'll stay with them, of course; Ailiss, you're in charge of the camp itself. Prepare to disembark."

Crowing, the crew broke for their quarters and their gear.

Jorn's heart was in his mouth as he stepped off the ladder onto the actual, inarguable soil of the new world. He had not really realized how unlikely such a moment had come to seem to him. Nor had he known, ever before in his life, what it would be like to be in the midst of a wilderness. There had been none left at home, not even for the rich and powerful; everything there had been tamed, organized, put to use. Here, everything was new; They were starting over.

It was appallingly hard work, as Ertak had prophesied, but his training stood him in good stead. Despite the years of confinement in the ship, he had kept himself in reasonably good shape. Though his muscles ached abominably at the end of each day for the first week, he was never actually incapacitated, and finally his body caught the work-rhythm and fell in with it. After that there was no trouble.

And there was time, even while wielding spade or sledgehammer or winch-handle, to look at the life around him. There were no birds here, but there were plenty of delicate insectlike creatures of many species. than none larger a breadth. Often they simply hovered, with improbably slow motions of their wings; sometimes, on the other hand, they traveled with invisible speed from one hovering spot to another, slowing down into visibility only for an unpredictable swerve, and then accelerating beyond vision again. None of these seemed to have stinging or biting habits; after watching them for a long time. Dr. Chase-Huebner authorized disembarking small samples of the ship's livestock.

On the ground, the commonest form was a mollusc, superficially resembling a snail but considerably larger, and with as much apparent intelligence as a turtle; they were housed in brittle silicoid shells. They seemed to prefer crawling over pitted rocks; though they were sometimes found crossing over vegetation, it was only on the way to an-

other rock. The plants over which they passed en route showed no signs of having been eaten—which was promising for the crops, some of which were just beginning to show their first shoots in the eternal summer.

All this was duly reported to the Grand Log. Messages poured in daily from the rest of the fleet, offering congratulations and voracious for more details. The four ships in the globe nearest the Javelin were decelerating under full drive; all the same, it would take them years to get here. The rest of the armada, not without jealousy, continued to expand outward.

Then came the morning when Jorn looked down out of a tree he was trimming to string wire, to find himself being watched by a demon. Yes, it could be described no other way.

It was a striped animal, four-footed, about twice as big as a man and obviously at least four times as heavy; it looked, in fact, almost overstuffed. It padded smoothly, soundlessly in figure eights around the base of the tree, looking up at him with a face whose markings gave it an expression of permanent, insane fury. Occasionally it stopped and sighed; then it resumed pacing.

Jorn hurriedly dug his lineman's cleats into the tree bole and reached for his sidearm. He doubted that he could hit the beast—there were too many branches in the way—but he was going to try. With the oth-

er hand, he swung his cheek microphone into position.

"Birn calling base camp. I'm treed by something over here. Nothing we've seen before. It's big and obviously carnivorous. I'm going to take some shots at it, but I may need help."

"O'Kung here. I read you, Birn. I'm sending a squad. Try not to damage it too much— Biology will want to look at it."

"I'll try," Jorn said disgustedly and swung the mike away. Leaning back against his safety belt, he steadied the pistol with both hands and tried to lead the animal back and forth in its pacing. It was, as he had anticipated, difficult to do; the treebole kept getting in the way. But if he could have it in the sights just as it stopped to sigh—

It stopped and he squeezed the trigger. He did not hit it—not by several feet, at least—but the result was utterly unexpected. He watched with incredulity for nearly five minutes; and then, holstering the pistol, began to climb carefully down to the ground.

He was looking down at the colorful corpse when the cautious party from camp arrived.

They dragged it back to camp and into the improvised surgery tent, where Dr. Chase-Huebner, the ship's surgeon and the chief of biology were already set up to perform an autopsy. The beast, looking somehow smaller, was hauled up onto the table, where it lay in a peculiarly floppy position, like a child's toy.

"What a face," Dr. Chase-Huebner said. "Like a devil. What happened, Jorn?"

"I wish I knew. I know I didn't hit it. But at the sound of my gun it jumped sidewise, and landed in a tangle of those clover-like plants we've been clearing away, the ones with all the long thorns. It thrashed around in there for just a moment as though it were going to jump out, and then all at once it just—collapsed. From the noises it made, you would have thought it was suffocating."

"Very likely. Those thorns must carry some kind of nerve poison—something that blocks the breathing reflex. Odd; we've been scratched often enough by them without any apparent harm. We'll send some more samples to Chemistry—and I suppose we'd better take to wearing boots and heavy puttees until we get the results." She hefted a pair of electric shears thoughtfully, and then bent to shaving the animal's belly for the first incision.

"That was my guess," Jorn agreed. "But what puzzles me is, why should it have been so jumpy about so small a noise as my gun makes? The sighing noise the critter makes itself is almost as loud. But it jumped like it had been stung."

Dr. Chase-Huebner didn't answer. She was busy painting the shaven surface with alcohol. After a moment she took up a

scalpel, and Jorn, who was inclined to be sensitive about raw innards, went back to work as quickly as his dignity would allow. Questions about the creature continued to fill his mind.

"We can take the boots off," Dr. Chase-Huebner reported at the end of the next day. "There are no alkaloids on the thorns; the plants are entirely harmless, just as we first thought. And we won't have to worry about these carnivores, either. If you can't get a fast shot into one before he's on you, stab him around the limbs or the rib-cage and you've done for him."

"I don't know," Jorn said dubiously. "You never saw him when he was alive. He looked powerful—and mean."

"I assume he's both," Dr. Chase-Huebner said cheerfully. "But that doesn't matter. You see, he hasn't got any bones. He's supported entirely by nitrogen under high pressure, in sealed tubes, thick-walled but essentially flexible. When the poor animal dodged into the thorns, his 'skeleton' got punctured in several places and the nitrogen pressure was released -some of it into the outside air, but most of it into his body cavities. He couldn't support himself any longer and smothered under his own weight. Probably that was why he panicked when he heard your gun hiss, Jorn: to him the sound of escaping gas is the sound of death. Ordinarily, I assume, he

has better sense than to jump into a patch of thorns."

"That's fine," Ailiss said, but she did not sound pleased. "But I'm afraid I've got another case for you. About five minutes ago a man came swearing into the first aid station with a wounded shoulder. He didn't hear anything and didn't see anything; he was digging post-holes in an open field when it happened. But it looks to us very much as though he's been shot."

Dr. Chase-Huebner agreed. She could contribute little more, except that the missile had been quite small and of relatively low velocity—not much past the speed of sound, just enough to go on through and out the other side of the shoulder. In that the victim had been lucky, for a high-velocity missile can kill a man from shock alone, no matter where it hits him.

Two nights later one of the cattle was dead of the same cause, shot all the way through the chest. A bigger and faster missile, this time; but no other clues.

"We will make the obvious assumption," Ertak said grimly. "There are no safer ones to make. That is, that there are intelligent natives here after all—without electricity, but with enough brains to construct missile weapons of relatively low velocity and accuracy—and that they're keeping under cover and sniping at us. I want a doubled guard, and a twenty-four hour infra-red watch from the bridge

of the Javelin; also radar, sonar, trip-wires, the works. If anyone sees a native, notify headquarters first; I'd rather catch one than kill one."

Within a day, the camp was in a state of siege. Within a week, a woman on the agronomy team was creased lightly across the back. Two weeks later, an officer on temporary duty as a lineman, as Jorn had been when he had met the stuffed tiger. was killed, a hole driven right through his skull: it took most of the day to get his body out of the tree in which he had been working, but it did not tell them anything they did not know already. Then there was a lull. which lasted more than a month. It ended when the woman who had sustained the back crease earlier was brought in with a shattered knee-cap.

"Their accuracy," Ertak said, "is improving. And still we haven't seen a thing. From now on, the guards are to wear spacesuits at all times, day and night; the rest of you will sleep in the ship. All the animals are to be brought back in. Birn, doesn't analysis of the apparent direction of the shots give you anything?"

"No, Director, not a thing, except that we're obviously surrounded."

"Which is logical. Orders to capture a native if possible are hereby rescinded; we can't afford these losses. The new orders are: Shoot to kill." It was almost as though he had been overheard. For nearly two months, the only incident was a minor flesh wound. One of the night guards also reported in with a bright weal across one hip of his suit, which might or might not have been the result of a grazing shot; there were no traces of extraneous metal in the weal, the steel had simply been polished. He hadn't even heard the impact, let alone felt it, and the weal wasn't turned up until suit inspection.

Then, in broad cloudless daylight, ten naked unarmed men came out of the forest to the west, and walked slowly toward the distant, bristling fence of the encampment, which was yet unaware of their action.

CHAPTER 8

TT WAS lucky, although it was **L** probably also inevitable, that the natives were spotted first by the watch atop the Javelin, and the alert conveyed directly to Ertak. A quick, fierce look at magnified image on his screen evidently was enough to convey to him, first of all, the absolute nakedness of the entire deputation: and secondly convince him that if this race nevertheless had arms and could use them, the deputation was probably enfiladed by many invisible warriors in the forest behind them. His command boomed out over the camp from the Javelin's loudspeakers like the voice of a god:

"HOLD YOUR FIRE! I RE-PEAT, HOLD FIRE!"

Jorn was the first to reach the creatures, with Ailiss and her party panting not far behind. As soon as the natives saw them coming, they stopped and waited peaceably, even passively, their hands held palms outwards at their sides.

Jorn was most astonished at their absolute humanity. These were all males, and except for a certain oddness in the shape of the eyes, and a rather silvery sheen to the skin, they could well have belonged to any of the races of Jorn's own people. That they were savages seemed attested to by their nakedness. which was accentuated by a few stripes of paint on bodies and arms, all identical except for one man who was entirely without them; yet they did not give the impression of being savagequite the contrary. Jorn's immediate impression was one of total inoffensiveness, even timidity.

He spoke to them, and one of them to him, in a questioning voice so low that it was almost a whisper, but of course to no effect. Nevertheless, the exchange reinforced his impression that their intentions, at least for the present, were not warlike. On a hunch, he turned and beckoned, and then began to walk slowly back toward the ship.

Despite their obvious weaponlessness, he quickly developed a powerful itch between his vulnerable shoulderblades. He kept walking.

Thus, by the time Ailiss and her party arrived, all ten of them were trooping docilly after Jorn. Ailiss' party, managing to look wise, belligerent and baffled all at the same time, had no choice but to fall in around them as a sort of inadvertent honor-guard.

That they were intelligent was established almost instantly. Ailiss was able to ask them a question and get a significant answer before either party had learned a word of the other's language. After inspecting their hands quickly and finding them essentially just like hers, she included them all in a quick gesture and held up ten fingers. To this, the leader—the unpainted man who had spoken to Jornresponded at once by pointing to Ailiss and holding up one finger, to Jorn and Ailiss and holding up two fingers, and to Ailiss' party and holding up five. Although her expression showed that she was a little stunned. Ailiss promptly included the whole of the forest behind them with a sweep of both hands, and then simply looked at the leader; to this he made a movement of his head which might have been either negative or positive, and then, seeing that she did not know how to interpret this, he held up one hand with all the fingers closed.

Ailiss turned to Jorn. "If he understands me, he means that there's nobody in the forest behind him," she said, frowning. "and damned if I don't think he does."

"I think so too," Jorn said.
"Let me try it once."

At her nod, Jorn pointed to the horizon across the lake and did a slow 720-degree pivot, returning at last to look at the leader. To this he responded with so rapid an opening and closing of both hands that it was impossible to keep count, nor did Jorn believe that that was what had been intended; it was the plainest kind of manual sign for the "many."

"He understands, all right," Jorn said. "He's not only intelligent, but he's exceedingly fast on the uptake. I think we'd better be careful, no matter how harmless these ten may look."

"For once," Ailiss said grimly, "I couldn't agree with you more."

The party picked up the language of the people of the Javelin with astonishing rapidity, much faster than anyone in the camp could pick up theirs. The humiliating reason for this. it soon turned out, was that theirs was by far the richer and more complex. Among the several knots in it which nobody proved completely able to untie was a syntax of states-of-being. partly referrable to the emotions and partly to a construct of metaphysical concepts, which Ertak was not psychologist enough and Ailiss not philosopher enough to plumb more than fractionally. Nobody else in the camp ever got any farther than recognizing its existence.

But there seemed to be no reason to be afraid of them or of the people they represented. Their sole desire, and indeed the whole purpose of their visit to the camp, seemed to be to know whether the strangers in the giant house had any orders they could have the honor (sanctity? enrichment?) of obeying. Toward the end of the second week, one bold unauthorized soul among the crewmen, seeing one of the natives standing nearby watching her work, as they watched everything, with an air of interested submissiveness, took it into her head to indicate to the native that he should take over the dirtier half of the job she was doing.

The impulse doubtless came deep out of the wells of the lost past on the home planet, when she might automatically have done the same thing with the nearest passing drone. But what counted was that the native took up the spade at once and, handling it oddly but not inexpertly, proceeded to dig her her trench with great speed. He then shouldered the spade and waited for more orders-but by that time the incident had been seen by one of Ailiss' non-coms, and it was speedily brought to an end. The woman was given a dressing-down both on the spot by Ailiss and later by Ertak, but not entirely wholeheartedly in either case: the incident had been regrettable, perhaps, but after all it was also a datum.

And yet, as later, more tentative experiments showed, the attitude of the natives toward working for their guests was hard to define. They did so willingly and quickly, and yet without any apparent pleasure. It was as though they knew they had gotten what they had come for, and were satisfied to find their expectations realized, and that was all . . . "Almost," Ailiss summarized uneasily, "like a guilty man who's decided he'll feel better if he turns himself in and takes what's coming to him."

Some limited field work with the local tribe, with which the ten men of the deputation cooperated completely, confirmed and widened this impression. For all their intelligence, the natives had no technology. They had no shelters except flimsy temporary ones against rain and sun; they had almost no tools, and those that they did make were those expectable, at best, from the most refined and sophisticated era of a late Stone Age; they were nomadic hunters, dependent about equally upon fleetness of foot and fire-hardened thorn daggers. The closest thing to a missile weapon that anvone could find among them was a sling, used only against game they could not outrun.

Except for the stuffed tigers, whose fatal secret they knew

with surgical precision. they had no natural enemies. They used neither thorn nor sling against each other, and seemed completely shocked at the idea after it was conveyed to them. with much linguistic difficulty. It was in fact so unthinkable that their codes contained no prohibition against it. In all other respects their social and religious structures were elaborate in the extreme, and both were buttressed by a long and equally elaborate literary tradition, mostly oral, but with key works preserved upon fine parchment in a written language which was the despair of everyone on board the Javelin.

And yet, trimmed of all these riches, the central tenet of their religion seemed to be that of utter resignation to anything that a completely malignant Fate might bring.

"Which is a peculiarly anomolous notion in such a paradise as this planet seems to be," Ertak said, when he was appraised of it. "And yet I don't see how it can have grown up without some reason in the real universe to give it weight. There's still some cause for caution here, which we simply haven't fathomed yet. In the meantime, I must say, in one way it seems to be promising."

"How's that, Director?" Ailiss said.

"If these people are just as we see them to be now," Ertak said, "then they appear to be an ideal work force for a more aggressive race like ours—and I needn't remind you that manpower is going to be one of our chiefest problems, even after the other ships get here. The question of slavery doesn't raise itself, happily; as far as I can see, these people seem genuinely to want to be pushed around. All right, we'll push—but gently, bearing in mind what happens to cultures who come to think that they can really own a man."

"It would make a nice stable relationship all around," Ailiss agreed. "Nevertheless, Director, I can't quite rid myself of a few misgivings."

"Oh, as to that," the Director said moodily, "neither can I."

That conference took place late one night aboard the *Javelin*; it was one of the regular monthly planning boards which had evolved more or less naturally as the camp seemed to be settling down toward a routine. Some time during the same night, one of the space-suited guards was killed. He was pierced clean through; so was the suit.

In the ensuing consternation and fury, only prompt action by Ailiss O'Kung's squad was able to prevent the mass murder of all thirty-five of the natives who had spent the night in the compound. She was as furious, Jorn could see, as any of the rest of them, but primarily at herself, for her failure to have asked any of the natives, over the more than a month when the state of communications between them could have made it possible, if

they could shed any light upon this random sniping.

"Certainly," the leader said, obviously as content as usual to find that he could be of service—quite as content, in fact, as he seemed to be over the four deaths in his party which Ailiss had been unable to prevent—but filled with wonderment at the simplicity of the question. "Those are the insects."

No one believed it at first. Yet it speedily became evident that there was something decidedly peculiar about the insects, all the same. Attempts to capture some of them were defeated in a variety of ways: first by cut nets and punctured airscoops; then by several skin creases, and eventually a serious and all too familiar hand wound. They would not be caught, and after a while it began to appear that they could not be caught.

After nearly two weeks, a small cloud of gnat-like motes was captured by the elaborate expedient of gassing it. They came drifting down through the poisonous cloud in strangely slow, erratic spirals, as though they weighed nothing—and they tinkled bouncing into the collection bottles like bird-shot.

The returns from the field laboratory showed that the natives had been telling the truth, though they were even more incredible. Under the microscope the tiny creatures proved to resemble beetles more closely than they did gnats; and their rigid exoskeletons seemed to be made of something closely resembling tool steel. The wings under those impossible wing-cases had ironsheathed venules; and the color in the blood of the creatures was provided by flecks of rust, which picked up and lost oxygen and energy by changing cyclically from ferrous to ferric oxides and—impossibly—back again. Nothing so heavy for its size could ever have flown, not even an inch.

They could not, indeed, be said to be true fliers, despite the wings. Instead, they hovered or travelled in the planet's magnetic field. Such wing movements as they made set up eddy currents throughout the metal exoskeleton, which were promptly transformed into movement, at more than bullet-like velocities, along a line of magnetic force. The sudden slowing and veering motions which had been observed from the beginning were probably attributable to passage over local iron ore deposits; there was plenty of the metal on the planet, though the natives did not know its uses.

"The velocities involved vary, but some are quite sufficient to penetrate a spacesuit with a man in it," Dr. Chase-Huebner reported to a hastily convened council of war. "The injuries and deaths we have sustained thus far have been due to nothing but standing in the way. We shall sustain many more, depending entirely on how long we decide to stay here. I can think of no way to prevent it, and neither can

anybody else that I have talked to."

"Does the impact kill the insect too?" Jorn asked.

"Undoubtedly," Chase-"though Huebner said. that seems to me to be small consolation. And in addition I have a few other discoveries to report to you all, none of which you are going to like very much. You have all seen these brittle little molluscs with the silicon shells crawling around on the rocks. They are no joke either, it turns out. All the time we have been ignoring them, they have been crawling over the Javelin as well. working hard on all the ship's outside sensing instruments which have fused quartz lenses: and they have ruined about twenty per cent of them and damaged almost half of the rest. These two examples, plus that of the inflated tiger that you ran afoul of. Jorn, suddenly made a pattern in my mind and I asked the natives about it, with Ailiss to help me over the hard spots. My conclusion is that the probable and possible dangers of this kind that we will encounter if we expand over this planet are just about numberless."

"Of what kind?" Ertak said. "I can't see anything in common among the three."

"I'm not surprised, but I should have, long before this. In brief, Director, what has happened here is that on this planet, evolution has adopted nearly every imaginable path for giving its creatures structural rigidity.

This includes both plants and animals, and a good many borderline or mixed forms; I can show you a catalogue later. And it has also produced all the compensatory attack mechanisms.

"Some of these, like the inflated tiger and the thorn, don't represent any particular danger to us. Some of them, like the iron insects, look difficult indeed to cope with. Some of them are outright impossible: there are highly organized animals on this planet with skeletons like ours, of which the natives are the immediately available example, and natural enemies for them which are as deadly to us as the thorn is to the tiger. One of these, in fact, is a plague quite capable of turning our bones to a watery jelly in about thirty-six hours. We are only lucky that we haven't encountered it yet, especially since it never occurred to me to look for such a thing while I was making my bacteriological tests of this world.

"In short, it turns out that the native religion of complete resignation to an implacable Fate accurately reflects things as they are on this planet. The place is gay, colorful, fertile, inviting—and wholly uncolonizable."

"The natives seem to get along," Jorn protested.

"The natives," Dr. Chase-Huebner said with a sad and glacial calm, "are the last tatters of their species. They will probably be extinct before ten more generations have passed. Like most intelligent anthropoid creatures, they're unspecialized in the biological sense, and under these conditions their intelligence is of no use to them. They won't have time to develop a technology sufficient to protect them. We found them here only because we arrived while their planet is still young."

"But we have the technology
"Kamblin started to protest.

"I assure you, Dr. Kamblin, that we do not. We will be unable even to protect ourselves; nor will we be able to do so after the other four ships have landed here, if we let them. I will have a full written report ready for you all by day after tomorrow; if you are not convinced now, I am fully persuaded that you will be after you have read it."

No one left the ship for the next two days, and the caves and halls of the *Javelin* were hushed with a silent fury of reading. On the morning of the third day, Ertak's voice came tiredly and heavily over the public address system.

"To all hands: Prepare to embark."

After nearly a year on the planet, the order came with sickening suddenness, and the embarkation itself was so hasty that there was no time left any more to talk about the problem itself. The Javelin was driving outward from the blue-white sun at full acceleration before the four ships who had veered that way could even be told to turn

back, and the reasons why so promising a world had had to be abandoned took considerable explanation to them and to the rest of the armada—and then the explanations had to be made all over again, because those who had made them the first time had been so low in heart that they had been too curt to be wholly understandable.

And even another year thereafter, many of the captains of the other ships remained openly critical of the decision; the more boldly so since there was no way any more by which any displeasure Ertak might have felt at their criticism could be vented upon them. Though perhaps no one but Ertak sensed it at the time, it was the beginning of the end of his power as Director of the IEP and commander of the armada.

It was perhaps more important that this dissent was shared by a significant number of the people aboard the Javelin, particularly among the passengers, although in Ertak's own demesne the criticism was necessarily less vocal. After all, it had been a beautiful place, hadn't it? And they had never even gotten around to naming it, much less exploring and exploiting all its visible promises. Supposing it had cost them some loss of life to consolidate it? Did anyone expect anything less, on any planet they might choose to try to settle? And when, after all, are we likely to see its like again? Not until we are old, surely . . . or, perhaps, never.

The officers, in general, knew better, yet the feeling was endemic in their country too. Even after a year, they talked about hardly anything else but hind-sight ways of coping with one or another of the experienced, reported or conjectured menaces summarized in the Chase-Huebner Report.

"Take the magnetic insects, for example," Jorn said privately to Ailiss. "Supposing we had drawn in the perimeter of the camp to about half the distance we'd been working at, and filled all the intervening space with zigzags of charged wire to a height of, say, a hundred feet. I think that would have scrambled the local magnetic field enough so that damn few of the insects could have gotten through-not enough of them to be a real danger, anyhow. Sure, it would have taken lots of energy, but we had energy to spare; and once the other ships had landed, we could have expanded the camp again and kept up a really big electrical barrier without any significant energy drain at all."

"First of all, you couldn't put down five ships the size of ours in the same area anywhere on that planet," Ailiss said, "and even if you could, each one of them would have to have had its own camp, each with its own electrical chevaux-de-frise; I don't know what the effective radius of protection such a gimmick would grant you, but it couldn't be very large."

"Ailiss, your answer to everything is an automatic No."

"If you'd stop pasting that sticker on my nose every time we argue, you might actually hear what I'm saying."

"All right, go ahead."

"Good. The next thing is, our intention is to colonize a planet, not just garrison it—crouching in self-limited camps which can't be expanded beyond a certain perimeter. The only real protection in the long run would be to exterminate the insects—and what that would have done to the balance of nature on the planet I don't know, but I'm inclined to think it would have created even more damage in the long run. Dr. Chase-Huebner thinks so, that's sure."

"That's true enough, but it's only one such expedient," Jorn insisted. "If that one wouldn't have done it, there are lots of others that might have been possible. After all, it's only a technical problem, and there are always solutions for those if you look hard enough."

"It's not a technical problem, it's an ecological problem, which is something entirely different," Ailiss said. "It wasn't only the insects, it was the whole planet. You can't approach a problem like that one on a piecemeal basis. Look: Supposing I grant you that we might well have come through, after years and years, even though a good many of us were killed or crippled in the process. Now you grant me this: supposing we didn't? No other

ship has made a planet-fall yet, and the Javelin contains a big fraction of all that there's left of the whole of humanity. It simply isn't permissible that risks be taken with that, on nothing better than speculation and boldness. Of course some chances will have to be taken, there's no way around that and I wouldn't want to catch anybody thinking that there might be. But at least they ought to look like good chances—not just blind gambles."

Jorn could see that there was justice in this argument, which he had heard advanced before, in more condensed form, by Ertak; but nevertheless he did not feel compelled to agree with it. He was realistic enough to grant that since the die had been cast, that ended the debate, at least for this time. Next time, however—if any such situation were ever to arise again—he had every intention of raising his voice more loudly in the councils of the officers.

Neither the Javelin nor any other ship in the armada was ever likely to find a planet which was not hostile in some degree: and suitable planets of any kind seemed to be so scarce that chances, even blind chances, were going to have to be taken. It seemed to him that pulling up stakes every time a world showed its fangs, and going on to look for a blander one, was in itself in the long run a matter of taking the longest of all long chances with the remaining

scraps of humanity . . . for after all, the search was being conducted in a limited strip of finite time, cut off at its visible end by the lifespan of man. It was nonsense to suppose, as fiction writers often had done, that the next generations might carry on the search successfully; with no experience of any other kind of life than ship life, their judgment in selecting planets to land on was bound to be bad, and their chances of being wiped out utterly by their first choice very good indeed. The chances would have to be taken by those who knew something about the odds; those who did not would fare just as well, or just as badly, by selecting their star of choice from a table of random numbers.

And as the years passed, and the Javelin began to bury in space, one by one, the irreplaceable members of her original complement-some of them carried off inevitably by age, some suddenly by physical or medical accident-the odds grew longer and longer. There was nothing to write in the Grand Log; and the next day, nothing again. One by one, too, the ships of the armada were passing out of earshot, even to the straining, hypersensitive nerve-ends of the Ertak Effect. The expanding, misshapen globe of ships now encompassed an unthinkably enormous volume of space, without filling that volume in the least; and the Javelin and her four sister ships who had stopped or slowed down for the system of the blue-white sun were the farthest behind of all, and still losing ground every day. The armada was no longer an entity, but only a loose system of far-flung outposts. Before very much longer it would cease to be even that, leaving behind only a number of single cells, each alone and silent in the voiceless night.

There were other silences, already, which were not so easily accounted for. Several ships had stopped transmitting while still well inside the theoretical reception area of the Ertak Effect. Sometimes they had simply failed to respond to calls after a short silence, then and thereafter: sometimes the broadcast was broken off in the middle of an apparently routine message: and twice, the end was a garbled message, or a fragmentary one. obviously intended to be final, but impossible to interpret. In only three of these vanishments was there enough information available to construct a sensible hypothesis of what had happened to the ships, and in those three it appeared to have been a major accident of some kind-one of them a roaring, self-propagating engine-room explosion so unlikely according to theory that it shook Ertak all the way to his secret core; he promptly shut the Javelin's drive down for nearly two weeks while he had it rebuilt almost from the deckplates up. thereafter kept detailed, tape-recorded instructions for so doing spraying off into space over and over again until he had gotten acknowledgments from every ship that could hear him that the instructions had been received.

For the remaining disappearances there was no explanation at all.

Of the ships still in flight and still in range, none had yet reported a successful planetfall, and it was apparent to everyone that the process of attrition of the fleet was far advanced. Kamblin, in a moment of reflection unusually morbid for him, extrapolated this curve: at this rate, there would be nothing left of the fleet at all within the Javelin's range, before the second generation would be old enough to have to worry about it, let alone be prepared to take command from its elders.

And then, to everyone's incredulity, came the hour of the death that they had been fleeing.

Had it really been that long? Jorn, looking into a polished hull-plate at his graying temples, could see that it had; yet he found it hard to believe. Except for the botched colonization attempt, the years had all been so much alike since take-off that it was difficult to accept that they had been years at all.

"Everyone feels that way," Ertak said. "And that's one of several reasons why I mean to broadcast the view of the explosion over the general intercom system. I know what you're going to say, Ailiss. I remember very well that the last broadcast

we got from home had a nasty emotional effect on ship life as a whole, but I'm persuaded that a good deal of time and experience has intervened, and that the people have both the stamina and the right to see the end come. Nor is it an ordinary way for a world to end; Dr. Kamblin tells me that a supernova happens in a galaxy on the average of less than once every three hundred years. It will not be pleasant to watch, but it will be spectacular. I for one shall take some pride in that; I counsel you all to try to do the same."

The Sun hung there in the screens, calm, steady, about the size of a fist. It would have looked like that, in its present swollen state, to someone on a satellite of the next-to-outermost planet of the home system, Nothing seemed to be happening; but along the bottom of the screen was a thin ribbon of color, like a tape-recorded rainbow-only the screen on the bridge was big enough to hold all seven decks of it, for the complete spectrum was 13 feet long—along which vertical lines, striations and shadings shifted and shuttled. In the doomed star the eternal blacksmith was forging more and more iron, more and more cobalt, more and more nickel, more and more zinc . . .

And then, at first so slowly that the motion in the image seemed to be only an illusion brought on by staring, and then faster and faster, the Sun began to shrink. Within five hundred

seconds it had fallen back to its "normal" size; within another five hundred, it was half as big as anyone had ever seen it before.

All the heavy metal lines, and those of titanium, vanadium, chromium and manganese, too, vanished instantly from the spectrum. That ribbon could not show the sudden outpouring of gamma rays; instead, there glowed forth the malignant blue and indigo lines of helium, so glaringly that the rest of the spectrum seemed to dim and shrink almost to invisibility.

The Sun collapsed.

For a full second it was not there at all. All that was left was a heartbreaking after-image upon the retina.

The screen turned white. Then, it turned black. It was burned out. In something less than a hundred seconds, the Sun was shining again . . . shining more brilliantly than all of the hundreds of millions of other stars in the galaxy put together.

In the glare of this colossal torch they fled outward, disinherited.

Jorn and Ailiss were married the next day. Somehow, there seemed to be nothing else to do.

CHAPTER 9

DISINHERITED they were, as finally and completely as it was possible for a people to be, short of complete extinction. Yet the ultimate irony of their situa-

tion lay in this: that after nearly fifty years of traveling, they were now three thousand light years away from home.

Were they now by some fiat of magic to stop in their tracks and look back, what they would see would be their Sun as it had always been-although not a sun any one of them nor even any of their grandparents ever could have seen. Since where one act of magic has occurred, anything is possible, add to this halt and sighting sufficient magnification to allow them to see events on the home planet; then they might be able to watch the crowning of Gol of Dobrai, a small, uninteresting and short-lived nation distinguished only by Gol himself. He had been the first king in recorded history.

And yet a backward look with the comparatively minor magic of the Ertak Effect showed what at first glance seemed to be a different segment of the skies altogether. The enormous glare of the initial explosion had died away in slightly less than a year, leaving behind sprawling. a growing cloud like a glowing cancer which seemed slowly but inexorably to be reaching after them. The interferometer showed that it was in fact expanding at the rate of 0.31 angular seconds per year; and since not even the Ertak Effect could produce absolute simultaneity between ship time and the time of an object three thousand light years away, what they were seeing on the screens was the aftermath of

the explosion as it had appeared between five and six years after the event—and since that day was in fact closer to fifteen years in the past, the malignant nebula was now actually far larger than the screens could show it to be.

The central mass of the nebula, which could not be seen, but only photographed by infra-red light, was a smooth sphere. It was surrounded by an irregular, interwoven complex of filaments and jets of glowing hydrogen, brilliantly visualizable through a crimson filter. The total effect was lace-like, innocently delicate and beautiful—and intensely radioactive. From this gigantic natural cosmotron. immense gusts of cosmic rays, rich in heavy primaries, fountained out into the universe at large in never-ending blasts. The boundaries of the envelop, too, were rushing outwards at nearly six hundred and fifty miles per second; the cloud was already nearly a light year across.

And at its heart, only dimly visible through the enormously rarified inferno which writhed and seethed about it, was a steadily glowing ball hardly bigger than their vaporized home planet: a white dwarf star—the quiet and infinitely heavy corpse of their blue-white supergiant Sun.

But the Ertak Effect was seldom called upon any more, even by Kamblin. Ertak himself had retired to his quarters almost as completely as he had in the years just before take-off, emerging like a sleep-walker at intervals of six months or more to stalk along the bridge, stare at the banked instruments, the screens and the Grand Log with an expression of stunned and remote agony, and then vanish again. His meals were brought to him by a close-mouthed and apparently not very bright teen-age boy selected from among the passengers. Occasionally Dr. Chasebriefly. Huebner visited him sometimes coming out with a few orders, but more usually with nothing to say at all. After these visits, Dr. Chase-Huebner's expression was a strange duplicate of his, but it never lasted more than a few days at most. No one else had any access to him.

Jorn did not care, and neither, he suspected, did anyone else. He had his family to think about. It now included a twelve-year-old daughter named Kasi, conceived after the most protracted and solemn discussion with Ailiss had resulted in an agreement to have no children, and he devoted almost all his free time to her, with a sort of gloomy delight. He no longer thought about his duties, nor did Ailiss; they got them over with, and that was that.

In this, it was evident, they were typical. With the actual extinction of the home world, nobody on board the *Javelin* really believed any more that there was any place in the universe that was a real and tangible world for

them, except the Javelin-unless it was Ertak himself: but it was impossible to know what he thought, and becoming increasingly harder to care. A promising sighting by the computer of the Quarrel, one of the few remaining ships of the armada within range, so completely failed to disturb this pervasive, selfcentered apathy that there was hardly any detectable disappointment when it turned out to be a false alarm. The sky itself a prison is, some anonymous hand had quoted in a slantwise scrawl across one otherwise blank page of the Grand Log; and whatever Ertak might have thought of the entry, he let it stand.

Or perhaps he never saw it; for between the day when it had apparently been written in, and the expected date of his next somnambulist's tour of the bridge, the *Javelin's* own computer once again made the control barrel clang with Yellow Warning One.

It was a shock to find something very like the old excitement singing wirily in the air of the Javelin again, like sympathetic vibrations in the taut strings of some invisible harp. There was no doubt that, this time, the excitement was moderately and heavily overlaid with caution; the barriers against a new disappointment were almost visibly going up in the minds and hearts of everyone; but it was still a real excitement, and Jorn was surprised to find how

ready he was to welcome it. When Ertak came loping out of his hermetic quarters to pull the tapes from the computer, his eyes glowing like corpse-fires in the dark, gaunt hollows of his face, it was as though everyone in the control barrel had an instant previously been organic marionettes, now abruptly drawn together and set to dancing by the hands of their accustomed master.

"These tapes are a mystery," Ertak summarized tersely, a day later. "They're completely ambiguous. Dr. Kamblin and I are in agreement that the sun involved is somewhat less promising than the blue-white star we last hit was, and there don't seem to be any evident astronomical reasons for the computer's having sounded the alarm at all. All it seems to have to offer is a long series of gnomic equations in probability, which in turn depend seem to on several rhythmic functions it says the system involved exhibits-but neither Dr. Kamblin nor I can find any way to tie them to the observations we have made."

"In fact, there's more to it than that," Kamblin added. "The most baffling problem of all is that the computer seems, all by itself, to have evolved a new mathematics to handle this material, which we're finding very difficult to interpret from scratch. Though I don't understand how such a thing could be, it has all the stigmata of an original invention."

"Creativity from machinery?"
Ailiss said. "That's impossible.
There must be some other explanation."

"I think there is," Jorn said slowly. "I've never mentioned it before, since the evidence I had for it seemed to be so wispy. But I've been suspecting for some years now, nearly five years, in fact, that the various computers within the armada had begun to work out a sort of Grand Log of their own. Certainly we fed into our computer everything in the way of data that we could get from the rest of the fleet, but that's not quite what I mean. I think there's also been some kind of direct connection."

"A lot of machines are no more creative than one machine," Ailiss objected.

"True enough; and I think it very likely that the new mathematical system you're talking about did have a human inventor—but on some other ship, maybe one that has been out of range of us for years. There would be no reason for any of the computers to store his name, they're not interested in personalities, they just gobble up data and processes."

"Well, whoever he was, he was good," Kamblin said reflectively. "We've still got a lot to learn about this scholium, but we can already see enough of the principles on which it seems to be based to suspect that it may be a powerful tool for applications in many different disciplines—

which may or may not have direct bearing on ship life and ship processes, that's one of the things we *don't* know yet."

"Which is exactly our trouble now," Ertak interposed. "Getting our teeth into this discipline and mastering it is probably going to take well over a year—and during that time the Javelin will have swept by the star the computer has indicated without our having been able to examine it. And this is the question that I want to raise: Are we going to take the computer's word for it. without a thorough understanding of the reasons behind the choice, and plow in to look the place over anyhow? If we do, we'll be dealing from the most original kind of ignorance, since at the moment we very frankly don't know what the computer is talking about. Any opinions? Yes, Jorn."

"Long chances are all we have left, Director," Jorn said, Carefully, he laid out his reasoning, remembered from his arguments with Ailiss back before the detonation of the Sun, and scarcely thought of since. For the most part, they still seemed to him to be as valid as ever, though they were, not to his great surprise, a little tempered by the fact of his new fatherhood. This time, on the other hand, he had Ailiss on his side—a rather better prop to his courage than the marriagedissolved Tabath.

"No? I see no hands raised; nothing but vaguely disturbed

expressions. Well, that's how I feel myself. Nevertheless, we will take the chance."

Excerpts from the Grand Log, as broadcast by the Javelin during preliminary exploration of system IEP #5:

"This appears to be a rather organized eight-planet tightly system whose original supply of hydrogen separated out from the primal cloud rather earlier than is usual in the formation of new stars, forming a thick shell inside which the sun involved eventually condensed. This event was evidently very ancient, since the sun is a second-generation star, implying high stability; and preliminary studies indicate that it will last in its present phase without significant change for at least another 2,000 million years —probably longer.

"The result of this accident, whose causes can now only be conjectured, is that the three outermost planets of the system are all gas giants of about equal size, widely separated in orbital distance from each other, and all so far away from the central sun that even the largest bodies among their considerable families of satellites cannot maintain atmospheres in gaseous form. An exception may have to be made for the largest satellite of the innermost gas giant, a body about 3,500 miles in diameter, which may still have a very thin atmosphere of neon and other noble gasses, but observation shows that the remainder of its original envelop now lies frozen on the rocks.

"All five other planets in the system are relatively small, dense bodies drawn close in to the sun, the outermost orbit of this interior system being at a mean distance of 300 million miles from the primary, and the innermost at about 42 million. By virtue of their surprisingly different diameters and densities, all but the innermost of these worlds appear to be habitable in some degree. and even the innermost—hot and stormy though it obviously iscannot entirely be ruled out as an abode of indigenous life. The outermost, a body about 10,000 miles in diameter and rich in both water vapor and carbon dioxide, exhibits a frost-line after midnight almost as far down as the equatorial belt, and it is permanently glaciated in both its northern and its southern sixths: but the temperatures at noon range from hot along the equator to freezing at about 25° N. and S. latitude. As a result the prevailing planetary may be described as violent, but by no means intolerable.

"The three planets bracketed by these two extremes are all livable, and in fact the spectroscope shows that life has arisen on all three. The fourth planet outward from the sun, a world 9,000 miles in diameter with one very large moon and two small ones, is particularly verdant, and close inspection shows that both the planet and the large moon were in fact occupied at one time. The lunar installation is a featureless metal dome. The planet can be seen to bear many large stone and metal artifacts suggesting cities, now obviously quite silent and deserted. Pending exploration, their age, origin and fate remain conjectural.

"We are not yet able to say upon what basis our computer selected this extraordinary promising system, but hope to accumulate more data after planetfall. Stand by."

The hammer fell. As the Javelin began to settle complacently into the outermost reaches of the atmosphere of that abandoned, incredibly rich planet. smooth. blown-steel, pilot-fish shapes of the blind little ships came raining down around her out of the blackness, spitting needles of white fire. The computer rang all its bells at once, radio heat red orange yellow green blue indigo violet ultra-violet X-ray and panic, but it was too late. Above the bubble ships which were seeing to it that the Javelin continued to go down, turret-bumpy forts as big as small moons crashed into orbit out of nothingness, indifferently forcing the entire metrical frame of local space-time to bear their malignant tumorous masses with groans profound enough to be heard, should anyone with ears for gravitational waves be listening, almost to the center of the galaxy.

The computer yelled its mechanical horror so loudly in the control barrel of the Javelin that it was almost impossible to think. After a brief moment of fury and bafflement, Ertak cut its power; and then, for thirty seconds of ringing, desperate silence, he turned his back on the barrel and pressed his temples with the heels of his hands.

"We are fordone," he said at last in a high, white voice. "We will maintain our landing trajectory. We have no other choice. Ailiss!"

"Great Ghost. Yes, Director."
"Try to raise someone out there. Find out what they want; try to convince them that we're harmless. They've got us—there's no other way out."

There was no doubt about that. The hull of the Javelin was banging continuously with the admonitory small shot from the bubble ships, obviously not intended to wound the great clumsy interstellar vessel much, but only to see to it with a fusillade of whip-cracks that she came to ground conveniently near her proper cow-barn. She could no longer see the landing place she had picked for herself; suddenly the quiet atmosphere into which she had been settling was aroil with black storms, blinking and bursting with gigantic, jagged lightning-bolts.

"No," Ailiss said, in a hoarse whisper. "Oh, no."

The beautiful black creature on the screen smiled at her, but without mercy.

"And why not?" he said, in a voice as deep and rich as that of

an organ. "You cannot say no to us. You never could. You were stupid to try; and now it's far too late. Too bad—anywhere else, you might have gotten away with it."

As Ailiss swallowed and attempted to muster an answer, he burst into a peal of musical, glistening black-and-white laughter. There was no humor in it, though there was a great deal of joy: it was the amusement of a demon, part delight, part calculation, and part the compulsive whicker of insanity.

While the laughter died away, they had time to realize that this tall black man-thing without lashes, brows or hair which glittered at them from the screen like volcanic glass spoke their language as fluently as though he had been born to it—and as contemptuously as though he had picked it up entirely just yesterday afternoon.

"You're making a mistake," Ailiss said, with the sudden prim severity of a schoolteacher. "We're not doing you any harm."

"No, indeed. Nor will you. We've been listening to you talk to yourselves ever since your probe picked us up; we know what's on your mind—and we know about your other starships waiting outside. We mean to make an example of you. This system is ours."

"They may wind up making an example of you," Ailiss said, seizing instantly upon the slight apparent error. "For that matter,

we are not as helpless as you think. We could very well plant nuclear bombs in a good many of your cities before we're forced down."

"The cities are empty," the black man said indifferently. "Do you know why you didn't detect us until now? We evacuated this planet completely when we heard you coming, and shut down electromagnetic activity throughout our system. If your main force looks too strong for us, why then we won't be found; and if it isn't—"

Symbolically he cut his throat, with a gesture all the more shocking for its complete—and completely spurious—familiarity.

Ertak, out of sight of the screen, beckoned to Jorn, motioning for silence. Jorn walked over to him, and tried to understand his pointing finger and odd gestures. Kamblin understood first. and once he fumblingly began to carry out the action, Jorn could see what was wanted: a jury-rigged "take-off" sequence without benefit of the computers. It looked like sheer suicide, but there was no time to argue; he could no more successfully rig such a thing than Kamblin could. He buzzed crew's quarters for the armorer; she seemed to arrive almost before he took his finger off the button. She looked once, nodded once, and got to work.

"I can see that you don't have an interstellar drive of your own," Ailiss' voice went on. "You'd be better off dealing with us, instead of shooting at us. We may have a good many other things you might want."

"An interstellar drive is of no use to us," the black man said. "And if it were, we would invent it ourselves. I demean myself by talking to a race that could make such an offer. Death and destruction to you all."

The screen went dark. Ailiss wrung suddenly trembling hands.

"Ailiss, no time now for shock reactions," Ertak said in a voice as bleak as lava. "Come here and see what we're doing—and don't say anything aloud about it. I don't know whether our friend can overhear us when we're off the air or not, but I don't want to take any chances. Do you understand this rig?"

"Mmmm . . . yes, Director."

"All right, it's your job to run it, understand? Just as you would a more conventional thing of its kind. Pick your own, uh, target, and don't stint—do you follow me?"

"Yes-but-"

"I know all the 'buts' just as well as you do," Ertak said. "We've got no time for them. You've got fifteen seconds to familiarize yourself with the apparatus, starting now." He snatched up a microphone. "TO ALL HANDS. THIS IS BLUE WARNING FOUR, OTHERWISE UNSPECIFIED. SEARCH YOUR MEMORIES. SIGNAL BLUE IN TEN SECONDS."

Those ten seconds seemed preternaturally quiet to Jorn, despite the screaming of the atmos-

phere and the clangor of the missiles against the hull. Five . . . four . . . three . . . two . . . one . . .

With a rasping roar from the drive, more thunderous and ugly than any sound it had ever made before, the *Javelin* rolled on her axis and clawed skyward, on full emergency acceleration.

The nearest fort got off a shot at her as she passed, already doing 200 miles per second and building more velocity every instant. The shot was a clean miss—luckily, for a few thousand miles to starboard-and-rear some metallic bit of meteoric trash triggered its proximity fuse and it blossomed out into a megaton fusion explosion.

But from now on, for a while, the Javelin would be an increasingly better target. If the black creatures had a drive fast enough to enable them to colonize all their planets economically, furthermore, there would still be a considerable gauntlet to run.

The gabble of venom and fury spewing after them by radio did not suggest that the creatures would simply be glad to see them go. The ranging shots were coming closer—

But in fact the battle was effectively over. Had the fifth planet not been on the other side of the sun at the time, the outcome might have been different; but as events actually fell out, there was only a stern chase, in which the *Javelin* proved to have the advantage all the way. The

ranging shots fell farther and farther behind; and then, finally, they stopped.

"Radio silence until we pass the light barrier," Ertak ruled, mopping his brow. "And we'll keep the computer off, too. I strongly suspect that those devils could overhear it thinking, if they could pick up its probes from three light years out—and if it is in some sort of contact with computers in the other ships, so much the worse. After we pass light speed, we'll risk using my communicator to pass the word, but not before."

He turned toward his quarters, steadying himself with one hand against a bulkhead; suddenly he seemed to be all gone at the knees. Jorn could well understand why; he was grateful that he himself was already sitting down.

Then, surprisingly the Director turned back.

"Masterly piloting, Ailiss," he said "And not as rough as I expected; but Doctor, you'd better check around for injuries. Jorn, you'd better find out where we're headed."

And then he vanished.

Her drivers still snarling under the maximum emergency overload, the *Javelin* raced outward from her second defeat.

And this one, Jorn sensed dimly, was crucial. It would never be completely forgotten; eventually, if any of them survived, it might retreat into the mists of mythology, but it could never be expunged from the racial memory. It was one thing to be driven off a verdant world by blind natural forces . . . and quite another to be scourged away with whips and contempt, by a people very like their own—whose last words had been a promise of undying hatred for so long as any member of either race remained alive. It was a heavy blow.

CHAPTER 10

In THIS Jorn was both right and wrong; for he did not know that they were not done biting that bullet yet. It was over, as far as he was concerned, when the defeat had been recorded in the Grand Log, in terms as unemotional as possible, for the benefit of the few ships that were left who could still take part in that communal rite.

Staring into the plotting tank only five years later, he saw with hypnotic gloom how few their numbers had become: only nine, counting the *Javelin*, of that original thirty-one.

Watching the tank had become one of his main hobbies these days, especially since Kasi had become a teen-ager, and become abruptly both incomprehensible and-he could hardly bear to admit it-a little hateful. He had set the tank up originally on the pretext that it would be an aid to navigation; there was nobody to say him nay, especially since time, power and materials for it had been plentiful, but it had in fact never been of much use. More recently, he had begun to entertain the faint hope that it

might offer some clue to the disappearances.

That was about all there was to see in the tank: lights winking out, faster and faster-much more rapidly, in fact, then even tottering old Kamblin's original extrapolation had predicted. It seemed to Jorn that the positions and rates of the disappearances might yet reveal some pattern, and thus re-infuse at least a faint shade of meaning into the scraps and ghosts of the armada. But the few arcs and chords of the original sphere that were left for the plotter to work on were too scattered to provide sufficient data; and now the tank was only one more well-spring of despair, with Jorn hanging over it like an impotent god, waiting year after year for another world to dim and go out.

"Why do you keep watching that thing?" a dry, whispery voice said behind him. He straightened, cautiously—he was a little creaky lately. The voice was Kamblin's, of course; he had been the last of the officers but Jorn to lose interest in the tank, but lose it he had, finally.

"I don't quite know. The Ghost knows I don't have any hope of seeing anything significant in it any more. But it fascinates me, somehow."

"I can see that," Kamblin said.
"I suppose I can see why, too.
But I can't stand it any more
myself. It depresses me too
much."

"Well, I'm beyond that, maybe. I don't know . . . Ailiss tells me

you were in to see the Director this morning. Any news?"

"No good news," Kamblin said, twisting his mouth wryly. "I'm afraid he's not going to be with us much longer."

"I suppose you're right, but it's hard to believe—I thought he'd last forever. Why, he's younger than you are . . . and he's had these fits of being in isolation before. He always comes out, when there's any real need for him."

"He's a sick man," Kamblin said heavily. "Sick in his mind. This business with the black devils . . . well, of course, you don't know the whole story."

"I was there," Jorn said, a little huffily.

"That's not what I mean. I don't suppose there's any harm in your knowing about it now. You see, those creatures were never there at all."

"Never there . . .! Excuse me, Dr. Kamblin, but they made some remarkably real dents in the *Javelin*."

"I know. Let me begin at the beginning. Didn't it strike you that that black man was more than a little insane, going to such lengths to destroy one ship, and refusing even to consider that we might have something to offer him? And he was the only one of them we ever saw; he made decisions that only the chief person of the entire system could have made—but under what circumstances would such a personage be in direct command of a fleet?

"Then there was his claim that they had evacuated a whole planet, in something under six months, just to trap one ship—ours. Not very easy, or very logical either. But he also claimed that they had maintained strict electromagnetic silence from the moment they overheard our computer until the time they jumped us. Tell me, Jorn, is that possible?"

"Well, with chemical rockets... but then there's communications, logistics... No, you're right, it isn't possible. No electromagnetics, no evacuation."

"Very good, now we reach step two: To maintain a high energy civilization, you must have power -lots of it. Yet he claimed that they shut themselves down entirely for six months in order to hide themselves from us; and he said they would do it again if our imaginary 'main body' proved to be too big for them to handle. For how long could they have done that? Supposing this main body had decided to stick around indefinitely? Would the black people have just remained in hiding, living on roots, until they froze to death? Not very likely."

"Hmm. But the electromagnetic silence was perfectly real; we sampled continuously, and never heard a whisper, beyond whatever it was that the computer first picked up."

"Right," Kamblin said solemnly. "The silence was real; therefore the high-energy civilization was not. You can't shut a high-

energy civilization down that far without exterminating it, it's just plain impossible. And if Ertak hadn't cut the power to the computer when we were attacked, we might have found that out in time. That was one of the things the computer was ringing its alarms about; it detected right away that the entire attack was being directed from a single central source—that big metal dome on the large moon. Now it makes sense, you see: you can shut down the energy output of a single installation to a trickle. and shield the trickle, except for detectors; and if the detectors are transistorized they don't make enough noise to be overheard from space.

"And once we turned the computer back on again and fed the tapes of the attack to it, it immediately identified the broadcast of the black man as coming from the same source. Furthermore, it identified the black man himself as a solidigraph—a construct. So we never really saw even one black man; we saw a synthetic image, and heard a synthetic voice. The computer also says that what was actually doing the speaking—the being with which Ailiss was really talking-was itself a computer."

"Great Ghost," Jorn whispered. "But, couldn't there have been..."

"A real such race? Yes, we think so. But there are two more things to be added. While we were in our aborted landing orbit around that planet, we were pho-

tographing continuously, as a matter of course; and the pictures show that all the cities over which we passed were in a fairly uniform stage of ruin. Secondly, we passed over the spot which later turned out to be the place where our attackers wanted us to land; and after this matter came up, we examined that site closely.

"It evidently had been a landing field, a large spaceport, at one time in the distant past. It's completely overgrown now, and you can only see its bare outlines. You can also see two wrecks. One of them is about three hundred years old, if we have interpreted the vegetation around it correctly. It looks rather like the Javelin in general design. The other one is such a ruin that almost nothing can be told about it, except that it's of completely different design. I would like to guess that the more recent of the two might have been a refugee from the Great Nova, but of course, that's just my romantic nature speaking.

"Given this much, however, we can put the story together. The black race obviously was real, and it was probably just as proud and hostile as was the ghost of it we encountered—after all, the computer involved had to build its solidigraph and its social attitudes from stored data, it couldn't invent them. Maybe the race was visited by an interstellar squadron once, and was sufficiently panicked to

fortify against any such visitor again; so they built the lunar station, equipping it to act the moment it detected an intruder, long before the people themselves could.

"After a while-who can guess how long a while?—the computer malfunctioned. It went mad, if you like. It decided that the black race itself was the invader against which it was instructed to act, and it so acted. If each of the two wrecks we saw was a refugee from a separate supernova explosion, as we are, then that race has been dead at least six hundred years, and probably more. The cities are in poor enough shape to support that estimate. But the trap is still there, and it very nearly made us its third victim-or, counting the black race, its fourth."

For a while Jorn could think of nothing to say. At last, he found one unanswered question:

"So then if we'd just bombed that lunar installation—but how long ago did you find this out? Wasn't there any other ship nearby who could have gone in there and done what we failed to do? It would be easy enough to pretend to walk into the trap, and then hit the lunar station with a fusion salvo—and after that, that whole beautiful system—"

"Yes, I know," Kamblin said.
"That's what's hurting the Director's sanity. He could have sent a message to the Quarrel; she was still close enough, though we weren't any longer.

"But he didn't. And now it's too late. We lost our opportunity."

The story, like a worm at the heart of a fruit, gnawed incessantly at Jorn, for no reason that he could put his finger on. It was tragic, surely—not only for them, but for the earlier explorers, and even for the black race, for whom Jorn could now feel nothing but pity. But none of this explained why he woke up, day after day, with the awful feeling that he had somehow missed the point.

It was a dream that gave him the clue: a peculiar nightmare, more depressing at first even than the nightmare of daily living because of its apparent meaninglessness. He had had similar ones before. As then, he was about to graduate from engineering school, and facing one last comprehensive test in some subject-just which one he could not afterwards say, if indeed it was identified in the dream at all -and realized suddenly that he had never, during the entire course, paid the least attention to what the teacher had said, or even opened the book; in fact, he could not specifically remember ever having attended a class. At this he sat bolt upright, banging his forehead against the bottom of Ailiss' bunk, and said hoarsely:

"The computer!"

"Uhm? Whassa?"

"Nothing, An idea, Sorry,"

By the end of the next morning the plotting tank had finally ceased to be an old man's toy.

With the aid of Sergeant Strage, the aged but still incredibly deft armorer, he had wired its output end into the computer, with specific shunts to that section of the insensate brain where the new mathematical discipline was stored. Then he sat back and waited it out.

He did not have to wait long. Within half an hour the computer was showing more activity than had been evident since the disastrous retreat from the dead devils; and within an hour after that, it uncoiled a long tongue of tape which Jorn's trembling hands nearly tore in two as he tried to look at it.

For the merely human brain studying it, several weeks were required to see what the machine was driving at; during the last stages, Jorn had to enlist Kamblin's knowledge of the recondite mathematical scholium.

"No doubt about it," Kamblin said at last. "This changes a good many things—and not for the better, either, as usual."

"Well, let me be sure *I* understand it," Jorn said intensely. "The computer says that the extinction rates for the lights in the tank were higher in the wave-fronts of the fleet that were proceeding inward, toward the center of the galaxy. Correct?"

"I'm afraid so. Of course, there's a little uncertainty—"

"Uncertainty, my eye! I mean, uh, sure, it's far from obvious just from watching the spots of light in the tank, otherwise I might have seen it myself; but isn't that what the equations say?"

"I have to agree."

"All right, now: if that means anything at all, it means that the galactic center is not only a center of population for suns, it's a center of population for people. Of course, the equations don't say that, but how else can you account for such heavy losses? And that's the way the Javelin is going now. It looks to me like it would be a damn good idea to change course. Let's see what the Director thinks."

"I doubt very much," Dr. Kamblin said, "that you will ever find out what the Director thinks. But I agree that we'd better ask for some extra heads in discussing our next move."

They did not find out what the Director thought; he did not appear; Dr. Chase-Huebner, now shockingly white and withered, spoke for him. Jorn spoke for himself, but the agreed strategy called for Dr. Kamblin to open.

"So much for the facts," Kamblin was saying. "Now we are thrown into the realm of deductions, and from there into the realm of inferences. To begin with, obviously as one goes inward toward a center of population—stellar or otherwise—one's chances of locating a habitable planet begin to rise. They go up pretty sharply toward the tail of the curve, because the stars at the heart of the galaxy seem to average about a light year apart, or only a little more. If everyone

is clear about this so far, I will yield the floor to Jorn Birn."

There seemed to be no questions, Jorn rose slowly. All eyes were on him.

"What I want to point out is this." he said. "The farther we go toward the galactic center, the more likely we are apt to meet more advanced, civilized, colonized, dangerous systems; the more likely we are to meet someone like the black men and get thrown out, probably with more damage. Sergeant Strage tells me that the Javelin can no longer survive such a fight. It's my opinion that we never could have. We lost the first one we got into so decisively that we're going to have to face up to our own pretensions. All the military training and weaponry and gimmickry, all our postures of ferociousness, look now to have been nothing but whistling past an obvious graveyard—an illimitable one, but all the same a gravevard."

"That may mean something," Dr. Chase-Huebner said, "or it may be just oratory."

"I'm net the orator type, as you know full well after all these years. Look at the facts. We proceeded from the start from an assumption—maybe a buried assumption, but all the same it was there—that we might be able to take over an inhabited planet by force. Back then, we had the temerity to think that we might find a world resembling the Akimisov Empire, big, rich and pre-scientific, that we could push

over with determination and a few hand-grenades.

"The real fact of our existence, as these equations prove—I'm not so cautious as Dr. Kamblin—is that our whole armada is nothing but a small guerrilla force of nomads, advancing steadily farther into the heartland of cultures far older and bigger than ours. Most of the races that we meet there will probably be able to blow us all away, with nothing more than a huff or two of surprised contempt."

"Or swallow us up," Ailiss said surprisingly. "Jorn, if you don't mind, perhaps we ought to pause here for a debate on the desireability of being swallowed by a more advanced culture?"

"I've already been swallowed once," Jorn said grimly. "So have we all, and here we sit in the bowels of that very whale. I'm frank to say that the novelty has worn off, and I'm not anxious to be swallowed again by something whose very nature I can't even guess."

"Part of the fleet is going to be swallowed in any event," Kamblin noted, with a faint grimace. "And we can only hope that at least some of these disappearances in that direction mean that the ships involved were swallowed whole, without having been chewed to bits first. I can't say that I opt for that either, Ailiss."

There was a short silence.

"Well, then," Dr. Chase-Huebner said, "what is your alternative, Jorn?"

"There's only one: to turn the ship out of what's left of the armada—that's only a direction now anyhow, not a body of anything-and resume cruising along the galactic spiral arm our old Sun belonged to . . . just as the Director started us out to do. We aren't out of that arm vet. of course. The stars will be sparser there and the chances of finding a good planetfall correspondingly smaller: but all the same I wouldn't take us even one light year farther in toward the galactic center."

"I oppose it," Dr. Chase-Huebner said. "There are penalties to pay for such a policy which I don't think you have considered. If we adopt it, we divorce the Javelin quite finally from the organism of which it is supposed to be a part . . . and I don't mean just from the remaining tatters of the physical thing. I agree that that's only a wraith now, but also from the very notion of being any longer a part of such an organism. That would deprive us of our last cultural tie with home and race, weak though that admittedly is. The results in terms of morale would be disastrous; it would, I think, destroy us."

"My field," Ailiss said. "And I disagree. Those ties are already illusory; and the second generation will not feel them at all. Look around you, Doctor; we are not young any more! That generation is treading on our heels, and ought to be given its chance. It's not much of a chance, perhaps, but we are not empowered

to commit suicide for them; that is their decision to make, not ours."

"Suicide is an inflammatory term," Dr. Chase Huebner said.

"Murder is an even more unpleasant one, Doctor. I thought you would appreciate my avoiding it."

"Exactly," Jorn said. "I haven't heard anybody arguing with the computer's equations, or with Dr. Kamblin's interpretation of them. That's where we have to start. They are both perfectly definite and don't permit of any argument. All the rest. I am afraid, is emotion—as is signalled by the fact that we have already degenerated into using loaded words. And I cannot impress upon you too strongly that every minute we spend now brings us closer and closer to that enemy, whoever he may turn out to be, who will burst our bubble for good . . . and our children's as well."

Dr. Chase-Huebner's lips thinned; it was obvious that she thought she was being reminded that she had no children aboard.

"Very well," she said remotely. "I will present your opinions to the Director."

"Please," Jorn said, as gently as he could. "That's not quite how it goes. Please present our decision to the Director."

"Ailiss' eyebrows shot up, but she offered no protest. Her old back as straight as a spear, Dr. Chase-Huebner walked away from them and into the Director's quarters. The door closed.

They waited all day, but she did not come out. The next morning, the middle-aged "cabin boy" found the door locked.

But by noon of that day, in response to some extension of control into the cabin which no one had suspected even existed, the *Javelin* began to turn.

The signals in the plotting tank faded precipitously, and went out. At last, among the miniature symbols of stars, there were only two ship lights left: The Quarrel, and the Javelin herself.

But at least, Jorn told himself, it had been by their own decision ... not only because of some failure of the Ertak Effect generators, or by some increase in the malice of the absolutely unknowable, but by deliberate action of the Javelin's own crew. It was all but over; the umbilical cord had been cut.

Kamblin joined him beside the tank.

"What do you think will happen to them?" Jorn said.

"I have no evidence to go on," Kamblin said in a quiet, distant voice, as though he were half asleep, or very far away. "From now on, Jorn, it's going to be all guesses and dares... and we're a little old for either."

"Ertak wasn't too old."

"No. More power to him. I didn't really believe . . . well, no matter now. As for the fleet, about half of the remains of it is still proceeding inward—to-

ward almost certain encounter with some kind of interstellar empire, if you and I are right."

"You adopt my view, then."

"I have to. As for the rest . . . well, they are doubtless proceeding outward toward the galactic edge, and before they get there they will have to cross the Rift -a term I won't explain, it almost stops my heart to think of it. They will find no promising stars there, that's all that needs to be said. They will probably not even get to the other side. Of course, some few ships like the Javelin may still be cruising along the spiral arm, in diametrically opposed directions, by accident or even by policy. But if they are, it's something about which we can't know now, and will never know. The distances have grown too great; the end of the fleet as an organism is almost complete. The Javelin is on her own."

Together, they stared down into the plotting tank, the little lights in it glinting on the wet curves of their blind eyes.

While they watched, the point that was the *Quarrel* turned slowly russet, and then crimson. It began to dim.

For a moment, then, it brightened to a sullen orange. As a visible signal the little light had gone out, but the computer was reporting that it was still maintaining the pip in the infra-red. Now it was crimson again: a signal in radio in the tank, but growing longer and longer in wave-length . . .

It flickered, turned sooty, and was gone.

The old men stood like statues over the tank for an indefinite length of time. No one seeing them could have told for certain whether they were alive or not, except perhaps by the two tears standing under Kamblin's eyes.

Behind them, at last, there was a fumbling sound; and then an uncertain sliding of metal against metal. They turned slowly and looked up at the bridge.

Ertak's door was half open; a little light, steamy and dim, spilled out of it into the control barrel and cast itself into the plotting tank, making faint glints among the little, hair-fine wires which guided the fields in that compact planetarium. It turned Kamblin's face into a skull.

Ertak was moving along the bridge, with the utmost care. He was so thin that his joints inside his ancient, tissue-paper uniform seemed far larger than the shafts of his limbs. High on his agonybent back the hump rode, exuberantly strong, pulling at his arms as though demanding him to help himself. In contrast, he seemed to have no belly left at all.

Somehow he reached the lectern by the communications desk where the Grand Log was kept. He looked down at it for a while, breathing heavily, but without seeming to see or to care what was written there. Then, pulling all his wobbly parts together, he lifted it, and carried it clutched

to his collapsed chest, by inches, into his stateroom.

They could hear him sobbing for breath. Just as obviously, he could not.

The door closed, and they heard the slight sound of the lock. Then, with a dead slam, they heard the Grand Log fall to the deck.

None of them ever saw it again.

CHAPTER 11

TORN was playing Castles with Ailiss in the dimness of their cabin when the chimes began, soft with distance but quite clear. He paid no attention, nor, as far as he could see, did she, Almost all of the remains of the original crew had cabins now, thanks to the fact that the differential birth rate on the Javelin was negative-or, to put it another way, that there were fewer births than deaths—and the privacy was all the more valuable for the many years that they had been without it.

Not that Ailiss was much more than an indifferent player of Castles; she could think as many moves ahead as Jorn could when she wanted to, but she was given to impulses, and she had never bothered to study the classical openings and the Great Games; but with Kamblin dead, there was nobody else on board Jorn cared to play with. This time, for a wonder, she was putting up a passable resistance.

Besides, the dim light was

grateful, a privilege in itself. The children were welcome to the glare of the working areas and ward-rooms of the Javelin; they had been born to it and seemed to prefer it, but it was hard on old eyes.

It was Ailiss' move. After a while, her mouth pursed in an expression of annoyance.

"I can't think," she complained. "Isn't that thing ever going to stop?"

"Probably. It's not our job to answer it. You're in double jeopardy, let me remind you."

"I see that. I just keep losing my train of thought, with those bells jangling away. Let's declare a recess. Maybe we ought to see what the trouble is, anyhow."

"If there's any trouble, the Director will let us know," Jorn said ponderously. "It's probably just some routine thing. Let the kids handle it, it's good practice for them."

"Jorn, my dear, how long has it been since you last saw the Director?"

Jorn frowned. It seemed an irritatingly minor question. "I can't say. Several years."

"Has it occurred to you that he might be dead?"

"Frequently. However, there have been meals coming in and going out of there all that time, and somebody's been eating them."

"That could be the doctor. Anyhow, I think we ought to go to the control barrel and take a look. Unless my memory has gone bad entirely, that's Yellow Warning One we're hearing."

Jorn sighed and pushed himself carefully back from the board. "I hope not," he said; but he followed her out, all the same, wincing as the fluorescent light came pouring through the open door.

They shuffled toward the barrel. favoring their individual arthritides with the unselfconsciousness of long resignation. Looking at the ship around him closely for the first time in many months. Jorn found good reason to renew his wish that no planetfall was being foreshadowed. It was not only that he personally had been disappointed more than often enough already-he could still, he told himself, see the course of that apathy dispassionately for what it was. But in addition, the Javelin was shabby. The children had been keeping her running, at least as far as her essential services were concerned, but they had not been keeping her up . . . and where little negligences are allowed, big ones are sure to come creeping after, unnoticed until it is too late.

Well, perhaps that's our fault, too—all of us on the original crew. They never had the training we had. We were too old and tired and discouraged to give it to them, even if we'd had all the facilities. And of course, you can't expect anything of passengers...

The thought faltered. It was hard to bear in mind that there

were very few passengers any more. They had outnumbered the crew enormously at the start, he seemed to recall. But somehow they had failed to breed, in anything like sufficient numbers. Odd, when you thought about it; what else had they had to do?

There were not very many people in the control barrel, and of these Jorn and Ailiss recognized only two: their daughter Kasi and her new husband, a hardvoiced. cock-sure youngster whom Jorn could barely stand. Ailiss seemed to be able to put up with him a little better, if only for Kasi's sake. He had been in training to be Kamblin's replacement at the time of the latter's death, but how much astronomy he actually knew was an open question. Hearing him talk, in that arrogant, know-it-all voice of his. Jorn sometimes got the fleeting impression that he did not think of stars as being real objects at all, but only dots with certain arbitrary properties which he had ben forced to learn by rote. His name was Monel.

He did not appear to be so cock-sure at the moment, however. Like everyone else in the barrel, he was standing at his post but not doing anything, his glance going from the door of Ertak's quarters, to the computer, and back again to the door.

The door did not open.

"How long has this been going on?" Jorn demanded.

"About five minutes, Father," Kasi said.

"That's already too long. If the Director doesn't appear in another five, we'll have to take action ourselves." The decision came out with great reluctance; but anything was better than this agony of suspended doubt, ringing with the chimes of the computer.

"And then?" Ailiss said.

"I don't know. I suppose we'll have to break into the cabin, just to make sure that he's dead . . . that they're both dead."

As an afterthought, Jorn started to cut the bells from the computer, and then, remembering the last time such a step had been taken, decided against it. Better to give Ertak, or Dr. Chase-Huebner, every possible opportunity to hear them, if they were going to within the time limit.

The bells chimed away at the minutes. At last Jorn said, "All right," and cut off the sound. "Somebody get a drill."

The whirring cutter bit into the tough metal of the bulkhead. It was heavy work; in seconds the business end of the tool was white hot. The boy wielding it sweated over his work, frowning with absurdly fierce concentration, his teeth slightly bared. After a while, he had a quarter-circle cut around the main dog, the one which carried the lock. He paused to push his wet hair back out of his eyes.

The annunciators cleared their throats, all at once. Jorn started and looked up, automatically. "Rrch. Rk. Tsu arr hamds. Rk. Arr hamds. Yerrow Warming. Wum. Rk. Yerrow Warming Ome."

The sound sputtered and popped, and then the carrier hum cut off again. Everyone turned to look at Jorn, but he had no answers; no more did Ailiss.

The voice had been a little like Ertak's. It had also been a little like Dr. Chase-Huebner's, though in reality, he recalled, these two had never sounded in the least alike.

Jorn spread his hands helplessly.

"Whoever it is, they're sick," he said. "We'd better get in fast. Resume drilling."

"Arrchk. Arr hamds. Rk."

The cherry-red half-disc of metal canted suddenly, and then fell on the other side of the door. The boy put the cutter down carefully and yanked the two unlocked dogs free, pushing open the door and walking through it without waiting for orders.

Then he put his hand over his mouth and tried to get out again, but he could not entirely battle the press of people pushing after him; somehow the word had been passed, and the control barrel was almost crowded now. He was sick in their midst before he could break free into the barrel itself. The rest sidled slowly into the cabin along the walls, less because they wanted to than because the pressure of people behind them made it imperative.

It was wholly incredible. Cer-

tainly the youngsters could not have understood it; though they could clearly see that it was horrible, they could hardly begin to guess where the real horror lay. They lacked the data for any such awareness.

At first glance, Jorn thought that the wizened old lady was still alive. It was only long minutes later, at third or fourth look, that he saw that the open eyes were dull and unwinking, and that she was in fact almost mummified. She was seated on the deck, leaning against the hull, her mouth sagging open on one side.

Ertak, nude except for a few scraps, lay on his bunk, looking even smaller than the woman. His great shoulders and chest had somehow vanished; in death it could be seen that his frame had in fact been perfectly normal for his height and weight. He too looked quite dried out, so that it was impossible to guess how long he had been dead; by appearance alone both of them might have been lying there for months, though their "cabin boy" had spoken to one of themhe did not know which-through the door only two days ago.

But all this was secondary to the central terror. In the middle of the deck there lay coiled the serpentine shape of a familiar so huge that Jorn did not at first even recognize it for what it was. Its head was as big as a large book . . . and as the invaders tried to press back against the inward urging of the curious people outside, it raised that head from the floor.

"Rrch," it said, in a hoarse feminine parody of Ertak's voice. "Rk. Arr hamds. Tsu arr hamds."

At the very center of its coils, in the geometric center of the cabin, there rested a smooth, dully shining sphere, about the size and shape, and even almost the color, of an apple.

"Out," Jorn croaked. "Everybody out. Who's Sergeant Strage's successor? Never mind

yet-out, quick!"

The familiar watched them go, her head weaving back and forth slightly. Jorn was the last one; and with more courage than he had ever dreamed he possessed, he stopped on the sill to look around the cabin for the Grand Log.

If it was still there, it was nowhere in sight. Then he found himself looking first into the eyes of the mummified woman, and then into the eyes of the familiar.

"Yerrow Warming Ome," the voice rasped. "Arr hamds. Arr hands."

He fled, and the bulkhead was secured behind him by willing, shaking hands,

"Great Ghost," someone quavered. "What . . . what is that?"

He did not answer for a few minutes. He could not have spoken had he wanted to.

"The armorer," he croaked at last.

"That's Prin Tober," Kasi said

in a hushed voice. "I've called her, Father."

"Call her again. Tell her to bring a flame-thrower."

"Jorn—" Ailiss said hesitantly.

"Yes. Now it's up to you, Ailiss."

"No, no, I—I just wanted to ask a question. Why me?"

"Because you're in command now. Ertak's dead, the doctor's dead, the standby captain died on Salt Flats, Kamblin's dead. That leaves you."

"Absolutely not," Ailiss said, sounding a little surer of herself. "I relinquish it, formally and officially. I will not be in command over my own husband—not at my age."

"Well," Jorn said drily, "since I'm the last other officer, I'm getting at least one order from you: Take over. All right. Where's that girl?"

"Here, Director," a voice at his right said. He was still too deeply in shock to take more than marginal notice of the title. He was a little too old now to be tickled by such gauds, anyhow. He was even less able to notice how completely, in only half a century, the last faint traces of the Matriarchy had vanished.

He looked the girl over, bearing in mind that she had not seen what still awaited them inside the Director's cabin. She was sturdy, flat-footed, straight-haired, and her gaze was direct and matter-of-fact; very much like his first memory of Sgt. Strage, in fact, though, of course, much

younger. She held the flamethrower as though she knew how to use it. He decided that she would do.

He walked to his desk, unlocked a drawer, and retrieved his side-arm, checking it as he returned to the enigmatic and fatal door. It had been a long time since he had even worn it, let alone used it, but it seemed to be all right. It was armed, and would fire.

"A couple of the boys are going to undog that bulkhead for you," he told the youthful armorer. "As soon as it swings open, and you're sure that the boys are in the clear, I want you to cut loose. No matter what you see, no matter what, burn that room out. I'll be right behind you, covering you. Understand?"

"Yes, Director. All ready." She planted her feet, standing directly in front of the cabin, her tanks of fuel and propellant hunched high on her sturdy back, the flamethrower canted slightly downward in her gloved hands, her mask pulled down over her face.

"All right." Jorn drew a deep breath. "Open up."

The dogs fell and the door swung inward. Jorn had only the briefest of glimpses inside, but it was more than he wanted.

"Rk. Yerrow Warming-"

The flame-thrower gushed inferno. Despite his promise, Jorn had to fall back immediately, his eyes streaming. The girl stood where she was, an immobile form of solid black framed in a panel

of intolerable bright yellow glare.

Inside the cabin there was a single high-pitched squeak, like a pinch of air escaping from a balloon; and then, a small, muffled detonation. The curtain of yellow fire seemed to ripple, and the armorer took one step back.

The flame-thrower died out with a sputter of black smoke. Everyone was coughing. The aperture to the hell that had been the cabin glowed cherry, then crimson, and finally went black, but waves of heat continued to whelm out from it. The girl pushed up her mask.

"Cleaned out, Director."

"Thank you," Jorn said, swallowing hard. "Well done. Very well done." He could think of nothing more adequate to say. She must have looked for at least a second into that room, and into those eyes; but she had not even quivered.

"Nothing to it," she said, shaking a last little spatter of fire-drops from the nozzle of the flame-thrower onto the deck. "I'm glad I finally go to use it for something."

She marched out, disconnecting her hoses as she went. Jorn wondered crazily: has she no curiosity at all? But Sergeant Strage wouldn't have had, either.

"What's next?" Monel said. He seemed, to Jorn's secret and malicious pleasure, to be a little dazed.

"We've got a Yellow Warning," he said. "Pull the tapes and look them over. That's your job, isn't it? When you've got a di-

gest of what's on them, report to me in my cabin—no later than tomorrow noon."

"The tapes? Oh, of course. Yes, all right."

"No, it's not all right. Try again."

The youngster looked up, startled, into his father-in-law's eyes. Then his expression turned slightly sullen.

"Yes. Director."

Unfortunately, Kasi chose this moment to giggle. That was not going to improve matters. All the same, Jorn enjoyed it. His small streak of sadism was one of his few remaining pleasures.

"Ailiss, let's go." Heads high, the Director and his consort walked arthritically out of the control barrel.

"Now, Director," Ailiss said sardonically over the Castles board, "tell me what you make of that affair, or I won't make another move, double jeopardy or no double jeopardy."

"I'd make more of it if I knew more about synthetic biochemistry," Jorn said reluctantly. "I never saw a familiar that size before and I didn't know it was possible. But Ertak was old and he never married, so I suppose he had the sheer time for it—though he must have pampered her beyond belief, enough to make him quite sick now and then."

"I knew that much," Ailiss said. "It was his own special vice. There are a few other cases in the literature, though none of them are this extreme. His mother tried to—"

"His mother?"

"Yes. Dr. Chase-Huebner. He was a reject of the Chase line. That's how he got her into the Project; she felt guilty at having made Jon Huebner such a favorite, and a partner in her cancer research and so on, and having dumped her earlier son. When Ertak got to be an eminent scientist in his own right, he had a club he could use, and he did."

Jorn stared at his wife with new eyes. "And you knew this all the time?"

"Well, ever since she tried to persuade him to give up the familiar before take-off. She couldn't make him; she was afraid to try. Otherwise, you'd have had to give up Tabath, and the same for all the other bachelors."

"Great Ghost. Hmm. How many of them are there aboard ship now, do you think?"

"None, I'm almost sure," Ailiss said. "Everyone surviving from the first generation is married; and of course, we couldn't make new familiars for the male children, we didn't have the laboratory to reproduce them." The wrinkles at the corners of her eyes suddenly deepened sharply. "Though from what I saw back up there, she'd solved that problem. Quite an achievement, when you look at it dispassionately."

"Yes. An egg. That's what I took that apple-thing to be, too. But only on intuition." He stared down at the still-incomplete game on the Castles board. "And you

were asking me what I thought of all this! You might as well go on. Why did she do it?

"Do what?"

"Don't dodge, Ailiss, this is your field. Why did she help her son's familiar to make the egg?"

"If I told you that you would go out of your own mind."

"There seems to be a good many things that you don't tell," he said stiffly.

"There are some things I don't tell until I'm asked," she said. "and some I don't tell even then. You want an explanation? It depends on who died first. We'll never know that now, and we might never have been able to figure it out; obviously the familiar was living off the corpses' body fluids, which was a new departure in itself. But if he died first, then she knew the familiar would die soon after unless she could get it to reproduce; strong though it was, it needed some new emotional attachment. And she still felt that she owed him something. So . . . I suppose you could say that the egg was her grandchild."

Jorn choked, nearly upsetting the board.

"You see?" Ailiss said.
"Where would it get me, peddling that kind of information to anybody who asked for it? The first thing a psychologist learns is to keep her mouth shut around laymen." She reached out and picked up a charger, twiddled it judiciously, and moved it from here to there.

"I can see why . . . She must

have been crazy, poor old woman. You know, I almost loved her once, old though she was even when we met."

"Of course, I know," Ailiss said. "And if it comforts you any, she wasn't crazy at all. She was being quite normal. I haven't given you the real explanation, and I don't plan to, either . . . All right, that's my move; and now you're in jeopardy, Director."

There was a decorous knock at the door of their cabin. It was divinely well timed, from Jorn's point of view; though he spent the rest of his life wondering what he would have said next, nothing satisfactory ever occurred to him.

The knocker was Monel. He was being very stiff and formal.

"The tapes, Director."

"Very good," Jorn said, trying to regroup some of the scraps of his dignity. "Report."

"It's a yellow dwarf star, sir, forty-one hundred light years from our point of origin; surface temperature about fifty-five hundred degrees. The computer says ten planets, possibly eleven. No evidence of patterned electromagnetic activity. The star is third generation and good for about five thousand million years more at a minimum before it begins to expand."

"Hmm. Pretty cold star. Anything else?"

"Very little as yet, sir," the boy said stiffly. "Except that the star is a double." "A double? With planets?"

"Yes, Director. There's a small white dwarf located about half a light year below the south pole of the yellow sun, and their masses are such that at that distance they have to be in orbit around each other. It's almost a duplicate of the doublet system we passed at extreme range just a few weeks ago. But the larger star here has planets; we can even see the biggest one from here, just barely."

"I see. Very good. Dismissed."
"Thank you, sir. Uhm . . . Director?"

"What is it?"

"Do you have any further orders, sir?"

Jorn frowned. He did not: that was his trouble. It was, of course, remotely possible that the lonely and decrepit Javelin had finally found herself a stop, but it was not very likely-surely not in a system as outré as this one. One more Yellow Warning like this and he would be convinced for good and all that the computer, like the one the black men had devised and entrusted their fate to, was deranged; none of its choices, now that he came to think of it, had ever been very close to the model it was supposed to have been set to scan for.

And did they really want a stop? Now, after all this time? They were in no shape to fight for a planet, not only with hostile natives, but even with blind nature. It would be so much easier simply to glide onward forever.

Now that they could be sure that they were not likely to run headon into the dangers and mysteries of the galactic center, they might continue to go uneventfully along parallel to the rim until death solved their problems, and no longer have to cope at all with their old, foolish notions of having had some definite, Elysian goal.

Why not? With Ertak dead, it was suddenly easy to see that the armada itself had never been more than a day-dream, a minute and evanescent soap-bubble in the eternal silver-and-black silences of the sidereal universe.

"Maintain course," Jorn said.
"No further orders at present."

The boy left. Jorn turned back to the board with a sigh to consider his next move. He was aware of Ailiss' eyes upon him, but he did not look up.

He had had enough for one day—or one lifetime. More than enough.

CHAPTER 12

DUT, as he knew well enough in his heart of hearts, he had finally to make up his mind. When he came into the control barrel with Ailiss, almost all the young officers were already gathered, watchful and waiting. Feeling utterly displaced, he mounted the bridge, and after a while was able to bring himself to sit down in Ertak's old chair . . . though not without a shudder. Before him was the master screen, with a tiny yellow globe shining, like

a lambent egg, in its geometric center.

"Very well, posts, everyone. Monel, report, please."

"Director, we have continued on course as you ordered. This has brought us well inside one light year of the system."

Jorn repressed a start. He should have checked that before issuing any orders; but, what was done was done. "Go on."

"This is a ten-planet system; the presumptive eleventh is actually an asteroid belt between planets four and five. Number five is the gas giant first spotted by the computer; it is large but not as large as the one recorded for system IEP number three. Six, seven, eight and ten are also gas giants of moderate size. Nine is a small dense world about eight thousand miles in diameter with a very eccentric orbit: presumably it is an escaped satellite of number eight, which also has four other moons, all much smaller. Number ten has two moons. and number seven has five. Number six has twelve, including a large one, plus a small asteroid belt of its own, which the spectroscope shows to be mostly ice. Number five has fourteen satellites, three of them large. None of these bodies are livable. Then comes the asteroid belt, followed by four small dense planets, two of which appear to be inhabitable."

"Two of them? Around so cold a star?"

"Yes, Director. Number four is small and cold and wouldn't

support us except under domes, but it shows traces of water and indigenous simple plant life. Number three is a binary, consisting of one planet about two thousand miles in diameter and one of about eight thousand miles, revolving around each other. The smaller body is quite dead and meteor-battered, and obviously never had any atmosphere to speak of. The larger is almost an exact duplicate of our home world in many important respects, according to the computer, except that it has much more extensive bodies of water. The land areas show a few limited deserts, but for the most part are completely covered with plant life, apparently very complex. This binary system is at a mean distance from the primary about ninety-three million miles. The two innermost planets are not inhabitable."

As close as that? Jorn thought. That's no good. One really extensive solar flare, and—

But life took a long time to arise. Evidently there hadn't been any solar flare big enough to be dangerous for some 500 million years, at the least.

"How quiet is the star, Monel?"

"Very quiet, Director. It's a micro-variable. Judging by spot types, the longest period would seem to be about ten years. During that time the solar constant may vary by about two per cent—certainly no more."

"I see. What is the situation

in the binary system itself? The dynamical situation?"

"Stable, Director. The two worlds are about a quarter of a million miles apart, and separating slowly, because of tides in the oceans I mentioned. The tidal friction appears as an increase in the angular momentum of the smaller planet; but it's very slight."

There went another possible out. Jorn sighed.

"Recommendations?"

There was a long silence. Finally he realized that they were waiting for him to turn around. When he did so, Monel's hand was raised.

"Go ahead, Monel."

"Director, we know that this isn't exactly the kind of star that the computer is supposed to favor. But we ask leave to remind you that our generation can't share your prejudices in the matter, or the computer's either. We have never seen a blue-white super-giant star except in pictures-and in one of those pictures, we saw it blow up. If this little yellow star has a livable planet, we think we ought to try it. There's-there's something to be said for a star that's good for another five thousand million years."

Quite so, Jorn thought, reading the tone as well as the words. And though you are far from being as excited as we would have been, at your age, about making another planetfall, still you're contemptuous of our laxness; and convinced that what-

ever this planetfall may turn out to involve, you'll make a better job of it than we would have.

And you ought to have the chance. What can it matter to the rest of us now, the tiny remnant? One death is as good as another, if death is what you are courting.

And after Ertak, it was clear that almost anything was better than dying in bed.

"Very good," he said. "I agree. We will sit down."

And then he had to grin as he watched the boy's tense belligerence sag sidewise into surprise.

The continents passed across the master screen, and then were replaced, again and again, by enormous oceans. There was a lot of water here, for sure.

There were also several inarguable cities. Jorn studied the photographs anxiously, despite his inner resignation; but the towns were uniformly mud-brick affairs, each structure heaped squatly into a pyramid, with the levels connected by ramps. Beyond the zigurats were slums, and beyond these, enormous acres of tilled fields; it looked as though as many as five acres were required to feed each and every person in one of these little nations.

The cities were also isolated. The rest of this world was pure jungle. That there was a sort of civilization arising here could not be argued, but it was obviously primitive, based upon the most backbreaking, around-the-clock

labor—slave labor, almost beyond question. So it appeared to Jorn.

almost microscopically An close examination of the giant moon had showed nothing. It was dead, and always had been. The fourth planet, on the other hand, still had rudimentary vegetation: but its surface was cracked and split and tilted like a vast artillery target by millennia, even by geological ages of bombardment by large strays from this system's asteroid belt. If it had ever held advanced forms of life -which was in itself very doubtful, considering the planet's small size—they had been bombed out by more planet-wide concussions than an aching old head cared to visualize. There was nothing to fear from that direction.

"We'll be touching down after the next circuit, Director. Near the spur of the large southern continent that's shaped like a big upside-down buskin."

"I see no objection. Let her go, Monel. I think this is it."

"Yes, sir!"

The Javelin creaked, righted herself, and glided down like a dowager, dignified, ancient, and more than a little weary. The green world rushed up to meet her.

She settled, The engines throbbed once and were silent. Was it over at last—or, once more, just beginning?

Silence.

"Orders, Director?"

Jorn got painfully up out of

the Director's chair. He had never been comfortable in it.

"Prepare your disembarkation party."

"But . . . Tests, Director?"

"The party will be your test," Jorn said, making his way down the stairway from the bridge to the floor of the control barrel. "We have nobody to man the laboratories any more; what we need now are guinea-pigs. I'll go first; and if something happens... Ailiss? What is it?"

"A point of privilege, Director," Jorn's wife said steadily.
"I am as entitled to be first out as you are. And then if something happens, all the original crew will be gone, and the children will be in charge. That's their privilege, Director."

Jorn could feel the tears coming. He choked them back as best he could; but he was old . . . old.

"I was going to ask you," he said, not ashamed—no, not really—of the quaver in his voice. "But I didn't quite know how... Monel, put out a crane, and rig us some kind of cab. I'm afraid we won't be able to manage the ladder."

They had meant to come back to the *Javelin:* Jorn was always positive about that. But after walking carefully a while, hand in hand, in the singing, flower-burdened heat, with the heart-stopping blue sky bending above them, they came to a yellow, rutted road.

There was a man trudging along it, blue-bearded and

bronze-skinned. Behind him he was leading a four-legged animal, gray, with a long mournful face and long mobile ears, and with a net thrown across its back in which earthenware jugs and bolts of cloth were entwined. It had a long slim tail with a tassel, with which it switched incessantly at small insects which harried it, in absurdly familiar fashion.

The man was dressed in skirts of some skin with the wool still on it; the wool had been twisted into little decorative tufts. Some part of his clothing, also, was metal, but it did not seem to be armor, but merely ceremonial—otherwise he would have shucked it off in the heat. He looked at them, and at their clothing, without any apparent surprise.

He was wholly human. That did not surprise Jorn either. There was, he had come to suspect, a Model.

Jorn asked the greeting question. The man only nodded, and pointed down the road, the way he had been going.

"Gerzea," he said, and beckoned. He tugged at the sad little animal. Jorn and Ailiss, wondering, each grasped a hand in the netting, and followed.

It was a long journey. The man was kind in his brutal way, but they were old. He buried them in the sands not far west of the Faiyum, and resumed his pilgrimage; and it may be also that he forgot them.

But they had come, with all the rest of the civilized world of 3900 B.C., to within miles of the crowning of the Earth's first king.

EPILOGUE

It is written:

That given any one of a thousand million possible paths, life will take them all;

That worlds which will support life will give birth to it;

That worlds which cannot support intelligent life will be colonized;

And that where both can take place, both will take place.

It is written that this is what the vast, unknowing interstellar stage is for: To be given consciousness and purpose while its gift of existence lasts.

It is written:

That this is a random process; That in the end all will be darkness and silence again;

But that while it lasts, life spreads through it, to make it aware of its own vastness and beauty, which otherwise it can never have known.

This is a gift; but the Giver is unknown.

That too is written.

1086 A.D.: A sudden glare of light in the constellation later called Taurus. The Chinese astronomer T'ang Yaou-Shun marks it down: A new and marvelous star, portending miracles.

But the miracle has already happened. It sleeps inside Yaou-Shun, in twelve of his genes.

THE END

TIME Enough

By

DAMON KNIGHT

THE walls and the control panel were gray, but in the viewscreen it was green summer noon.

"That's the place," said the boy's voice in Vogel's ear.

The old man gently touched the controls, and the viewpoint steadied, twenty feet or so above the ground. In the screen, maple leaves swayed in a light breeze. There was just a glimpse of the path below, deep in shadow.

The display, on the tiny screen, was as real as if one could somehow squeeze through the frame and drop into those sunlit leaves. A warm breath of air came into the room.

"Guess I could go there blindfold, I remember it so well," he heard Jimmy say. The boy seemed unable to stop talking; his hands tightened and relaxed on his knees. "I Nowadays we lie on a couch and talk about the past. Someday we'll be able to go back ourselves and right the wrongs, or pacify the guilts. There's time enough, both ways — isn't there? Isn't there?

remember, we were all standing around in front of the drug store in the village, and one of the kids said let's go swimming. So we all started off across town, and first thing I knew, we weren't going down to the beach, we were going out to the old quarry."

The leaves danced suddenly in a stronger breeze. "Guess we'll see them in about a minute," Jimmy said. "If you got the right time, that is." His weight shifted, and Vogel knew he was staring up at the dials on the control board, even before his high voice

read aloud: "May twentyeight, nineteen sixty. Elevennine-thirty-two A.M."

His voice grew higher. "Here they come."

In the screen, a flicker of running bodies passed under the trees. Vogel saw bare brown backs, sports shirts, tee shirts, dark heads and blond. There were eight or nine boys in the pack, all aged about twelve; the last, lagging behind, was a slender brownhaired boy who seemed a little younger. He paused, clearly visible for a moment through the leaves, and looked up with a white face. Then he turned and was gone into the dark flickering green.

"There I go," said Jimmy's raw voice. "Now we're climbing up the slope to the quarry. Dark and kind of clammy up there, so many old spruces you can't even see the sky. That moss was just like cold mud when you stepped on it barefoot."

"Try to relax," said Vogel carefully. "Would you like to do it later?"

"No, now," said Jimmy convulsively. His voice steadied.
"I'm a little tensed up, I guess, but I can do it. I wasn't really scared, it was the way it happened, so sudden. They never gave me time to get ready—"

"Well, that's what the machine is for," said Vogel soothingly. "More time—time enough for everything."

"I know it," said Jimmy, in an inattentive voice.

Vogel sighed. These afternoons tired him, he was not a young man any more and he no longer believed in his work. Things did not turn out as you expected when you were young. The work had to be done, of course; there was always the chance of helping someone, and occasionally it happened, but it was not the easy, automatic thing that youth in its terrible confidence believed.

There was a rustle in the screen, and Vogel saw Jimmy's hands clench into desperate fists on his knees.

A boy flashed into view, the same boy, running clumsily with one hand over his face. His head rocked back and forth. He blundered past, whipped by undergrowth, and the swaying branches closed behind him.

Jimmy's hands relaxed slowly. "There I go," his voice said, low and bitter. "Running away. Crying like a baby."

After a moment Vogel's spidery fingers reached out to the controls. The viewpoint drifted slowly closer to the ground. Galaxies of green

leaves passed through it like bright smoke, and then the viewpoint stopped and tilted, and they were looking up the leaf-shadowed path, as if from a point five feet or so above the ground.

Vogel asked carefully, "Ready now?"

"Sure," said Jimmy, his voice thin again and not at all convincing.

The shock of the passage left him stumbling for balance. and he fetched up against a small tree. The reeling world steadied around him, and he laughed. The tree trunk was cool and papery under his hand: the leaves were a dancing green glory all around. He was back in Kellogg's Woods again, on that May day when everything had gone wrong. and here it was, just the same as before. The same leaves were on the trees: the air he breathed was the same air.

He started walking up the trail. After a few moments he discovered that his heart was bumping in his chest. He hated them, all the big kids with their superior grinning faces. They were up there right now, waiting for him. But this time he would show them, and then afterward, slowly, it would be possible to stop hating. He knew that. But

oh, how he hated them now!

It was dark under the spruces as he climbed, and the moss was squashy underfoot. For a passing moment he was sorry he had come. But it was costing his family over a thousand dollars to have him sent back. They were giving him this golden chance, and he wouldn't waste it.

Now he could hear the boys' voices, calling hollow; and the cold splash as one of them dived.

bitter. Hating and climbed to where he could look down across the deep shadowed chasm of the old quarry. The kids were all tiny figures on the other side, where the rock slide was, the only place where you could climb out of the black water. once you were in. Some of them were sitting on the wet and shivering. rocks. Their voices came up to him small with distance.

Nearer, he saw the dead spruce that lay slanting downward across the edge of the quarry, with its tangled roots in the air. The trunk was silvery gray, perhaps a foot thick at the base. It had fallen straight down along the quarry wall, an old tree with all the stubs of limbs broken off short, and its tip was

jammed into a crevice. Below that, there was a series of ledges you could follow all the way down.

But first you had to walk the dead tree.

He climbed up on the thick twisting roots, trying not to be aware just yet how they overhung the emptiness below. Down across the shadowed quarry, he could see pale blurs of faces turning up one by one to look at him.

Now he vividly remembered the way it had been before, the line of boys tightropewalking down the tree, arms waving for balance, bare or tennis-shoed feet treading carefully. If only they hadn't left him till last!

He took one step out onto the trunk. Without intending to, he glanced down and saw the yawning space under him—the black water, and the rocks tiny below.

The tree swayed under him. He tried to take the next step, and found he couldn't. It was just the same as before, and he realized now that it was impossible to walk the tree—you would slip and fall, down, down that cliff to the rocks and the cold water. Standing there fixed between the sky and the quarry, he could tell himself that the others had done it, but it didn't help—

what good was that, when he could *see*, when anybody could see it was impossible?

Down there, the boys were waiting, in their cold and silent comradeship.

Jimmy stepped slowly back. Tears of self-hatred burned his lids, but he climbed over the arching roots and left the quarry edge behind him, hearing the clear distant shouts begin again as he stumbled down the path.

"Don't blame yourself too much," said Vogel in his gray voice. "Maybe you just weren't ready, this time."

Jimmy wiped his eyes angrily with the heel of his hand. "I wasn't ready," he muttered. "I thought I was, but—must have been too nervous, that's all."

"Or, maybe—" Vogel hesitated. "Some people think it's better to forget the past, and solve our problems in the present."

Jimmy's eyes widened with shock. "I couldn't give up now!" he said. He stood up, agitated. "Why, my whole life would be ruined—I mean, I never thought I'd hear a thing like that from you, Mr. Vogel. I mean the whole point, of this machine, and everything—"

"I know," said Vogel. "The past can be altered. The

scholar can take his exam over again, the lover can propose once more, the words that were thought of too late can be spoken. So I always believed." He forced a smile. "It's like a game of cards. If you don't like the hand that is dealt to you, you can take another, and after that, another..."

"That's right," said Jimmy, sounding appeased. "So if you look at it that way, how can I lose?"

Vogel did not reply, but stood up courteously to see him to the door.

"So, then, I'll see you tomorrow, Mr. Vogel," Jimmy said.

Vogel glanced at the wall calendar: it read, "April 21, 1978." "Yes, all right," he answered.

In the doorway, Jimmy looked back at him with pathetic hopefulness—a pale, slender thirty-year-old man, from whose weak eyes a lost boy seemed to be staring, pleading . . . "There's always tomorrow, isn't there, Mr. Vogel?" he asked.

"Yes," said Vogel wearily.
"There's always tomorrow."

THE END

FILL IN AND MAIL THIS COUPON . . .

YOU'LL GET 2 ISSUES OF Amazing Stories

FREE!

Here's How . . .

ONE YEAR (12 issues) of AMAZ-ING STORIES would cost you \$4.20 if bought individually. But if you fill in the order form at the right, you can have a full year of AMAZING delivered right to your home for only \$3.50! This low subscription rate brings you the equivalent of

2 issues free!

AMAZING STORIES

434 South Wabash Avenue Chicago 5, Illinois

- Please enter my subscription to
 AMAZING for one year for only
 \$3.50.
- \$3.50.

 Sign me up for the special 2-year rate of only \$6.50. (This brings me the equivalent of more than five issues free!)
- Payment enclosed
- Please bill me.

Z NAME

=

CITY_

ADDRESS

ZONE____STATE

AM 7-60



by S. E. COTTS

THE HAUNTED STARS. By Edmond Hamilton. 192 pp. A Torquil Book. (Dodd, Mead & Company, 432-4th Avenue, N. Y. C.) \$2.95.

Mr. Hamilton has had a long career as a science fiction writer, (his first story was published in 1926) and this reviewer does not claim to have read his entire output. But surely, *The Haunted Stars* must be one of his best books. I recommend it highly to all science fiction lovers, but particularly to those who complain that top-notch adventure stories don't get written these days.

From the moment young Robert Fairlie, a philologist, gets word from the Government that his help is needed on a project, his life changes completely. He had been a college professor and a scholar; now, suddenly, he is given a language problem to unravel with the knowledge that the fate of the free world depends on a quick solution

The time is 1966 and both the United States and Russia have established bases on the moon. But at the United States base fantastic discoveries have been made. A base had already been at the spot, leaving traces of a race that had spanned the stars some thirty thousand years before.

This is a fast-paced narrative with some espionage thrown in for spice. But it is also a good deal more than that. Fairlie, in applying his talents to crack the language of this race from the stars, loses his scholar's blindfold and finds himself reaching out for all knowledge. Yet, all these fine features would be nothing were it not for the fact that Mr. Hamilton's writing is liberally endowed with clarity as well as imagination.

THE SOUND OF HIS HORN. By Sarban. 125 pp. Ballantine Books. Paper: 35¢.

It is hard to decide just what to tell about this unusual fantasy. It is a short book, but the language used is so vivid that the author does not need more space to tell his story of what would happen had the Nazis won the war. Instead of a general picture of world conditions, Sarban chooses to give a detailed analysis of one location with the implication that it is a pattern repeated everywhere.

The author shows us the vast domain of the Reich Master Forester, Count Johann von Hackelnberg. He is the head of a near-feudal estate, most of whose inhabitants are either captured prisoners or selectively-bred slaves. The Count's favorite sport is hunting—for human game. This description might lead one to believe that the book is a horror story, pure and simple. However, there is much more in store than that for the careful reader. In its underlying symbolism, its startling visual and aural images, and in its almost nightmarish atmosphere, Sarban's story has a literary quality that would distinguish it no matter what the subject.

This offering from Ballantine is further enhanced by Kingsley Amis' introduction. Though I would question some of his remarks about the differences between fantasy and science fiction, his essay does provide an interesting prelude to the novel. Both are well worth the reader's attention.

STADIUM BEYOND THE STARS. By Milton Lesser. 206 pp. The John C. Winston Company (1010 Arch Street, Philadelphia 7, Pa.) \$2.50.

The hero of this book is Steve Frazer, champion spacesuit racer, who is going to the Interstellar Olympic Games. But on his way, he finds evidence of a telepathic race superior to our own. While he attempts to convince others of his story, he realizes that he has stumbled on something which he was not supposed to know. Though competently written, with the Games providing an interesting setting, the book is a little too naive for the group at which it is aimed. I would suspect that the younger sf fans of today are too well-read and knowledgeable to be really excited by this tale. Let us hope that next time he will not underestimate his readers.

LOST RACE OF MARS. By Robert Silverberg. Illustrated by Leonard Kessler. 118 pp. The John C. Winston Company. \$2.95.

This is a Junior Science Fiction novel for the 8-12 age group. Dr. Chambers and his wife take their two children and the family cat to Mars for a year. Jim and Sally, the children, solve the mystery of the old Martians while they're there.

Though this book may teach a child some things about Mars, the dialogue is often stilted and lacking in the necessary charm.



Dear Editor:

The letters published in the April Amazing which attack Ward Moore's "Transient" quite literally horrify me. The merits of this distinctive and moving story seemed to me to speak for themselves, and I did not realize that it would be necessary to write and say: "Transient" is one of the finest stories published in years, and one of the best things Amazing ever had the honor of presenting.

Please be assured that not everybody disliked the yarn as much as your outraged readers in the April "Or So You Say."

Congratulations on buying and printing such a magnificent story.

And speaking of magnificent stories, Marion Zimmer Bradley's short novel, "Seven from the Stars," in the March issue was in its own way almost equally fine. Amazing is doing an excellent job of entertaining science fiction enthusiasts these days. Thanks again for giving us "Transient" and "Seven from the Stars."

Redd Boggs 2209 Highland Place, N. E. Minneapolis 21, Minnesota • Thanks to you and the many other readers who came to the defense of Moore's novel—which we'd buy and print again if we had it to do over!

Dear Editor:

I have just finished the letter section of the April Amazing. Dr. Robey and Mr. Brown condemn Ward Moore's magnificent novel "Transient" in a few short paragraphs, and Mr. Hamlin gives it high praise indeed! Long live Mr. Hamlin! This is definitely one of the best novels in a long time, Moore's phenomenal writing and descriptive skill make it a true classic, in my opinion.

I would very much like to see a series of short biographies of science fiction's most famous personalities. This would include writers, editors, anthologists, and any other big names in the field

> David Greenman 253 Oakland Dr. East Lansing, Michigan

Beginning with the May issue, our sister magazine, Fantastic, inaugurated a series of critiques-plus-biographies of

some of the classically great names in science fiction writing.

Dear Editor:

Having seen my name in print in your March issue I felt much pleased, but apparently there is a thorn in the rosebush. During the last month or more I have been bombarded with letters and flyers from various private and commercial purveyors of second hand science, fantasy and publications of a similar nature.

I would like to state for the record, as you yanks say, that I can buy over the counter, and through subscription all the upto-date magazines that I could possibly read in a month before the next issues are on the newsstands.

This is not a tirade against the more mercenary members of our outward-looking fraternity, but as a minor gripe that not one of the more orthodox followers have contacted me, either locally or throughout the country. So here is an invite: I will be only too glad to meet with, or write to, all applying to me as such, and I deeming them worthy.

By the way, when I get a paint carton full of magazine I take them to the Veterans Hospital in Newington, Conn. The fellows there are certainly glad of extra diversion and we may possibly win more aficianados. If the present standards and editorial policies are continued I feel sure that we will win fur-

ther esteem amongst thinking and filtering bookworms.

H. Taylor 33 Seaman Circle Manchester, Conn.

• Hope you get as much action from our intellectual readers as from our commercial ones. As for giving magazines to Veterans' Hospitals, we commend the idea to all our readers.

Dear Editor:

Why the devil is everybody complaining about Valigursky's art work? True, he has been a little sloppy as of late, but he's still darn good! The day I can do half as good, I'll be satisfied. My own art looks like a refugee from a modern-art factory!

You have a good man in Nuetzell. Don't let him get away.

I have a bone to pick with you, Norm. Namely, those editorials of yours. To coin a phrase, "They ain't what they usta be." Fairman's, in my opinion, were tops, and beat yours to a pulp! If I want to hear of the latest advance in Aerodynamics, I'll read a science magazine. I want news of sf and fandom! Astounding has gone that way and I wouldn't want to see Amazing follow in her tracks. I hope you'll keep this in mind.

Where can I get an issue of Fantasy-Times? (Current one if possible.) I wouldn't be wasting space like this if you would have a fanzine review. I'd like to pick up some issues of that old fan-

zine "Barsoomian." Name your price.

I'd be glad to correspond with anybody! I'm probably the loneliest fan this side of the Mississippi. Interested in communicating with other Edgar Rice Burroughs fans.

Lenny Kaye Sutton Terrace 418 Hobart Rd. North Brunswick, N. J.

● For S-F Times, write to Jimmy Taurasi, 18-36 129th St., College Point 56, N. Y., or P.C. Box 115, Solway Branch, Syracuse 9, N. Y. Will somebody please write this guy before he starts making contact with the spirit world for a chat with Edgar Rice?

Dear Sir:

It occurs to me that in the past several years my letters to you haven't been the epitome of sweetness and light. This one isn't to comment on the April issue of Amazing in fact, but just to let you know that I think my past record needs a few changes. You are now worth every cent of the thirty-five you ask for. That is a statement I doubt I would ever have made under the reign of Browne or Fairman.

In the current issue, for instance, I see that you have Henry Hasse and Gordon R. Dickson. Hasse has never once failed to entertain me. Dickson is one of the best craftsmen to appear since the war. Bone has

very good ideas, and excellent ship is inept. I now feel that I actually owe the magazine something.

If you'd only do something about your art, you would be a perfect magazine. Nuetzell is the best cover painter you have . . . and he's pretty bad. You don't use Finlay enough, and what you do use has no gusto to it. As for Leo Summers, I don't blame him for hiding behind his pen names, "Varga" and "Grayam"—not one little bit. And I hope you print that remark.

I don't know any of these artists personally, but I've seen work by George Barr, Larry Ivie and Prosser in fanzines that far out-strips even Finlay's efforts. If you don't get them soon (Especially Barr) I predict one of your competitors will.

Of course, Lawrence, Macauley and Paul for covers, are simply necessary. I don't propose to have to convince anyone of that! (Paul and Leo Morey deserve to come back at least once each just for old times sake.)

Here's hoping for continued improvement!

Jerry Page 193 Battery Place, NE Atlanta 7, Ga.

• You're still not exactly the epitome of sweetness and light, but you're improving. We are going to introduce a greater variety of cover artists—including some new ones who are going to be applauded.

Dear Editor:

- I just finished reading my first *Amazing*. Here are my impressions:
- 1. The best part of your magazine is the letter department. I suggest you heed the complaints made by readers. Every magazine can be made better with effort.
- 2. Your editorials are much too short. One thing that makes a magazine is a few pages from the editor. Everyone likes to see what he has to say.
- 3. Your book reviews are likewise too short and don't cover enough books. This can turn readers to a magazine that does have this feature.
- 4. From the looks of some of your stories ("Remembering" and "It Hardly Seems Fair") your magazine is just a dumping ground for big name writers who did a sloppy job on one. I don't think you have a dumping ground, but if you don't send a few poor ones back (even to a top writer) that's just what you're making yourself.

Please don't think I'm just a critic. Your covers are good and so is your arrangement. I think we could use a few more magazines up in the quality zone, and yours is a likely prospect. It can't compare with any one of the top four (which I won't mention) but it could get up there. If you don't slacken down and just keep striving for a good job, you'll make it all right. But you've got to keep trying for quality. That's what got the top

four where they are. If they could do it, so can you.

Alan Lacrosse 2422 Barnard Street Saginaw, Michigan

 Great minds undoubtedly run in the same channels, for in the past few weeks been considering making some changes that parallel your suggestions (and by the way we always do heed suggestions; we may not follow them, but we heed them). On one point, however, may we reassure you: We are not a dumping ground for goofs by top-name writers. Some people could put out a magazine with the material by said writers which we turn down.

Dear Editor:

Well, I'm glad to see Henry Hasse back! I remember his "He Who Shrank" vividly (the anthology version. not magazine version, for I wasn't reading \mathbf{sf} then). Friends Now" had a special kick for me, because not too long ago Hank and I sat over many a game of chess, and many a stein of beer, and he unfolded this theme to me with some enthusiasm. I wasn't aware he had written the story, much less marketed it, until I spotted this issue on the stands.

The story was rather like a game of chess, wasn't it? I mean the intricacies, the unfoldment, the relentless pursuit. I remember telling Hank at the time, that I didn't especially like de-

tective stuff mixed up in my sf. But he surprised me, and I sure got a kick out of Beardsley, once he got to rolling! Too bad the end was so inevitable, but I suppose ECAIAC had to prevail in the end. (Which reminds me—Hank did mention that he would try to make me a character in the story—now don't tell me that I was ECAIAC!

Hey, Hank, here's an idea for free! Must Beardsley really pay the penalty? You made ECAIAC so human, couldn't the machine turn rational, and absolve Beardsley completely, and the two of them really become "Friends Now"-and go on to other adventures and solutions together?

H-mmm. Well, it was a thought.

John Houston 5033 W. 116th St. Inglewood, Calif.

• Attention, Mr. Hasse—free ideas are few and far between. This one may have some possibilities for all concerned.

Dear Editor:

I hate to say this, but it does seem that the heretofore reliable Gordon R. Dickson put one over on you this time. "It Hardly Seems Fair" is most appropriately titled, inasmuch as it is the sloppiest of hack writing, vague in its presentation, altogether crude and—yes—vulgar in its basic theme. Too bad, too bad—Dickson's material has been admirable in the past, and

I never would have thought he'd allow himself to be thus represented.

Aside from this, your April issue ranged from the merely acceptable to the superb. And superb I think is the proper term for Henry Hasse's most intricate and sharply devised "We're Friends Now." This was sheer delight! Both in Hasse's style, his major concept here, and his creation of real characters as he manipulated them around in a mood of suspicion and suspense. This man can really write! I remember Hasse from earlier days, in various magazines, but why hasn't he been writing more? Maybe now he will. I would behoove you to get him back on the ball.

I don't find too much wrong with Amazing, in fact I think it's on the improve, but if you follow Mr. Hybke's suggestion of raising the price to 50¢, more pages or not, you've lost me. Oh, nearly forgot. That cover. Two words will express my sentiments—ree-diculous! It bears an amazing resemblance to a dabble watercolor my nine-year-old son brought home from school one day.

Harold Kafader 256 Towne Porterville, Calif.

•Please rush your son's watercolor to our offices! It may make a magnificent cover. As for Hasse and Dickson—well, we print 'em and you folks applaud or boo. That's publishing!

Dear Editor:

During the past two years. Amazing has been steadily improving; the quality of the fiction has risen considerably; the cover illustrations have gained a more attractive, more mature personality; and the series of novels, for the "full-length" most part, has been reasonably well-developed. You have graced the pages of Amazing with quality stories by quality writers, and we have come to expect fiction/fantasy good science from Amazing.

But now and then, sadly, a dud is dropped in our midst; and when this happens, said dud stands out like a very large, sore thumb. Witness: "We're Friends, Now" in the April issue. This isn't a bad story, not all of it, at least. It is an outmoded story—in plot, dialogue and presentation. The characters are cardboard cuttings that make not the slightest effort to act or react as actual people: and for this reason alone, this reader found it difficult to feel anything except resentment toward them. What a pity, too; the story, had it not degenerated into a third-rate detective thriller, had promise of developing into a logical conflict between the once forceful, now relegated to the insipid post of figure-head, Beardsley and the all-powerful ECAIAC, which was responsible for his untimely fall from grace. Instead, the author has chosen to throw us headlong into a series of baffling situations, with even more baffling people, wherein Beardsley, manages to miraculously revive "Vintage '60" detection methods, antagonize everyone with whom he comes into contact and achieve a sudden one-sided friendship with ECAIAC. Quite a fellow, this Beardsley.

Actually, it is difficult to determine just what Beardsley was trying to do—or if he did it. One also wonders whether or not the computor ECAIAC did possess some sort of "Alien intelligence" (my quotes), and, if so, whether or not the rather bleak irony at the end of the story will be resolved by the computor's acquittal of Beardsley, thus proving that they are friends—Now.

Thankfully, the remainder of the issue is devoted to fiction that ranges from fair to very good. I am greatly impressed with David R. Bunch's Stronghold series, probing into the thought-processes of the newmetal man. Gordon R. Dickson gives us a vivid picture, in "It Hardly Seems Fair," of the violence and sadness that often results because of human misunderstanding, and, in this case, alien misunderstanding as well.

Bobby Gene Warner 745 Eldridge St. Orlando, Florida

• Your letter typifies the wide range of reactions we got to Hasse's story. Bunch is producing so many vignettes of Moderan—I wouldn't be surprised if they became a book.

Dear Editor:

Aside from "Star Surgeon" I Hasse's think Henry Friends Now" is quite the most terrific story you've run in the past year—and this is significant, proving that a story to attain the status of "classic" need not always run to book length. Keep the book-lengths. but let's have, more frequently, two novelets per issue, if you can get the quality. Yes, I think Hasse's current effort is destined to become a classic, just as his earlier "He Who Shrank." Upon analysis, the theme alone of "We're Friends Now" is truly classic not to mention startling and ironic. And how beautifully handled! Hasse is to be congratulated for pursuing such a theme to its utter, logical end, when at any moment denouement seemed to verge upon the impossible if not ridiculous-but the "Thinking through" did not permit it to happen. Some anthologist is missing a sure bet if he doesn't grab this one! It would seem a shame for such a story to die in the pages of a monthly magazine.

"The Red Telephone" was vigorous and hard-hitting enough, but rather too lengthy for such a "gimmick" ending? And it seems to me that Dickson goofed in "It Hardly Seems Fair." It hardly seems fair that I, the reader, should be compelled to re-read the author's meaning.

The author has failed in his function (so my instructor in Creative Writing says) when the reader has to do this.

Commenting on "The Issahar Artifacts": why this straight, solid exposition stuff with utter lack of dialogue? It bores! And it's made worse by your use of smaller print in this one story. Select a uniform type and stick with it, otherwise you're cheapening the magazine.

What cheapens mostly, though, are the crude and inept interior illustrations you've been using of late. You can get better! And I don't necessarily mean Finlay!

Lee L. Millen 2236 W. Avenue 30 Los Angeles 65, Calif.

 You're absolutely right. We think you'll find uniform type and better illos (and more of them) in Amazing as the issues go by.

Dear Editor:

We noticed in your column in Amazing that Ben Bova was mistakenly (and perhaps with tongue in cheek) identified as a pen name of Milt Lesser. As agents for both writers, we know this is not so, of course—Lesser is a New York writter, and Ben Bova is with a science research company in Cambridge, Mass.

Scott Meredith Agency



SHOPPING GUIDE

Classified

Rate: 25¢ per word including name and address. Minimum 10 words. Send orders and remittance to AMAZING STORIES, One Park Avenue, New York City 16, New York Attention Martin Lincoln.

BOOKS-MAGAZINES

FANTASY & SF Books & Mags lowest prices, list free. Werewolf Bookshop, 7055L Shannon Road, Verona, Pa.

BOOKS, Pocketbooks, magazines. Tremendous stock, reasonable prices. Lists on request. Sciencefiction and Fantasy Publications, 78-04 Jamaica Avenue, Woodhaven 21, N. Y.

SPECIALISTS: Science-Fiction, Fantasy, Weird Fiction Books, pocketbooks, magazines. Lists issued. Stephen's Book Service, 71 Third Avenue, New York 3, N. Y.

MAGAZINES, Pocketbooks, SF, mystery, western. Five for \$1.00. My selections. Paul VanAvery, 187 Cornelia Street, Plattsburgh, N. Y.

GUARANTEED Most unusual 10¢ books ever offered! Fascinating Free Catalog! Eden, 471 S. W. Tenth Street, Miami, Florida.

1934-44 COMIC Books wanted, especially Walt Disney material. M. Willits, 11848 S. E. Powell Blvd., Portland 66, Oregon.

BACK Issue, science fiction, magazines and books. Pocket editions 5 for \$1.15. Free lists. John E. Koestner, 2124 Rene Ct., Brooklyn 37, N. Y.

BUSINESS OPPORTUNITIES

17 PROVEN ways to make money typing at home. Detailed instructions \$1 (refundable). Ryco Service, 210-M Fifth Ave., Suite 1102, New York 10.

HIGH Pay Overseas, Domestic Jobs. Men, Women. Generous Benefits. Companies Pay Transportation. For info, write: World Wide, Dept. E, 149 N. Franklin St., Hempstead, N. Y.

EARN Extra money selling advertising book matches. Free sample furnished. Matchcorp, Dept. MD-70, Chicago 32. III.

BUY Direct from Factories! Appliances, Cameras, Watches! Free Details! Cam Company, 6810 AM, 20th Ave., Brooklyn 4, N. Y.

RINOCULARS & TELESCOPES

OPTICAL—Science—Math Bargains—Request Free Giant Catalog "CJ"—128 pages—Astronomical Telescopes, Microscopes, Lenses, Binoculars, Kits, Parts. Amazing war surplus bargains. Edmund Scientific Co., Barrington, New Jersey.

STAMPS & COINS

"SILVER Stamps" (Half A Century Old)—Persia's exotic 1911 series, used by government officials only—complete mint, including stamps actually printed in silver!—only 10¢ with discount approvals. (Free bonus every time!) Send dime to Fred Greene. 1450 Jesup Aye., Bronx 52, N. Y.

BRITISH Commonwealth pictorials, commemoratives, healths, 25 different only a dime with approvals. Coster, 538 26th Street, Union City, New Jersey.

TAPES—RECORDERS

TAPE Recorders, Hi-Fi Components. Sleep-Learning Equipment, Tapes, Unusual Values. Free Catalog. Dressner, 69-02 MZ, 174 St., Flushing 65, N. Y.

RECORDS

BE Energetic. Speak, Sing with power! Self-Training. Canfield Voca-Records, 2018-R Fifth Avenue South, Minneapolis 4, Minn.

MUSIC

POEMS Wanted for musical setting and recording. Send poems. Free examination. Crown Music, 49-TM West 32, New York 1.

MISCELLANEOUS

COLOR Slides of other planets: paintings, space models. Catalog, sample, 25¢. Marris Dollens, 4372 Coolidge Ave., Los Angeles 66, Calif.

CHILDREN And youth of various countries, also Japanese subjects, slides and photographs. Blue Star Studio, P. O. Box 1381, Hampton, Va.

500 ELECTRONIC KITS

WHAT THEY ARE!
WHAT THEY COST!
WHAT THEY DO!

Yours in the brand new 1960



Here it is—the only complete, comprehensive directory covering the exciting world of electronic kits! It's yours in the 1960 ELECTRONIC KITS DIRECTORY—over 160 pages—listing over 500 kits of all kinds. Each listing gives you manufacturers, specifications, prices, everything you need to know about kits! You'll find such informative features as:

GIANT KIT BUILDERS GUIDE

Gives you the latest improvements, and innovations in kits...helps you select the right kit...identifies parts for you, too!

• COMPLETE SURVEY AND DIRECTORY OF:

Kits for HI-FI—make your own amplifiers, preamps, speakers, turntables, stereo control units, and tone arms.

Kits for COMMUNICATIONS—Rundowns on kits for oscilloscopes, tube testers, power supplies, transmitters, receivers, transceivers.

Kits for EDUCATION — Coverage of radio kits and many other special projects.

NOW ON SALE

ONLY

\$1.00



THE AUTHOR AND PUBLISHER ANNOUNCE A MOST DARING AND SENSATIONAL BOOK:

HIDE!

(A Challenge to the Devotees of Freud, Pasteur, Darwin and Marx) . . . by Herb Blackschleger. Published By Meador Press, 324 Newbury St., Boston 15, Mass.

History has frequently recorded the words:
DOWN WITH THE KING, LONG LIVE THE KING!

History will soon record the words:
DOWN WITH THE WORLD; LONG LIVE THE NEW AGE!

Yes, the ravings of so-called religious enthusiasts are true—the world of TODAY IS COMING TO AN END:

The secret of the mysterious disappearance of the dinosaurs is out—the dinosaurs disappeared IN A SINGLE DAY during a rotation of the axis of the earth! The present North Pole was once in a position now occupied by part of AFRICA; warm, mushy dinosaur prints were frozen intact when suddenly subjected to sub-zero temperature.

The "myth" of the lost city of Atlantis is becoming TRUE HISTORY. Atlantis is now revealed as a former CONTINENT which supported millions of human beings of greater ability than the people of today's world. In a single day, part of the continent of Atlantis dropped into the sea, carrying millions of shricking, surprised human beings to death. Other intelligent humans lived on this planet before the Himalayan Mountains and the Gobi Pesert were formed.

According to Edgar Cayce, the famous clairvoyant, many cities of the United States are destined to DROP INTO THE OCEAN sometime within the next 60 years. Some people will obtain clues to provide them with advance warnings of this catastrophe; others will declare such a happening impossible up until

clare such a happening impossible up until within a few minutes of the actual occurrence. The civilization of Atlantis flourished some 30,000 years ago. THE DEAD SEA SCROLLS are actual records of the basic philosophies of the people of Atlantis. The entire world has been kept in comparative darkness as to the

true nature of MAN—who he is, why he is on earth, and how he should-live. This darkness has existed for thousands of years; it has made possible the plunder of the entire world by suppression of knowledge, by mind control and brainwashing, and by extensive use of semantics. Lately, discoveries of man's true nature and actual destiny have been made so rapidly that most people will be unable to adjust to the COMING NEW AGE, because they will be caught in the DEATH THROES of the "present world." There will NOT be a worldwide atomic war! !!

The civilizations of today consider themselves "educated" and "enlightened"; actually, they are to a great extent BRAINWASHED and HYPNOTIZED. The world has actually been plundered for millenniums; in today's period of so-called "freedom" more people are living under physical, tranquilized, or lobotomized slavery than ever before in history.

HIDE! examines the true condition of today's world; it traces the dominant philosophies of today back to the ridiculous and false assumptions upon which they are based; it shows the basic errors of these doctrines; and it offers to the reader clues which will provide answers for which mankind has been searching, searching, searching.

For revelations of the secret doctrines used to achieve the plunder of the entire world; for clues as to a means of escaping the "invisible depression" of today, and for spinetingling thrills beyond your most sensational experiences, send for a copy of HIDE! today:

HIDE	! IS	NOT	A	VAILA	BLE T	0 T	HE	GEN	ERAL
				AMAZ					
			the	coupon	below.	SEI	ND	FOR-	YOUR
COPY	TOD	AY:							

P. O. I	BLACKSCHLEGER BOX 188 ALLEY, CALIF.	
me	Enclosed please find \$copies of HIDE! at \$4.00.	RUSH
me	Enclosed please find \$autographed copies at \$4.	RUSH
Name		
Address		
Address		