

DOUBLE YOUR READING FUN!

The best fiction is science fiction; and the best science fiction appears in GALAXY and IF.

READ



Leader in the science-fiction field for almost two decades! Presenting the finest writers: Asimov, Pohl, del Rey, Leiber, Anderson, Herbert Vance, Simak, Dickson, Blish, Silverberg, Ellison, Knight, Harrison, Aldiss, Niven, Clement. Popular monthly columns: For Your Information—Willy Ley, Galaxy Bookshelf—Algis Budrys.

Three-time winner of the coveted Hugo, science-fiction's Oscar; voted the best sf magazine in the world. IF's regular authors include: Keith "Retief" Laumer, Andre Norton, C. C. MacApp, Mack Reynolds, Roger Zelazny, Samuel R. Delany, Philip José Farmer. Features: The Reading Room, controversial book reviews by Lester del Rey. Hue and Cry where the readers praise or blast the editors, writers and artists—and where the editors, writers and artists blast back.

READ



EVERY MONTH

60¢

December, 1969 Vol. 19, No. 10 Issue 143

ALL NEW STORIES

Ejler Jakobsson, Editor Frederik
Judy-Lynn Benjamin, Managing Editor Lester de
L. C. Murphy, Circulation Director Franc L.
Jack Gauahan, Associate Art Director

NOVEL ETTE

Frederik Pohl, Editor Emeritus Lester del Rey, Feature Editor Franc L. Roggeri, Art Director Director

ANCIENT, MY ENEMY, Gordon R. Dickson	4
THE SEEDS OF GONYL (Conclusion), Keith Laumer	114
SHORT STORIES	
NOW NO ONE WAITS, Neil Shapiro	40
WHAT TIME WAS THAT?, Barry Malzberg	55
HEROES DIE BUT ONCE, Norman Spinrad	62
THE NEW THING, John BrunnerIN THE BEGINNING, Glenn Chang	
	108
SPECIAL SCIENCE FEATURE	\neg
THE STORY OF OUR EARTH, WILLY LEY 9	9
FEATURES	
HUE AND CRY: Reader's Write—and Wrong	2
EDITOR'S PAGE	3
SF CALENDAR	86
READING ROOM: Book Reviews, Lester del Rev	

Cover by GAUGHAN, suggested by ANCIENT, MY ENEMY

Arnold E. Abramson, Publisher

Bernard Williams, Associate Publisher

IF is published monthly by Universal Publishing & Distributing Corporation, Arnold E. Abramson, President. Main offices: 235 East 45 Street, New York, N.Y. 10017. 60¢ per copy. 12-issue subscription: \$6.00 in the United States, elsewhere \$7.00. Second class postage paid at New York, N.Y. and additional mailing offices. Copyright © 1969 by Universal Publishing & Distributing Corporation under International, Universal and Pan-American Copyright Conventions. All rights reserved. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction and any similarity between characters and actual persons is coincidental. Title registered U.S. Patent Office. Printed in U.S.A. The Company also publishes Award Books, Nova Books, Tandem Books (United Kingdom), Vocational Guidance Manuals, Golf Magazine, Golfdom, Ski, Ski Business, Ski Area Management, Home Garden, The Family Handyman.



Readers write—and wrong!

GOOD READERS: Did you ever get a letter from a guy who doesn't quite believe his senses—who keeps trying to look behind everything he sees and listens for hidden meanings in all he hears? Who titters wetly when he talks? I've just read one of those for about the fifth time, trying to put it into printable shape and now I have it. But I can't bring myself to print it —for his sake and mine.

But I'll answer it. The writer admits to being "a bit suspicious" because transfer of GALAXY and IF to new ownership inevitably led to certain schedule and other complications. Despite repeated assurances that changes of date on the cover and a delayed issue did not mean that he would get fewer consecutive copies than his subscription called for, he has decided to buy us on the newsstands. That's okay. We're ahead when you buy on the stands-you're ahead when you subscribe. Come back when you're ready and your mind's at rest.

The rest of the letter has no particular pertinence—so we file it in the

round and go on. I've saved this month's space specifically for readers concerned with IF | GALAXY's change of address and management. Most have rolled nicely with the punches right along with us.

I particularly like the following:

Dear Mr. Jakobsson:

Seeing as how Hue and Cry has been miraculously preserved in the Great Changeover, I thought that I would be one of the readers to "Write —or Wrong."

And believe me, I really don't know what to say. We really haven't seen exactly what your tastes are in sf. Makes it sorta hard on prospective writers, don't it?

I must say, though, that from what I have heard, you seem to have good taste. A friend of mine says of the magazine you originally edited: "It usually published stories of ASTOUNDING quality—but which Campbell didn't like." If the rates are going to be better now that you are in

(Please turn to page 155)

EDITOR'S PAGE

I anticipate great, rollicking good times for all of us in the next decade or so, an anticipation tempered only by a minor frustration. As the old saying goes: all that blood in the gutter and me without a spoon.

The springboard for my optimism is an editorial by John W. Campbell (Analog, October, 1969) and if you haven't already seen a copy, don't bother. The salient points are covered here and in the November Galaxy, now at your newsstands. And the December Galaxy will bring you a brilliant novel by T. J. Bass, complete in one issue, of an Earth Society dominated by four-toed Nebishes, who are curiously—if unintentionally—evocative of Mr. Campbell's docile Scots.

Mr. Campbell argues for a genetic study of "differences" in intelligence in U.S., based on skin color, Black and White are the words he usesand correctly. Considering all the places where George Washington and other prominent Caucasoids—some of them Scots-have slept, to call today's Afro-Americans a race would be genetically fallacious. And there is the embarrassing factor of the founder of the NAACP, a white-skinned, blueeved blond named White, whom some naive Caucasoids witlessly invited to attend lynchings of Negroes. Mr. White, by our genetics a Negro and by Mr. Campbell's White "Scholarly" standards a brilliantly successful novelist and newspaperman, wrote what many persons consider the first honest, though fairly devastating, analyses of Caucasoid "success" recorded.

Mr. Campbell obviously must claim him on the basis of color-success—though the late Walter Francis White would undoubtedly object wildly.

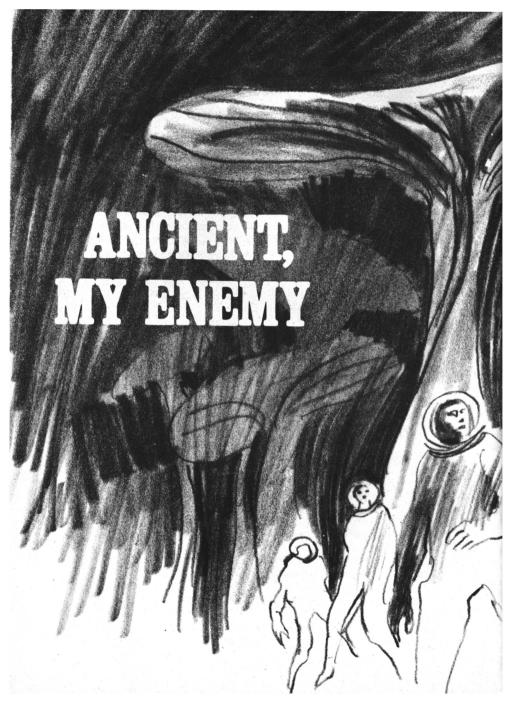
Skintelligence? Make sense?

One is tempted to wonder what planet Mr. Campbell inhabits. After mentioning the individual achievements of a couple of Scots as proof adaptability he writes. trouble is, today every effort is being made to suppress any study of difference between Black and White . . . " Such as, Mr. Campbell fails to point out, Chicago's Black Surgeon Daniel Hale Williams' successful open-heart surgery—the first by any surgeon anywhere in the world on a human being-during the latter part of the nineteenth century. One difference Dr. Williams' skin color made was that until recently he was denied recognition.

And I suppose that in these inflated times nearly everyone knows at least a brace of millionaires. Mine happen to have high IQs—one has won international recognition as an artist and a philanthropist in support of education and minorities—and both admit to amassing their piles by understanding money. Mr. Campbell cites a millionaire "with a tested IQ of 85" whose "solid reputation for unswerving honesty has helped him build his contracting business."

On what bleak and lying world is honesty priced so high?

Mr. Campbell is made of strong stuff. On his planet I would rapidly become paranoid. —JAKOBSSON





GORDON R. DICKSON

He had hunted aliens on many planets. Now he had to track down the deadliest—himself! THEY stopped at the edge of the mountains eight hours after they had left the hotel. The day was only a dim paling of the sky above the ragged skyline of rock to the east when they set up their shelter in a little level spot—a sort of nest among the granitic cliffs, ranging from fifty to three hundred meters high, surrounding them.

With the approach of dawn the Udbahr natives trailing them had already begun to seek their own shelters, those cracks in the rock into which they would retreat until the relentless day had come and gone again and the light of the nearer moon called them out. Already holed up high among the rocks, some of the males had begun to sing.

"What's he saying? What do the words mean?" demanded the girl graduate student, fascinated. Her name was Willy Fairchild and in the fading light of the nearer moon she showed tall and slim, with short whitish-blond hair around a thin-boned face. Kiev Archad shrugged. He listened a moment.

He translated:

You desert me now, female
Because I am crippled.
And yet all my fault was
That I did not lack courage.
Therefore I will go now to the
high rocks to die,
And another will take you.
For what good is a warrior
Whose female forsakes him?

Kief stopped translating.
"Go on," said Willy. The song was still mournfully falling upon them from the rocks above.

"There isn't any more," said Kiev. "He just keeps singing it over and over again. He'll go on singing until it's time to seal his hole and keep the heat from drying him up."

"Oh," said Willy. "Is he really crippled, do you think?"

Kiev shrugged again.

"I doubt it," he said. "If he were really hurt he'd be keeping quiet, so none of the other males could find him. As it is, he's probably just hoping to lure another one of them close—so that he can kill himself a full meal before the sun rises."

She gasped.

He looked at her. "Sorry," he said. "If you weren't printed with the language, maybe you weren't printed with the general info—"

"Like the fact they're cannibals? Of course I was," she said. "It doesn't disturb me at all. Cannibalism is perfectly reasonable in an environment like this where the only other protein available is rock rats—and everything else, except humans, is carbohydrates."

She glanced at one of the several moonplants growing like outsize mushrooms from the rocky rubble of the surface beside the shelter's silver walls. They had already pulled their petals into the protection of horny overhoods. But they had not yet retreated into the ground.

"After all," she said into his silence, "my field's anthropropathic history. People who disturb easily just don't take that up for a study. There were a number of protein-poor areas back on Earth and so-called primitive local people became practical cannibals out of necessity."

"Oh," said Kiev. He wriggled his wide shoulders briefly against the short pre-dawn chill. "We'd better be getting inside and settled. You'll need as much rest as you can get. We'll have to strike the shelter so as to start our drive at sunset."

"Sunset?" She frowned. "It'll still be terribly hot, won't it? What drive?"

He turned sharply to look at her.

"I thought—if you knew about their eating habits—"

"No," she said, interested. "No one said anything to me about drives."

"We've been picking up a gang of them ever since we left the hotel," he said. "And we're protein, too, just as you say. Or at least, enough like their native protein for them to hope to eat us. Sooner or later, if there get to be enough of them, they'll attack—if we don't drive them first."

"Oh, I see. You scare them off before they can start something."

"Something like that—yes." He turned, ran his finger down the closure of the shelter and threw back the flap. "That's why Wadjik and Shant came this far with us—so we could have four men for the drive. "Come on, we've got to get inside."

She went past him into the shelter.

INSIDE, Johnson and the other prospecting team of Wadjik and Shant—who would split with them next evening—were already cozy. Johnson was hunched in his thermal sleeping bag, reading. Wadjik and Shant were at a card table playing bluet. Johnson turned his dark face to Kiev and Willy as they came in.

He said, "I laid your bags out for you—beyond the stores."

"Regular nursemaid," said

Wadjik without looking up from his cards.

"Wad," said Johnson, quietly.
"You and Shanny can shelter up separately if you want." His bare arms and chest swelled with muscle above the partly open slit of his thermal bag. He was not as big as Wadjik or Kiev but he was the oldest and knew the mountains better than any of them.

"Two more cards," said Wadjik looking to Shant.

The gray-headed man dealt.

Kiev led the way around the card table. Two unrolled thermal bags occupied the floor space next to the entrance to the lavatory partition that gave privacy to the shelter's built-in chemical toilet. Kiev gave the one nearest to the partition to Willy and unrolled the other next to the pile of stores.

The pile was really not much as a shelter divider. By merely lifting himself on one elbow, once he was in his bag, Kiev was able to see the other three bags and Johnson, reading. The card players, sitting up at their table, could look down on both Kiev and Willy—but, of course, once it really started to heat up, they would be in their sacks too.

Kiev undressed within his thermal bag, handing his clothes out as he took them off and keeping his back turned to the girl. When at last he turned to her he saw that, while she was also in her bag, she still wore a sort of light blouse or skivvy shirt—he had no idea what the proper name for it was.

"That's all right for now," he said, nodding at the blouse. "But later on you'll be wanting to get completely down into the bag for coolness, anyhow, so it won't matter for looks. And any kind of cloth between you and the bag's inner surface cuts its efficiency almost in half."

"I don't see why," she answered stiffly.

"They didn't tell you that either?" he asked. "Part of the main idea behind using the thermal bag is that we don't have to carry too heavy an air-conditioning unit. If you take heat from anything, even a human body, you've got to pump it somewhere else. That's what an air-conditioning unit does. But these bags are stuffed between the walls with a chemical heat-absorbent—"

He went on, trying to explain to her that the bag could soak up the heat from her naked body over a fourteen-hour period without getting so full of heat it lost its cooling powers. But the lining of the bag was built to operate in direct contact with the human skin. Anything like cloth in between caused a build-up of stored heat that would overload the bag before the fourteen hours until cool-off was over. It was not just a matter of comfort—she would be risking

heat prostration and even death.

She listened stiffly. He did not know if he had convinced her or not. But he got the feeling that when the time finally came she would get rid of the garment. He lay back in his own bag, closed his eyes and tried to get some sleep. In another four hours sleep would be almost impossible even in the bags.

Wadjik and Shant were fools with their cards. A man could tough out a drive with only a couple of hours of sleep; but what if some accident during the next shelter stop kept him from getting any sleep at all? He could be half dead with heat and exhaustion by the following cool-off, his judgment gone and his reflexes shot. One little bit of bad luck could finish him off. Characters like Johnson had survived in the mountains all these years by always keeping in shape. After four trips into the grounds Kiev had made up his mind to do the same thing.

H^E SLEPT. The heat woke him.

He found he had instinctively slid down into his bag and sealed it up to the neck without coming fully awake. Opening his eyes now, feeling the blasting dryness and quivering heat of the air against his already parched face, he first pulled his head down com-

pletely into the bag and took a deep breath. The hot air from above, pulled momentarily into the bag, cooled on his dust-dry throat and mouth. He worked some saliva into existence, swallowed several times and then, sitting up, pushed his head and one arm out of the bag. He found his salve and began to grease his face and neck.

He glanced over at Willy as he worked. She was lying muffled in her thermal bag, watching him, her features shining with salve.

"You take that shirt off?" he asked

She nodded briefly. He looked over past the deserted card table at the three other thermal bags. Johnson, encased to his nose, slept with the ease of an old prospector, his upper face placidly shining with salve. Shant was out of sight in his bag—all but his close-cut cap of gray hair. Wadjik was propped up against a case from the stores, his heavy-boned face under its uncombed black hair absent-eyed, staring at and through Kiev.

"Wad," said Kiev, "better get Shanny up out of that. He'll overload his sack in five hours if he goes to sleep breathing down there like that."

Wadjik's eyes focused. He grinned unpleasantly and rolled over on his side. He bent in the middle and kicked the foot of his

thermal bag hard against the side of Shant's. Shant's head popped into sight.

"You go to sleep down there," Wad snarled, "and you won't live until sunset."

"Oh—sure, Wad. Sorry," Shant said, quickly

A short silence fell. Wadjik had gone back to staring through unfocused eyes. Johnson woke but the only sign he gave was the raising of his eyelids. He did not move in his bag. Around them all, now, the heat was becoming a living thing—an invisible but sentient presence, a demon inside the shelter who could be felt growing stronger almost by the second. The shelter's little airconditioner hummed, keeping the air about them moving and just below unbreathable temperature.

"Kiev," said Wadjik, suddenly.
"Was that old Hehog you and Willy were listening to out there, just before dawn?"

"Yes," said Keiv.

"This time we'll get him."

"Maybe," said Kiev.

"No maybe. I mean it, man."

"We'll see," said Kiev.

A movement came beside Kiev. Willy sat up in her bag.

"Mr. Wadjik—"

"Joe. I told you—Joe."

Wadjik grinned at her.

"All right. Joe. Do you mean you knew which Udbahr male that was—the one who was sing-

ing just before Kiev and I came in?"

"Sure. Didn't Kiev tell you?" Wadjik's eyes shifted for a moment to Kiev's face. "That's old Hehog you were listening to. He's picked off a couple of men in his time. And we've had him in two drives—and lost him in both."

"Lost him?"

"I mean, he got away." Wadjik stared at her. "Don't you know about drives, Willy? Didn't Kiev tell you?"

"He told me," said Willy. But I don't understand what you mean by got away. You couldn't very well keep him prisoner, could you? Or do you do that for a while after a drive?"

"Prisoner?"

Wadjik stared at her. Suddenly he gave a short, throaty laugh.

"Prisoner? Did Kiev tell you we kept them prisoners?" He jolted out another laugh. "Of course we don't keep them prisoners. We kill them. That's what a drive's for—to kill off the ones with guts enough to lead an attack at us. Prisoners?"

Willy stared at him. Slowly she turned her face to stare at Kiev. Greased-up and outraged, she made a picture more ridiculous than accusing but plainly she did not realize that.

"Damn you, Wad," said Johnson calmly from his bag. "Shut up. You're making trouble."

WILLY lay down, withdrawing into her bag and turning her face away from the rest of them. Kiev drew himself down to the nose in his own sack. Silence and increasing heat held the interior of the shelter.

There was no talk for a couple of hours after Johnson's words and Kiev fell into a sort of doze in spite of the heat. But with the increasing temperature even this became an impossibility—which was a good thing. A sleeping man could instinctively pull his head down into the coolness of the thermal bag and, by breathing inside it, overload it in a few hours.

Kiev came out of his semi-coma in the middle of a furious whispered argument going on across the ten feet of shelter space between Wadjik and Willy.

"...you're all alike, you—"
Wadjik swore at her. "Call a
monkey a man. Call him better
than a man. It doesn't matter to
you that real men get killed by
the monkeys. All that matters is
—do the monkeys get killed.
You—"

"Shut up." Willy did not use obscenity but she did not seem hampered by the lack of it in describing Wadjik to himself. She went on ragingly while he was still talking in that instinctive, venomous whisper which was easiest on both their heatdried throats. "Don't you know why

I'm going to these prospecting grounds of yours? Don't you know about the remains of a city there built by these same Udbahrs?"

"Sure, I've seen it. What of

"I'm telling you what of it! They had a high level of civilization once—or at least a higher level than now. But that doesn't mean anything to you—"

"They degenerated. That's what it means to me. They're cannibal degenerates. And you want me to treat them like human beings—"

"I want you to treat them like intelligent beings—which they are. Even an uneducated, brutal, stupid man like you ought to understand—"

"Listen to who's talking. The kid historian speaks. I thought you were still in school, writing a thesis. You didn't tell me you'd been at this for years—"

"I may be only a graduate student but I've learned 'a few things you never did—"

Looking past Wadjik's heat-reddened face, flaming under its salve, Kiev saw the upper part of Johnson's countenance beyond. Johnson seemed to be calmly listening. There was nothing to do, Kiev knew, but listen. It was the heat—the sickening intoxication of the deadly heat in the shelter—that was making the argument. When the heat reached its

most relentless intensity only the instinct keeping men in their thermal bags stopped them from killing each other.

Wadjik finally broke off the argument by drawing down into his bag and rolling across the floor of the shelter to the lavatory door. He pressed the bottom latch through his bag, opened the door, rolled inside and shut himself off from the rest of the room. Willy fell silent.

Kiev looked sideways at her.

"It's no use," he whispered to her. "Save your energy."

She turned and glared at him.

"And I thought you were different!" she spat and slid down, head and all, into her bag.

Kiev backed into his own cocoon. Fueled by the feverishness induced by the heat, his mind ran on. They were all a little crazy, he thought, all who had taken up prospecting. Crazy—or they had something to hide in their pasts that would keep them from ever leaving this planet.

But a man who was clean elsewhere could become rich in five years if he kept his head—and kept his health—both on the trips and back in civilization. On Kiev's first trip into the mountains, two years ago, he had not known what he was after. Just a lot of money, he had thought, to blow back at the hotels. But

now he knew better. He was going to take it cool and calm, like Johnson—who could never leave the planet.

Kiev meant to keep his own backtrail clear. And he would leave when the time came with enough to buy him citizenship and a good business franchise back on one of the Old Worlds. He had his picture of the future clear in his mind. A modern home on a settled world, a steady, good income. Status. A family.

He had seen enough of the wild edges of civilization. Leave the rest of it to the new kids coming out. He was still young but he could look ahead and see thirty up there waiting for him.

His thoughts rambled on through the deadly hours as his body temperature was driven slowly upward by the heat. In the end his mind rambled and staggered. He awoke suddenly.

He had passed from near-delirium into sleep without realizing it. The deadly heat of mid-afternoon had broken toward cooloff and with the first few degrees of relief within the shelter he, like all the rest, had dropped immediately into exhausted slumber. By now—he glanced at the wristwatch on the left sleeve of his outergear—the hour was nearly sunset.

He looked about the shelter. Willy, Shant, Wadjik, Johnson were still sleeping. "Hey," he croaked at them, speaking above a whisper for the first time in hours. "Time for the drive. Up and at 'em."

TN FORTY-FIVE minutes they were all dressed, fed and outside, with the shelter folded and packed, along with the other equipment, on grav-sleds ready to travel. Wadjik and Shant took off to the north, towing their own grav-sled. Kiev and Johnson were left with their sled and the girl. They looked at her thoughtfully. The sun was already down below the peaks to the west. But threequarters of the sky above them was still white with a glare too bright to look at directly and the heat, even with outersuit and helmet sealed, made every movement a new cause for perspiration. The climate units of the suits whined with their effort to keep the occupants dry and cool.

"I'm not going to join you," Willy snapped. "I won't be a party to any killing of the natives."

"We can't leave you behind," Kiev answered. "Unless you can handle a gun—and will use it. If any of the males break away from the drive they'll double back and you'd make an easy meal."

Inside the transparent helmet her face was pale even in the heat. "You can stick with the grav-

"You can stick with the gravsled," said Kiev. "You don't have to join the drive. Just keep up."
She did not look at him or

speak. She was not going to give him the satisfaction of an answer, he thought.

"Move out, then," said Johnson.

They began to climb the cliffs toward the brightness in the sky, the grav-sled trailing behind them on slave circuit, its load piled high. Willy, looking small in her suit, trudged behind it. Under the crown of the cliffs they turned about, deployed to cover both sides of the clearing below and began their drive.

They worked forward, each man firing into every rock niche or cranny that might have an Udbahr sealed up within it. Deep, booming sounds—made by the air and moisture within each cranny exploding outward—began to echo between the cliffs. Soon a shout came over Kiev's suit intercom in Johnson's deep voice.

"One running! One running! Eleven o'clock, sixty meters, down in the cleft there."

Kiev jerked his gaze ahead and caught a glimpse of an adultsized, humanlike, brown figure with a greenishly naked, round skull and large tarsierlike eyes, vanishing up a narrow cut.

"No clothing," called Kiev over the intercom. "Must be a female, or a young male." "Or maybe old Hehog playing it incognito—" Johnson began but was interrupted.

"One running! One running!" bellowed Wadjik's voice distantly over the intercom. "Two o'clock, near clifftop."

"One running! Deep in the pass there at three o'clock!" chimed in Johnson, again. "Keep them moving!"

The sounds of the blasting attack now were routing out Udbahrs who had denned up for the day. Most were females or young, innocent of either clothing or weapons. But here and there was a heavier, male figure, running with spear or throwing-stick in hand and wearing anything from a rope of twisted rock vines or rat furs around his waist to some tattered article of clothing, stolen, scavenged—or just possibly taken as a war prize—from the dead body of a human prospector.

The males were slowed by their insistence on herding the females and the young ahead of them. They always did this, even though nearly all prospectors made it a point to kill only the grown males—the warriors who were liable to attack if left alive. The pattern was old, familiar—one of the things that made most prospectors swear the Udbahrs had to be animal rather than intelligent. The females and young were gathering into a herd as they ran,

joining up beyond the screen of the males following them. When the herd was complete—when all who should be in it had been accounted for—the males would choose their ground, stop and turn to fight and hold up the pursuers while the females and young escaped.

THEY always reacted the same way, no matter whether the tactic were favorable or not in the terrain where they were being driven, Kiev thought suddenly. Everything the Udbahrs did was by rote. And strange to creatures who reasoned like men. No matter what Willy said, it was hard to think of them as any kind of people-let alone people with whom you could become involved. For example, if he, Johnson, Shant and Wadjik quit driving the natives now and pulled back, the Udbahr males would immediately turn around and start trying to kill each other. It was only when they were being driven or were joining for an attack on prospectors that the males had ever been known to cooperate.

So, as it always went, it went this sunset hour on the Udbahr Planet. By the time the last light of the day star was beginning to evaporate from the western sky and the great ghostly circle of the nearer moon was beginning to be visible against a more reasonably lighted sky, some half dozen of the Udbahr males disappeared suddenly among the boulders and rocks at the mouth of a pass down which the herd of females and young were vanishing.

"Hold up," Johnson gasped over the intercom. "Hold it up. They've forted. Stop and breathe."

Kiev checked his weary legs and collapsed into sitting position on a boulder, panting. His body was damp all over in spite of the efforts of his suit to keep him dry. His head rang with a headache induced by exhaustion and the heat.

The Udbahr males hidden among the rocks near the mouth of the pass began to sing their individual songs of defiance.

Kiev's breathing eased. His headache receded to a dull ache and finally disappeared. The last of the daylight was all but gone from the sky behind them. The nearer moon, twice as large as the single moon of Earth by which all moons were measured, was sharply outlined, bright in the sky, illuminating the scene with a sort of continuing twilight.

"What're you waiting for?" Willy's voice said dully in his earphones. "Why don't you go and kill them?"

He turned to look for her and was astonished to find her, with the grav-sled, almost beside him. She had sat down on the ground, her back bowed as if in deep discouragement, her face turned away and hidden from him within the transparent helmet.

"They'll come to us," he muttered without thinking.

Suddenly she curled up completely into a huddled ball of silver outerwear suit and crystalline helmet. The sheer, unutterable anguish of her pose squeezed at his throat.

He dropped down to his knees beside her and put his arms around her. She did not respond.

"You don't understand—" he said. And then he had the sense to tongue off the interphone and speak to her directly and privately through the closeness of their helmets, alone. "You don't understand."

"I do understand. You like to do this. You like it."

Her voice was muffled, dead.

His heart turned over at the sound of it and suddenly, unexpectedly, he realized that he had somehow managed to fall in love with her. He felt sick inside. It was all wrong—all messed up. He had meant to go looking for a woman—but eventually, after he'd made his stake and gone back to some civilized world. He had not planned anything like this involvement with a girl he had known only five days and who had all sorts of wild notions

about how things should be. He did not know what to do except kneel there, holding her.

"If you don't like it why do you do it?" her voice said. "If you really don't like it—then don't do it. Now. Let these go."

"I can't," he said.

The singing broke off suddenly in a concerted howl from the Udbahr males, mingled with a triumphant cry over the intercom from Wadjik.

"Got one." And then: "Look out. Stones."

Kiev jerked into the shelter of a boulder, dragging Willy with him. Two rocks, each about half the size of his fist, dug up the ground where they had crouched together.

"You see?"

He pushed her roughly from him and drew his sidearm. Leaning around the boulder, he searched the rocks of the slope below the pass, watching the vernier needle of the heat-indicator slide back and forth on the weapon's barrel. It jumped suddenly and he stopped moving.

He peered into the gun's rear sights, thumbing the near lens to telescopic. He held his aim on the warm location, studying the small area framed in the sight screen. Suddenly he made it out—a tiny patch of brown between a larger boulder and a bit of upright, broken rock.

He aimed carefully.

"Don't do it."

He jerked involuntarily, sending his beam wide of the mark at the sound of her voice. A patch of bare gravel boomed and flew. The bit of brown color disappeared from between the rocks. He leaned the front of his helmet wearily against the near side of the boulder before him.

"Damn you," he said helplessly. "What are you doing to me?"
. "I'm trying to save you," she said fiercely, "from being a murderer."

Another stone hit the top of the boulder behind which they hid and caromed off over their heads.

"How about saving me from that?" he said emptily. "Don't you understand? If we don't kill them they'll try to kill us—"

"I don't believe it." She, too, had shut off her intercom. Her voice came to him distantly through two thicknesses of transparent material. "Have you ever tried? Has anyone ever tried?"

Another sudden volley of stones was followed by more dull explosions as the heat of the human weapons found and destroyed live targets. Shant and Wadjik were howling in triumph and shooting steadily.

"We got five—they're on the run." Shant whooped. "Kiev! Johnson! They're on the run."

The explosions ceased. Kiev

peered cautiously around his boulder, stood up slowly. Wadjik, Shant, and Johnson had risen from positions in a semicircle facing the distant pass.

"Any get away?" Johnson was asking.

"One, maybe two—" Shant cut himself short. "Look out—duck. Twelve o'clock, fifty meters."

At once Kiev was again down behind his boulder. He dragged down Willy, tongued on his intercom.

"What is it?"

"That chunk of feldspar about a meter high—"

LEV looked down the slope until his eyes found the rock. A glint that came and went behind and above it, winking in the waxing light of the nearer moon that now seemed as bright as a dull, cloudy day back on Earth. The flash came and went, came and went.

Kiev recognized it presently as a reflection from the top curve of a transparent helmet bobbing back and forth like the head of someone dancing just behind the boulder. A male Udbahr's voice began to sing behind the rock.

Man with a head-and-a-half, come and get your half-head. Man with a head-and-a-half Come so I can kill you. Ancient, my enemy.

Ancient, my enemy.

Ancient, my enemy—

"Hehog," snapped Johnson's voice over the helmet intercom.

Silence held for a minute. Then Wadjik's voice came thinly through the phones.

"What are you waiting for, Kiev?"

Kiev said nothing. The transparent curve of the helmet top, rose again, bobbed and danced behind the boulder. It danced higher. Within it now was a bald, round, greenish skull with reddish, staring tarsier eyes and—finally revealed—the lipless gash of a fixedly grinning mouth.

"What is it? What's Wadjik mean?" Willy asked.

Her voice rang loud in Kiev's helmet phones. She had reactivated her intercom.

"It's Hehog down there," Kiev said between stiff jaws. "That's my helmet he's wearing. He's had it ever since he first took it off me, my first trip into the mountains."

"Took it off you?"

"I was new. I'd never been on a drive before," muttered Kiev. "I got hit in the chest by a stone, had the wind knocked out of me. Next thing I knew Hehog was lifting off my helmet. My partners came up shooting and drove him off."

"What about it, Kiev?" The voice was Johnson's. "Do you want us to spread out and get behind him? Or you want to go

down and get the helmet by yourself?"

Kiev grunted under his breath, took his sidearm into his left hand and flexed the cramped fingers of his right. They had been squeezing the gunbutt as if to mash it out of all recognizable shape.

"I'm going alone," he said over the intercom. "Stay back."

He got his heels under him and was ready to rise when he was unexpectedly yanked backward to the gravel. Willy had pulled him down.

"You're not going?"

He tongued off his intercom, turned and jerked her hand loose from his suit.

"You don't understand," he shouted at her through his helmet. "That's the trouble with you. You don't understand a damn thing."

He pushed her from him, rose and dived for the protection of a boulder four meters down the slope in front of him and a couple of meters to his right.

A flicker of movement came from below as he moved—the upward leap of a throwing stick behind the rock where Hehog hid. Kiev glimpsed something dark racing through the air toward him. A rock fragment struck and burst on the boulder face, spraying him with stone chips and splinters.

Reckless now, he threw himself

toward the next bit of rocky cover farther down the slope. His foot caught on a stony outcropping in the shale. He tripped and rolled, tumbling helplessly to a stop beside the very boulder behind which Hehog crouched, throwing stick in one hand, stone-tipped spear in the other.

Kiev sprawled on his back. He stared helplessly up into the great eyes and humorlessly grinning mouth looming over him inside the other helmet less than an arm's length away. The spear twitched in the brown hand—but that was all.

Hehog stared into Kiev's eyes. Kiev was aware of Willy and the others shouting through his helmet phones. A couple of shots blasted grooves into the bouldertop above his head. And with a sudden, wordless cry Hehog bounded to his feet and dodged away among the boulders toward the pass.

The bright beams of shots from the human guns followed him but lost him. He vanished into the pass.

KIEV climbed to his feet, shaking inside. He awoke to the fact that he was still holding his sidearm. A bitter understanding broke upon him with the hard, unsparing clarity of an Udbahr Planet dawn.

He could have shot Hehog at

pointblank range during the moment he had spent staring frozenly at the spear in Hehog's hand and at the great-eyed, grinning head within the helmet. Hehog had to have seen the gun. And that would have been why he had not tried to throw the spear.

Kiev cursed blackly. He was still cursing when the others slid down the loose rock of the slope to surround him.

"What happened?" demanded Shant.

"He—" Kiev discovered that his intercom was still off. He tongued it on. "He got away."

"We know he got away," said Wadjik. "What we want to know is how come?"

"You saw," Kiev snapped. "I fell. He had me. You scared him off."

"He had you? I thought you had him, damn it!"

"All right, he's gone," Johnson said. "That's the main thing. Leave the other bodies for whoever wants to eat them. We've had a good drive. We'll split up, now." He looked at Wadjik and Shant. "See you back in civilization."

Wadjik cursed cheerfully.

"Team with the heaviest load buys the drinks," he said. "Come on, Shanny."

The two of them turned away, dragging their loaded grav-sled through the air behind them.

KIEV, WILLY AND JOHNson reached Dead City a good two hours before dawn. They had time to pick out one of the empty, windowless houses, half-cave, half building, to use as permanent headquarters. Tomorrow night they would cut stone to fill the open doorway but for today the shelter, fitted doublethick into the opening, would do well enough.

No singing came from the surrounding cliffs. Johnson crawled in. Kiev lingered to speak to Willy.

"You don't have to worry." The words were not what he had planned to say. "The Udbahrs are scared of this place."

"I know." She did not look at him. "Of course. I know more about this city and the Udbahrs than even Mr. Johnson does. There's a taboo on this place for them."

"Yes." Kiev looked down at his gloved right hand and spread the fingers, still feeling the hard butt of his sidearm clamped inside them. "About earlier tonight, with Hehog—"

"It's all right," she said softly, looking unexpectedly up at him. Her intercom was off and her voice came to him through her helmet. In the combination of the low-angled moonlight and the first horizon glow of the dawn, her face seemed luminescent. "I

know you did it for me—after all."

He stared at her.

"Did what?" ·

She still spoke softly: "I know why you let that Udbahr male live. It was because of what I'd said, wasn't it? But you need to be ashamed of nothing. You simply haven't gone bad inside, like the others. Don't worry—I won't tell anyone."

She took his arm gently with both hands and lifted her head as if—had they been unhelmeted—she might have kissed his cheek. Then she turned and disappeared into the cave.

He followed her after some moments. A small filter panel in the shelter had let a little of the terrible daylight through for illumination. Here artificial lighting had to be on. Kiev saw by it that she had piled stores and opened some of her own gear to set up a four-foot wall that gave her individual privacy.

He laid out his own thermal bag. The heat was quite bearable behind the insulation of the thickwalled building as the day began. Kiev fell into a deep, exhausted sleep that seemed completely dreamless.

He awoke without warning. Instantly alert, he rose to an elbow.

The light was turned down. He heard no sound from Willy. Johnson snored.

Kiev remained stiffly propped on one elbow. A feeling of danger prickled his skin. He found his ears were straining for some noise that did not belong here.

He listened.

For a long moment he heard only the snoring and beyond it silence. Then he heard what had awakened him. It came again, like the voice of some imprisoned spirit—not from beyond the wall but from under the stone floor on which he lay.

Man with a head-and-a-half, come and get your half-head.
Man with a head-and-a-half,
Come, so I can kill you.
Ancient, my enemy.
Ancient, my enemy

The singing broke off suddenly. Kiev jerked bolt upright and the thermal bag fell down around his waist. Suddenly more loudly through the rock, and nearer, the voice echoed in the dim interior of the stone building:

Only for ourselves is the killing of each other!

Man with a head-and-a-half, come and get your half-head.

Man with a head-and-a-half...

THE singing continued. Fury uprushed like vomit in Kiev. He swore, tearing off his thermal bag and pawing through his piled

outerwear. His fingers closed on the butt of the weapon. He jerked it clear, aimed it at the section of floor from which the singing was coming and pressed the trigger.

Light, heat and thunder shredded the sleeping quiet of the dimly lit room. Kiev held the beam steady, a hotter rage inside him than he could express with the rock-rending gun. He felt his arm seized. The sidearm was torn from his grip. He whirled to find Johnson holding the weapon out of reach.

"Give me that," Kiev said thickly.

"Wake up," Johnson said, low-voiced. "What's got into you?"

"Didn't you hear?" Kiev shouted at him. "That was Hehog —Hehog! Down there!"

He pointed at the hole with its melted sides, half a meter deep into the floor of the building.

"I heard," said Johnson. "It was Hehog, all right. There must be tunnels under some of these buildings."

Willy chimed in.

"But Udbahrs don't-"

Kiev and Johnson turned to see her staring at them over the top of her barricade. Kiev became suddenly conscious that, like Johnson, he was completely without clothes.

Willy's face disappeared abruptly. Kiev turned back to look at the hole his gun had burned in the stone. It showed no breakthrough into further darkness at the bottom.

"All right," he said shakily. "I'm sorry. I woke up hearing him and just jumped—that's all. We can shift to another building tomorrow. And sound for tunnels before we move in."

Johnson turned and returned to his thermal bag. Kiev resumed his cocoon. He lay on his back, hands behind his head, staring up at the shadowy ceiling.

... Ancient, my enemy...ancient, my enemy...

The memory of Hehog's chant continued to run through his head.

You and me, Hehog. I'll show you, Udbahr...

After some time he fell asleep.

THEY moved camp the next night, as soon as the sun was down. Kiev and Johnson quarried large chunks of rock from the wall of an adjoining building, melted them into place to fill up the new door opening, except for the entrance unit, which was set up double as a heat lock and fitted into place.

Now the shelter air-conditioner could keep the whole interior of the new building comfortable all day long. The night was half over by the time they finished.

Kiev and Johnson had some four hours left to trek to their prospecting area. The gold ore deposits in the neighborhood of Dead City were almost always in pipes and easily worked out in a few days by men with the proper equipment.

Kiev hesitated.

"I'll stay," he said. "With Hehog around, someone's got to stay with Miss Fairchild."

Johnson regarded him thoughtfully.

"You're right. If we leave her here alone Hehog's sure to get her. And who would sell us gear for our next trip if word got out about how we left her to be killed?" He hesitated. "Tell you what—we'll draw straws."

Kiev said, "I'll stay. Drop back in a week. I'll tell you then if I need you to take over."

Johnson nodded. He turned away and began his packing—food, weapons, equipment, a water drill for tapping the moon flower root systems. Also, a breathing membrane for sealing the caves they would be denning up in by day. Kiev, squatting, making a final check of the seal around the entrance, saw a shadow fall across a seam he was examining.

He stood up, turned and saw Willy down the street, taking solidographs of one of the buildings. Johnson stood just behind him, equipment already on his backpack.

"We haven't had a chance to talk," Johnson said.

"No."

"Let me say now what I've wanted to say. Why don't you pack up and go back—and take the girl with you?"

"I've got my stake to make out here—like everybody else."

"You know there's more to the situation. Hehog's changed everything. Also, there's the girl—we both know what I mean. And there's something else—something I don't think you're aware of."

"What?"

"You've heard how sometimes the males—if they've just fed so they aren't hungry and there's only one of them around—will come into your camp and sit down to talk?"

Kiev frowned at him.

"I've heard of it," he said. "It's never happened to me."

"It's happened to me," said Johnson. "They ask you things that'd surprise you. Surprise you what they tell you, too. You know why Hehog's broken taboo and come right into Dead City?"

"Do you?"

Johnson nodded.

"There's a thing the Udbahrs believe in," Johnson said. "They figure that when they eat someone they eat his soul, too?"

"Sure," said Kiev. "And that soul stays inside them until they're

killed. Then, when they die, if no one else eats them right away, all the souls of all the bodies they've eaten in their lives fly loose and take over the bodies of pups too young to have strong souls of their own."

Johnson nodded. He tilted his head at the distant figure of Willy.

"You've been learning from her," he said.

"Her? As a matter of fact, I have," said Kiev. "But you were the one told me about Udbahr cannibalism—a year or more ago."

"Did I?" Johnson looked at him. "Did I tell you about Ancient Enemies?"

Kiev shook his head.

"Once in a while a couple of males get a real feud going. It's not an ordinary hate. It's almost a noble thing—if you follow me. And from then on the feud never stops, no matter how many times they both die. Every time one is killed and born again—when he grows up it's his turn to kill the other one. The next time the roles are reversed. You follow me?"

Kiev frowned.

"No."

"Figure both souls live forever through any number of bodies. They take turns killing each other physically." Johnson looked strangely at Kiev. "The only thing is that no soul ever remembers from one body to the next—they never know whose turn it is to be killed and which one's to be the killer. So they just keep running into each other until the soul of one of them tells him, 'Go!' Then he kills the other and goes off to wait to die."

Johnson stopped speaking. Kiev stared.

"You mean Hehog thinks he and I—he thinks we're these Ancient Enemies?"

"Night before last," said Johnson, "you and he were face to face, both armed—and neither one of you killed the other. Yesterday—while we were denned up—he showed up here in the Dead City where it's taboo for him to be. Being Ancient Enemies is the only thing that'd set him free of a taboo like that. What do you think?"

Kiev turned for a second look down the street at Willy.

"Hehog's not going to leave you alone if I'm right," said Johnson. "And he's smart. He might even get away with killing one or two of us so he could stay close to you. And the easiest one for him to kill would be that girl. And it's true what I said. We lose a human woman out here and no supplier's going to touch us with a ten-foot pole."

"Yeah," said Kiev.

"I'm not afraid of Hehog, myself. But I've got no place else to go. I plan to die out here some day—but not yet for a few trips. Take the girl and head back. Give up the mountains while you still can. Kiev—I mean it."

"You can't make us leave," Kiev said slowly.

"No," said Johnson. His face looked old and dark as weather-stained oak. "But you keep that girl here and Hehog'll get her. She doesn't know anything but books and she doesn't understand someone like Hehog. She doesn't even understand us." He took a step back. "So long, partner," he said. "See you in three nights—maybe."

He turned and walked away slowly, leaning forward against the weight of the pack, until he was lost among the rocks of the western cliffs.

Kiev turned and saw the small shape of Willy even farther down the street, still taking pictures.

HE CONTINUED to think for the next two days and nights, which were quiet. He spent most of his time studying the aerial maps of areas near Dead City he had planned to work during this trip. Actually he was getting his ideas in order for explanation to Willy, who seemed to be having the time of her life. She was measuring and photographing Dead City inch by inch, as excited over it as if it were one large Christmas present. She had

changed toward him, too, teasing him and doing for him, by turns.

Hehog did not sing from underground in the new building.

On the third night Kiev invited himself along on her work with the City.

He realized now that what Johnson had told him was true. Johnson's words had been the final shove he had needed to make up his mind. The fact that he and Willy had met less than a week ago meant nothing. Out here things were different.

He had worried about how he would bring up the subject of his future—and hers. But it turned out that he had no need to bring it up. It was already there. Almost before he knew it they were talking as if certain things were understood and taken for granted.

He said, "I've got at least five more trips to make to get the stake I need for a move back to the Old Worlds. You'd have to wait."

"But you don't need to keep coming back here," she said. "I know how you can make the rest of the money you need without even one more trip. I know because a publishing company talked to me about doing something like it. There's a steady market for information about humanoids like the Udbahrs. Books, lectures. Acting as industrial and economic consultant—"



He stared at her.

"I couldn't do anything like that," he said. "I'm no good with words and theories—"

"You don't have to be. All you have to do is tell what you've seen and done on these trips of yours. You'll collect enough on advance bookings alone for us to go back to any Old World you



want—after I get my doctorate, of course—and settle down there. Don't forget I've got my work, too. I'll be teaching." She stared at him eagerly. "And think of what you'll be achieving. Intelligent natives are being killed off or exploited on new worlds like this one simply because there's no local concern over them and be-

cause our civilization hasn't understood them enough to make the necessary concessions for them to accept it. You could be the one to get the ball rolling that could save the Udbahrs from being hunted down and killed off—"

"By people like me, you mean," he said, a little sourly.

"Not you. You haven't yet been infected with the sort of killing lust Wadjik and Shant and even Johnson—have."

"It isn't a lust. Out here you have to kill the Udbahrs to keep them from killing you."

She looked at him sharply.

"Yes-if you're a savage," she said. "As the Udbahrs are savages. I couldn't love an Udbahr. I could only love a man who was civilized—able to keep the savage part inside him chained up. That Ancient Enemy business Hehog sang at you—that's the way a savage thinks. I don't expect you not to have the psychological capacity to lust for killing-but if you're a healthy-minded man you can keep that sort of Ancient Enemy locked up inside you. You don't have to let him take vou over."

He opened his mouth to make one more stubborn effort to explain himself to her, then closed it again rather helplessly. He found a certain uncomfortable rightness in part of what she was saying. Although from that rightness she went off into left field somewhere to an area where he was sure she was wrong. While he groped for words to express himself the still air around him was suddenly torn by the sound of a gun-bolt explosion.

He found himself running toward the building they had set up as their headquarters, sidearm in his hand, the sound of Willy's voice and footsteps following him. The distance was not great and he did not slow down for her. Better if he made it first—or if she did not come at all until he knew what had happened.

He rounded the corner of the building and saw the shelter entrance hanging in blackened tatters. He dove past it. By some miracle the light was still burning against the ceiling but the interior it illuminated was a scene of wreckage. Concussion and heat from the bolt had torn apart or scorched everything in the place.

With a wild coldness inside him, he pawed swiftly through the rubble for whatever was usable. Two thermal sleeping bags were still in working condition, though their outer covering was charred in spots and stinking of burned plastic. Food containers were ripped open and their contents destroyed. The water drill was workable and most of one air membrane was untouched.

"What happened? Who did it? Kiev—"

HE AWOKE to the fact that Willy was with him again, literally pulling at him to get his attention. He came erect wearily.

"I don't know," he said, dully. "Maybe some prospector has gone out of his head entirely. Or—"

He hesitated.

"Or what?"

He looked at her.

"Or an Udbahr male has gotten hold of the gun of a dead prospector."

Her face thinned and whitened under the light of the overhead kamp.

"A dead-"

She did not finish.

"That's right," he said. "One of our people, it could be—Wad-jik, Shant or Johnson."

"How could a savage who knows only sticks and stones kill an experienced, armed man?"

Willy sounded outraged.

"All sorts of animals kill people." He felt sick inside, hating himself for not having set up at least a trigger wire to guard the building area. "We've got to get out of here. We can't spend another night in a building, anyway, without a shelter entrance."

"Where'll we go?"

"We'll head toward Johnson," Kiev said. "He isn't digging so far away that we shouldn't be able to make it before dawn—if he isn't dead."

They started out on the bearing Johnson had taken and soon left the city behind them. Fully risen moonflowers—some of them giants over three meters high—surrounded them. They were lost in a forest of strange, pale beauty, where by day there would only

be the bare, heat-blasted mountainside

"Aren't we likely to pass him and not even see him?" asked Willy.

"No," Kiev said absently. "He'll be following contours at a constant elevation. So are we. When he gets close enough, we'll hear static in our earphones."

He did not again mention the possibility of Johnson's being dead—partly because he wanted to be easy on himself.

They tramped on in silence. Kiev's mind was busy among the number of problems opened up by their present situation. After about an hour he heard the hiss of interference in his helmet phones that signaled the approach of another transmitting unit.

He stopped so suddenly that Willy bumped into him. He rotated his helmet slowly, listening for the maximum noise. When he found it, he spoke.

"Johnson? Johnson, can you hear me?"

"Thought it was you, Kiev." Johnson's voice came distorted and weakened by rocky distance. "The girl with you? What's up?"

"Somebody fired a gun into our building," said Kiev. "I scraped together a sort of maintenance kit out of what was left—but I'm carrying all the salvage."

"I see." Johnson did not waste breath on speculation. "Stop where you are and wait for me. We better, head back toward Wad's and Shanny's diggings as soon as we're together. No point your burning energy trying to meet me halfway."

"Right."

Kiev loosened his pack and sat down with his back to the trunk of a moonflower. Willy sat beside him. She said nothing and, busy with his own thoughts still, he hardly noticed her silence.

By the time Johnson found them Kiev had already worked out the new compass heading from their present location to the diggings where Wadjik and Shant had planned to work. A little over three hours of the night remained.

"Do you think we can make it before dawn?" Kiev asked as the three of them started out on the new heading. "You've been through that area before, haven't you?"

Johnson nodded.

"I don't know," he said. "It'll be faster going once the moon-flowers are down." He looked at Willy. "We'll be pushing on as fast as we can. Think you can keep up?"

"Yes," she said without looking at him. Her voice was dull.

"Good. If you start really to give out, though, speak up. Don't overdo it to the point where we have to carry you. All right?"

"Yes."

THEY continued their march. ■ Soon the moonflowers drawn in their petals until they were hardly visible under hoods and begun their retreat into the ground. The men were now able to see, across the tops of the hoods, the general shape of the terrain and pick the most direct route from contour point to contour point. Willy walked between them. The moonflower hoods still stood above her head-tall as she was for a woman-but did not seem to bother her. She looked at nothing.

Johnson glanced at Kiev across the top of her helmet, and tongued off his helmet phones. He let her walk slightly ahead, then lear.ed toward Kiev until their helmets touched.

"I told you," Johnson said softly through the helmet contact. "She didn't understand or believe. We were something out of books to her—so were the Udbahrs. Now she's trying hard to keep on not believing. You see why I told you yesterday to get her out of here?"

Kiev said nothing.

Johnson pulled back his helmet, tongued his intercom back on, kept walking.

After a while the sky began to whiten ominously. The nearer moon was low and paling on the horizon behind. Johnson halted. Kiev and Willy also stopped.

"It's no good," said Johnson, over the intercom to Kiev. "We're going to have to take time to find a hole to crawl into before day. We're going to have to quit now and wait for night."

Kiev nodded.

"A hole?" echoed Willy.

Kiev looked at Johnson. Johnson shrugged. The message of the shrug was clear—there were no caves in this area. But they hunted until Johnson called a halt.

"This will have to do."

He pointed to a crack in a rock face. He and Kiev attacked the crack with mining tools and their guns.

Twenty minutes' work hollowed out a burrow three meters in circular diameter, with an entrance two feet square. Above the entrance the crack had been sealed with melted rock. The trio crawled inside and fitted the breathing membrane in place against the opening.

Kiev waited until all were undressed and in their thermal bags before setting the light he had saved from the building in place against the rocky ceiling. The cramped closeness of their enclosure came to solid life around them. The den was beginning to heat up.

The place had no air-conditioning unit—the shelter had been a palace by comparison. Even Kiev

had to struggle against the intoxicating effect of the heat and the claustrophic panic of the enclosed space. Willy went out of her head before noon. Kiev and Johnson had to hold her in her thermal bag. Shortly after that she went into syncope and stayed unconscious until cool-off.

Haggard with exhaustion, Kiev leaned on one elbow above her. staring down into her face, now smoothed out into natural sleep. Teetering on the verge of irresistible unconsciousness himself, he felt in him the strange clearheadedness of utter weariness. She had been right, he thought, about that primitive part in him and all men-the Ancient Enemy. The prospectors did not so much fight the Udbahr males out here as something in themselves that corresponded to its equivalent in the Udbahrs. The lust for killing. A lust that could get you to the point where you no longer cared if you were killed yourself.

KIEV never finished the thought. When he opened his eyes the membrane was down from the entrance and outside was the cool and blessed moonlight.

He crawled out to find Willy and Johnson already packing gear.

"Got to move, Kiev," said Johnson, seeing him. "If Wad and Shanny are alive and headed home we want to take out after them as soon as possible. One long night's walk can put us back at the hotel."

"The hell you say." Kiev was astonished. "They didn't come all the way out with us and then cut that far back to find a digging area."

"No," Johnson said, "but from here we can hit a different pass through the border range. Going back that way makes the hypotenuse of a right triangle. Coming out we would have dog-legged it to reach this point like doing the triangle's other two sides. You understand?"

Within half an hour they were on their way. And within an hour, as they were coming around a high spire of rock, Johnson put out his arm and stopped.

"Wait here, Willy," Johnson said. "Come on, Kiev."

The two men rounded the rock and stopped, staring down into a small open area. They saw the scattered remains of working equipment and of Wadjik and Shant. At least one day under the open sun had mummified their bodies. Wadjik lay on his back with the broken shaft of a spear through his chest. But Shant had been pegged out and left to die.

Their outerwear and guns were gone.

"I thought I saw sign of at least half a dozen males back there," Johnson said. "Hehog, all right—with help. He must be swinging some real clout with the other males to have kept them from eating these two right away." He glanced hard at Kiev. "And all for you."

Kiev stared.

"Me? You mean Hehog tied Shanny up and left him like that on purpose—just so I could come along and see it?"

"You begin to see what Ancient Enemy means?" he responded. "We're in trouble, Kiev. Two guns missing and one of the local males grown into a real hoodoo. We'll get moving for civilization right now."

"You're going to bury them first," Willy said.

The men swung around. She was standing just behind them, looking at them. Her gaze dropped, fixed on the bodies below. For a second Kiev thought that the sight had sent her completely out of her mind. Then he saw that her eyes were clear and sane.

Johnson said, "We haven't time—and, anyway, the Udbahrs would come back to dig them up again when they were hungry enough."

"He's right, Willy," said Kiev. "We've got to go—fast." He thought of something else and swung back to Johnson. "That pass you talked about—they'll be laying for us there, Hehog and

the other males he's got together. It's the straightest route home, you say, and they know prospectors always head straight out of the mountains when they get into trouble."

Johnson shook his head.

"Don't think so," he said.
"You're no prospector to Hehog.
You're his Ancient Enemy, looking for that one spot where you and he come face to face and one of you gets the word to kill the other. He'll be right around this area, waiting for us to start hunting for him. If we move fast we've got as good a chance as anyone ever had to get out of these mountains alive."

Several times—before the nearer moon was high in the sky and the moonflowers were stretching to full bloom—Willy tripped and would have gone down if Kiev had not caught her. But she did not complain. In fact, she said nothing at all. Shortly after midnight, they broke out from under the umbrellas of a clump of moonflower petals and found themselves in the pass Johnson had talked about.

"We made it," said Johnson, stopping. Kiev also stopped. Willy, stumbling with weariness, blundered into him. She clung to him like a child—and at that moment a thin, bright

beam came from among the trunks of the moonflowers behind them.

The side of Johnson's outerwear burst in dazzle and smoke.

Johnson lunged forward. Kiev and Willy ran behind him. Three more bright beams flickered around them as they lurched over the lip of the pass, took half a dozen long, staggering, tripping strides down the far side and dived to shelter behind some waist-high chunks of granite.

Male Udbahr voices began to sing on the far side of the pass.

Johnson coughed. Kiev looked at him and Johnson quickly turned his helmet away, so that the face plate was hidden.

"Move out," Johnson said, in a thick voice, like that of a man with a frog in his throat.

"Are you crazy?"

Kiev had his sidearm out. He sighted around the granite boulder before him and sent a beam high into the rock wall beyond the lip of the pass, on the other side. The rock boomed loudly and flew in fragments. The singing stopped. After a moment it started again.

"I can't help you now," Johnson said, still keeping his face turned away. "Move out, I tell you."

"You think I'm going to leave you?"

Kiev sent off another bolt into

the rock face beyond the lip of the pass. This time the singing hardly paused.

"Don't waste your charges,"
Johnson said hoarsely. "Get out.
Half an hour puts you—hotel."

He had to stop in mid-sentence to cough.

"Forget it, partner," said Kiev.
"With my gun and yours I can hold that pass until morning.
They can't come through."

Johnson gave an ugly laugh.

"What partner?" he asked.
"This partnership's dissolved.
And what'll you do when dawn comes? Cook? You're still a good hour's trek from the hotel."

Kiev became aware that Willy was tugging at his arm. She motioned with her head for him to follow her. He did. She slid back down among the rocks until they were a good four meters from where Johnson lay, head toward the pass.

Willy tongued off her intercom and touched her helmet to his.

"He's dying," she said to him through the helmets.

"All right."

Kiev stared at her as if she were Hehog himself.

"You couldn't get him to the hotel in time to save his life even if there weren't any Udbahrs behind us. And we'll never make the hotel unless he stays there and keeps them from following us."

"So?"

She took hold of his shoulders and tried to shake him but he was too heavy and too unmoving with purpose.

"Be sensible." She was almost crying. "Don't you see it's something he wants to do? He wants to save us—"

Kiev stared at her stonily.

"Shanny's dead," Kiev said. "Wad's dead. You want me to leave Johnson?"

SHE did begin to cry at that, the tears running down her pale face inside her helmet.

"All right, hate me," she said.
"Why shouldn't I want to live?
This is all your fault—not mine.
I didn't kill your partners. I didn't
make Hehog your special enemy.
All I did was love you. If you were
back there I wouldn't leave you,
either. But that wouldn't make
my staying sensible."

"Go on if you want," he said coldly.

"You know I can't find the hotel by myself!" she said. "You know I'm not going to leave you. Maybe you've got a right to kill yourself—maybe you've even got a right to kill me. But have you got the right to kill me for something that's got nothing to do with me?"

He closed his eyes against the sight of her face. After seconds he opened his eyes, looked away from her, and began to crawl

back up the slope until he once more lay beside Johnson.

"It's Willy," he said, not look-

ing at the other man.

"Sure. That's right," said Johnson hoarsely.

A flicker of dark movement came from one side of the pass and his gun spat. The pass was clear of pursuers again.

"Damn you both," Kiev said,

emptily.

"Sure, boy," said Johnson.

"Don't waste time, huh?"

Kiev lay where he was. The nearer moon was descending in the sky a little above and to the right of the pass.

"I'll leave my gun," Kiev said

at last.

"Don't need it," Johnson said.

Kiev reached out and took Johnson's gloved hand into his own. Through the fabric the return pressure of the other man's grip was light and feeble.

"Get out," said Johnson. "I told you I figured on ending out here."

"You told me not for some trips yet."

"Changed my mind." Johnson let go of Kiev's hand and closed his eyes. His voice was not much more than a whisper. "I think instead I'll make it this trip."

He did not say any more. After a long minute Kiev spoke to him again.

"Johnson—"

Johnson did not answer. Only the gun in his hand spat light briefly into the wall of the pass. Kiev stared a second longer, then turned and went sliding down the hill to where Willy crouched.

"We go fast," said Kiev.

THEY went away without looking back. Twice they heard the sound of a gun behind them. Then intervening rocks cut off whatever else they might have heard. They walked without pausing. After about an hour Willy began to stumble with exhaustion and clung to him. Kiev put his arm around her; they hobbled along together, leaning into the pitch of the upslopes, sliding in the loose rock of downslopes.

The moon was low on the stony horizon behind them. Ahead came the first whitening in the sky that said dawn was less than two hours away. Willy staggered and leaned more heavily upon Kiev. Looking down at her face through the double transparencies of both helmets, Kiev saw that she was stumbling along with her eyes tightly closed, her face hardened into a colorless mask of effort. A strand of hair had fallen forward over one closed eye and his heart lurched at the sight of it.

Not from the first had he ever thought of her as beautiful. Now, gaunt with effort, hair disarrayed, she was less so than ever—and yet he had never loved and wanted her more. It was because of the mountains, he thought. And Hehog, Wad, Shanny—and Johnson. Each time he had paid out one of them for her, the worth of her had gone up that much. Now she was equal to the total of all of them together.

She stumbled again, almost lost her footing. A wordless little sound was jolted out from between her clenched teeth, though her eyes stayed closed.

"Walk," he said savagely, jerking her upright and onward. "Keep walking." They were on the Track, now, the curving trail that all the prospectors took out of the valley of the Border Hotel. "Keep walking," he muttered to her. "Just around the curve there—"

A bolt from a gun behind them boomed suddenly against the cliffbase to their right. Rock chips rained down Willy's knees. She lurched toward the shelter of the nearest boulder.

He jerked her upright.

"Run for it. Run-"

Jolting, stumbling, they ran while bolts from the gun boomed.

"They can't shoot worth—" Kiev muttered through his teeth.

He stopped talking. Because at that moment they rounded a curve and saw the sprawling concrete shape of the Border Hotel and its grounds—and saw Hehog, holding a sidearm, stepping out from behind a rock twenty feet ahead.

In that instant time itself seemed to hesitate. Kiev's weary legs had checked at his sight of Hehog. He started forward again at a walk, half-carrying Willy. Her eyes were still closed.

He thought, She doesn't see Hehog.

He marched on. Hehog brought up the gun, aimed it—but he, too, seemed caught in the suspension of time. He wore the helmet he had taken from Kiev two years before and now he also wore the white jacket of Shant's outerwear suit—which almost fit him. He stood waiting, one sidearm in a jacket pocket, one in his hand, aimed.

Kiev stumped toward him, bringing Willy. Kiev's eyes were on the bulging eyes of Hehog. Their gazes locked. The only sound was the noise of Kiev's boots scuffing the rock underfoot. From the hotel in the valley below, no sound. From the other Udbahr males that had been firing at them from behind, no sound.

Kiev marched on, Hehog growing before him. The great eyes danced in Kiev's vision. There was a wild emptiness in Kiev now, an insane certainty. He did not move aside to avoid Hehog. They were ten feet apart—they were five—they would collide—

Hehog stepped back. Without shifting the line of his advance an inch, without moving his eyes to follow Hehog, Kiev marched past him. The trail to the hotel sloped suddenly more sharply under Kiev's feet and now he looked only at what was manmade. All the Udbahrs were behind him. And behind him he heard Hehog beginning to sing softly.

Man with a head-and-a-half, come and get your half-head. Man with a head-and-a-half, Come, so I can kill you...

The song faded behind him until his stumbling feet carried him in through the great airdoor of the hotel and all things ended at once.

TIE WAS nearly four days re-Lacovering and three days after that sitting around the Border Hotel, making plans for the future with Willy. They had adjoining rooms, each with a balcony looking out to the dawnrise side of the hotel. Heavy filterglass doors shut out the sunlight and protected the rooms' air-conditioned interiors during the daytime. Kiev had agreed to go back to the Old Worlds with Willy, to get married and write and tell what he knew. There was nothing wrong with making a living any way you could back on the Old Worlds, even if it meant writing and lecturing.

Only once did Willy bring up the subject of the mountains.

"Why did Hehog let us pass?" she asked.

He stared at her.

"I thought that your eyes were closed."

"I opened them when you halted. I closed them when I saw him. I thought it was all over then—and that he was going to kill us both. But you started walking and he let us pass. Why?"

Kiev looked down at the thick

brown carpet.

"Hehog's never going to get the message," he said to the carpet.

"What?"

"Ancient Enemies—Johnson told me. Hehog thinks he and I are something special to each other with this Ancient Enemies business. We're doomed to have one of us kill the other. We're supposed to keep coming together until one of us gets the message to kill. Then the other just lets it happen. Because he's doomed—there's nothing he can do about it."

rle stopped talking. For a minute she said nothing, either, as if she was waiting for him to go on explaining.

"Hehog didn't get the message when we walked past him?" she asked, at last. "Is that it?"

"He'll never get the message," said Kiev dully. "He had two clear chances at me and he didn't do

anything. It means he thinks he's the one who's doomed. He's waiting to die—for me to kill him."

"To kill him? Why would he want you to kill him?"

Kiev shrugged.

"Answer me."

"How do I know?" Kiev said exhaustedly. "Maybe he's getting old. Maybe he thinks it's just time for him to die—maybe his mate's dead."

There was momentary, somehow ugly silence. Then Willy spoke again.

"Kiev."

"What?"

"Look up here," she said, sharply. "I want you to look at me."

He raised his gaze slowly from the thick carpet and saw her face as stiffly fixed as it had been in the helmet on the last long kilometer to the hotel.

"Listen to me, Kiev," she said.
"I love you and I want to live with you more than anything else for the rest of my life—and I'll do anything for you I can do. But there's one thing I can't do. I just can't."

He frowned at her, uneasy and restless.

"I can't help it," she said. "I thought we were getting away from it here and that it wouldn't matter But it does. If I can feel it there in you I go dead inside—I just can't love you any more. That's all there is to it."

"What?" he asked.

Her hands made themselves into ineffective small fists in her lap, then uncurled and lay limp.

"There are so many things I love about you," she said emptily, "I thought I could ignore this one thing. But I can't think so anymore. Not since we saw those two dead men—and not since the walk back here. Our love is just never going to work if you still want—want to kill. Do you understand? If you're still wanting to kill it just won't work out for us. Do you understand, Kiev?"

The bottom seemed to fall out of his stomach. He was abruptly sick.

"I told you that's all over!" he shouted furiously at her. "I don't want to kill anything!"

"You don't have to promise." She rose to her feet, her face still tight. "It doesn't matter if you promise. It only matters if you're telling the truth."

.. She turned and walked to the door of his hotel room.

"It's almost dawn," she said.
"I'm going down to see if the authorization for our spaceship tickets has come through for today's flight—before the sun shuts off communications. I'll be back in half an hour."

She went out. The door made no noise closing behind her.

HE TURNED and flopped on the bed, stared up at the ceil-

ing. Everything was wonderful or was it? He tried to think about the future in safety of the Old Worlds but his mind would not focus. After a bit he rose and walked out to the balcony.

Before him stood the ramparts of the cliffs. On the balcony was an observation scope. He bent over it and fiddled with its controls until the boulders a kilometer away seemed to hang a dozen meters in front of him.

He turned the sound pickup on. It was nearly time for the Udbahrs to be hunting their dens for the day but he heard no singing. He panned the scope, searching the rocks. There it came—a faint wisp of melody.

He searched the rock. The stone blurred before him. He lost then found the song again and closed in on it until the image in the screen of the scope locked on the figure of a male Udbahr standing deep between two tall boulders—an Udbahr wearing a transparent helmet and white jacket, with a sidearm in his hand.

The song came suddenly loud and clear.

Ancient, my enemy. Ancient, my enemy.

No one but ourselves has the killing of each other...

Man with a head-and-a-half, come and get your half-head. Man with a head-and-a-half Kiev stepped back from the scope. His head pounded suddenly. His stomach knotted. His throat ached. A fever blazed through him and his skin felt dry, dusty. He turned and strode across the room to his bag. He plowed through it, throwing new shoes, pants and shirts aside.

His hand closed on the last hard item at the bottom. His gun. He jerked out the weapon, snatched up the long barrel for distance shooting and was snapping it into position on the gun even as he was striding toward the balcony.

He applied the magnetic clamp of the gun butt to the scope and thumbed up the near lens of the telescopic sight. The red crosshairs wavered, searched, found Hehog. It was a long shot. The lenses of the sight held level on the Udbahr in a straight line; but below them, on their gimbals, the barrel of the automatically sighting weapon was angled so that it seemed to point clear over the cliffs at the day that was coming. Kiev's dry and shaking fingers curled around the butt. His forefinger reached toward the firing button and instantly all the shaking was over.

His grip was steady. His blood was ice but the fever still burned in his brain. As clearly as a vision before him, he saw the mummified figures of Wadjik and Shant—

and Johnson as he had last seen the older man.

Kiev pressed the firing button.

From the cliffside came the sound of a distant explosion. A puff of rockdust plumed toward the whitening sky. A rising murmur, a mounting buzz of voices began beyond the walls of his room. People began to appear on the surrounding balconies.

Kiev faded back two steps, silent as a thief. Hidden in the shadows of the balcony he could still see what the others could not.

Hehog lay beside one of the two boulders between which he had been standing. A blackish stain was spreading on the right side of his white jacket and the sidearm had fallen from his grip.

He was plainly dying. But he was not yet dead. He began to sing again.

Man with a head-and-a-half come and get your ... half-head.

Man with a head-and-a

Through the pick-up of the scope Kiev, frozen in the shadows, could hear the Udbahr's voice weakening. Then the door to the room slammed open behind him.

"Kiev, did you hear it? Someone shot from the Hotel—"

Willy's voice broke off.

He turned and saw her just in-

side the door. She was gazing past him at the scope with its picture of Hehog and the sound of Hehog's weakening song coming from it. She stared at it. Then, slowly, as if she was being forced against her will, her eyes shifted until they met his.

All the feeling in him that the sight of Hehog had triggered into life went out of him with a rush, leaving him empty as a disembow-eled man.

"Willy-"

He took a step toward her. Her face twitched as if with a sudden, sharp, unbearable pain and her hand came up reflexively as if to push him away, though they were still more than half a room apart.

Her throat worked but she made no sound. She struggled for an instant, then shook her head briefly. Still holding up her hand as if to fend him off, she backed away from him. The door opened behind her and let her out.

The door closed, leaving him alone. He swung slowly back to face the scope. Hehog still lay framed in the lens and above that image the ominous light of day was fast whitening the sky.

Hehog was still feebly singing; but the song had changed. Now it was the song Willy had asked Kiev to translate when she had first heard an Udbahr male. Kiev turned and flung himself facedown

IF

on the bed, his arms over his head to shut out the sound. But the song came through to him.

You desert me now, female,
Because I am crippled.
And yet, all my fault was
That I did not lack courage.
Therefore I will go now to the
high rocks to die.
And another will take you....

The slow rumble of the heavy, opaque, thermal glass, sliding automatically across the entrance to the balcony, silenced the song in Kiev's ears. Beyond the dark glass the sun of day broke at last over the rim of the cliffs and sent its fierce light slanting down. There was no mercy in that relentless light and all living things who did not hide before it died.



In the Next Issue

tells a mind-wrenching story of love, politics and genetic prejudice that reaches from Earth's bio-laboratories through the halls of Congress to the farthest stars. A timely classic of our tomorrows—about a man and a woman reduced to their basic male-female essences who, with nothing else in common, pointed to each other in hostile universe and insisted—

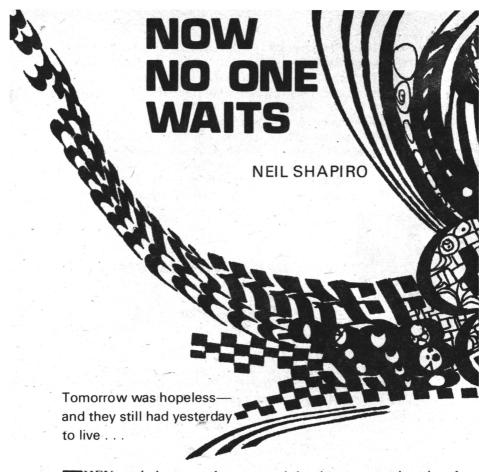
THIS ONE!

Also

JACK GAUGHAN
takes a look at man's future in space—

NATIONAL COSMOGRAPHIC

An Illustrated Feature



THEY made love together on a dead world. It was a grunting, hurried protest, a way of saying they still lived. It was perhaps more sane than laughing and safer than crying—and easier than being alone.

Better, it was a way to ignore each other.

The too-bright sun of that dead world began to set and the shadows from the tall, broken towers of the city, mute testimonies of an alien and forgotten architecture, lengthened and covered them over. If the silence of a dead world can be said to do so, the silence grew deeper. At night it sometimes seemed to the two of them that they were the only life that world had ever seen and that the city was only a skeletal outcropping of rock and stone. It would then seem to them that the



past had been quieter and that the future was nonexistent. It was not a pleasant feeling—but unnatural silences have a way of working on your mind. They knew this and felt lucky to escape so easily.

In the darkest parts of the night they would try to talk and that seldom seemed to work.

Unknowingly, even to themselves, they had arrived at a partial treaty with the night. They would talk but they had long ago reached an agreement never to say anything. Two people alone, alone and scared, cannot afford to become the best of friends. Friends confide truths; that hope was lost, for instance. So all they could do was become lovers.

"I wonder—" Cary mumbled.

He reached reflexively into his shirt pocket, searching for a pack of cigarettes that was never there.
"What do you wonder?" Natalie asked him, thinking he ex-

pected a reply of her.

"I wonder about death. I wonder what happened here. I think that they'll never find us and I wonder if they'll care. I wonder why I came here—and whether I would have if I had seen what was waiting." He grinned and leaned across the alley toward her, "Sometimes—sometimes I wonder if I had met you back home—would I even have learned your name?"

"Of course," Natalie said. "We moved in the same circles and knew all the same scavengers. Sooner or later there would have been one piece of carrion we both would have gone for. It just happened to be this one, that's all."

Of the two of them Natalie was more frightened of friendship. Often she would have to go out of her way to remind him of the danger. But she was not a cruel woman. She was merely young—and young people should never have to face death. It destroys their perspective and makes them fearful. Cary was older than she but he was still young enough. So he played the game, too.

"I'm going exploring," he said.
"Want to come?"

"You going to the map room?"

"Maybe. I suppose so."

"You go ahead then."

"Well, all right. See you later?"
"I'm not going anywhere."

TIE WALKED down the alleyways until he came to the main quadrangle of the city. At first glance it seemed identical to the other hundreds of quadrangles. It was a small, square area, towers rising from each of its four corners. Tall, those towers were, some more than a hundred stories. They were wide at the base and tapered smoothly to the top story. Yet they had an aura of besquat and ugly-of being somehow evil. Cary had long since ceased being awestruck by the towers. You can get used to anything after a while, even to a repetitive architecture, alien and cold.

But what never failed to arouse an emotion in him was a small statue on a pedestal in the middle of the blue lawn of that one quadrangle.

It was small, no more than three feet tall, and it was of a man and a woman.

Cary moved closer and squatted down to study it as he had done nearly every day since the crash. It had been the first thing they had found that gave any hint of the city's past. Hint? No, more of a puzzle-piece, a very small one. But it was still the only native object of art they had found. Cary, for what must have been the hundredth

time, wondered what kind of people would live in a city where there was only one statue. No paintings, no fountains, only a small statue of a man and a woman.

The figure of the man lay curled up, his hands pressed to his ears, his head bent over, seemingly ground into the stone pedestal. He seemed to be trying to cause himself pain.

The figure of the woman stood straight above him. Her head was tilted back and her eyes seemed to focus on a point above the tops of the towers around her.

Cary raised himself to his feet and stood over the statue. He looked down into the blank stone eyes of the woman.

"Whom are you looking for?" he whispered.

Not that he expected she would answer him. He was twenty-four years old. His best friend had died in the crash and he expected to die soon himself, once the food at the ship gave out. He no longer expected answers.

Because he was young he refused simply to wait to starve. He made love and he explored. He wondered. One of the places he wondered about the most was in the map room.

He entered the map room through the doorway in the base of the largest tower in the city. The doorway was the only other piece of ornamentation in the city. It was carved with what appeared to be designs but could have been lettering—or, for all he knew, warnings against unauthorized personnel.

He and Natalie referred to it as the map room but it was more of an auditorium than a room. Whatever it was, all of the immense first floor of the tower was devoted to it. The ceiling was a hundred feet overhead. It was the only tower they had found where the lighting system was still in working condition. The light had a slightly reddish cast, which was strange. The sun outside the tower was as vellow as that of Earth's. The red light was one more puzzle-piece-like the statue and the carvings on the door.

But the walls of the room were the main body of the puzzle. The keystone that seemed to say to him that all the other pieces would fit snugly if he could only decipher the one big mystery. From the ceiling to ten feet above the floor, the walls were engraved with maps—starmaps.

From the floor to the level of the maps, on each wall, were switches and dials and speaker grills, arranged in columns and sections. One part of the right wall contained four maps in a column and below it there were four speaker grills. Each speaker was surrounded and separated from the others by switches and dials.

The first day Cary had spent in the room he had counted the speakers and maps. Simple multiplication had supplied him with an accurate count, since everything was arranged geometrically. There were ten thousand each of maps and speakers.

The maps seemed engraved on the walls, which the reddish lighting of the room made appear deep black.

Stars were shown as luminescent points of white. Many of the star patterns repeated and all matched the constellations that could be seen outside at night. But, breaking the sameness of the patterns, tiny yellow crosses appeared at different places on each map, one on every map.

Carry ran his hands softly over a group of switches.

As he had done many times before he closed one of the switches and, as usual, the speaker below it began to hiss softly, like a radio tuned between stations.

It meant nothing to him and he cursed and almost savagely returned the switch to its previous position and the speaker to silence.

Unnoticed above him a scarlet cross returned to glowing yellow.

"YOU were out late last night," Natalie said. "Did you find any food?"

She managed to keep her voice noncommittal.

"There's none to be found. Any that might have been here spoiled a few centuries ago. You know that."

Cary talked to her with only one part of his mind—the other was still in the map room.

"Perhaps we should cut back on the rations."

"But we're already on half-rations. Look, there's no need to fool ourselves. The Institute could only afford to send out one probe and we were it. There's no help coming—so there's no need to pretend there is."

Cary looked reflectively at his empty ration bowl and stood up.

"Where are you going?" Natalie asked.

"I don't know. Outside."

"You're going back to the map room, aren't you?"

Her voice was frightened and small.

"What of it?"

"I don't know, Cary. I just wish you'd stay away from there. It frightens me. The stars and the statue—the red lighting." Her voice changed to a more pleading tone. "Are you sure we've looked everywhere for food?"

"Yes," Cary said angrily. "And as for the map room—for all we know it might hold the key to what we came here for, to Celestial Anomaly One. We were sent here to explain it and I'm not going to give up on it. Otherwise I

might as well lie down and wait to die."

Half ashamed of his outburst, Cary threw his ration bowl into the trash receptacle and stalked out and away from the ship. Natalie watched him until he turned a corner and one of the towers of the city hid him from further view.

THEN, as she did every day, she went out to water the flowers, the flowers Dr. Cahn of the Institute had presented to her as a bon voyage gift—the flowers they had planted on Skip's grave.

They blossomed on a small plot of ground marked by a small white aluminum cross on the far side of the ship, away from the gaping rent the crash had ripped in the smooth alloy of the hull. They hadn't wanted to bury their friend and pilot in a place where the ruined ship might seem to accuse him of failure.

At times Natalie dreamed of the crash and she would awaken screaming or whimpering. She had been at her post in Life-Support Systems Control and Cary had been in the Engineering and Power Section. Skip had been on the Bridge. After they realized that the instructions they had been supplied with were useless they had decided to land on the planet.

She had heard Skip scream, and knowing it was impossible for Cary to leave his own post during

a landing, she had run to the Bridge to find their pilot moaning and ripping at the earphones he wore, whispering over and over, insanely, "Tell them to stop!"

She seemed to remember Cary shouting instructions to her over the intercom as the ship made its first contact with the planet's atmosphere, trying to tell her how to control the ship. She thought that Skip might have come to his senses near the end and also have tried to help—but none of it had been good enough. Someone had forced her to the couch and had strapped her in. And then—chaos.

When it was over Skip was dead. No one had strapped him to a couch and he had been too busy fighting the controls to do it for himself. She and Cary had been left alone on the planet—a planet that had no business even to exist.

She imagined Skip's voice.

Tell them to stop!

Shivering, she finished her task and returned to the ship. She went to the recorder she kept in her room and began speaking this day's entry into it. She could not have said why she bothered. It might have been for no other reason than to hear herself talk, to fill the silence. She definitely never expected her notes to be found.

"Day Ninety-One," she began.
"It has been two weeks since Cary
found the entrance to the map

room and he now is spending more and more of his time there. am worried about him-he grows more morose and sullen each day. He may be worrying about how we'll get out or be feeling guilty that he has not vet found a way for us. But there is no way out. Every day our stores are depleted by two more ration packs and there is no food to be found in the city. It is a fact of life that in twenty-one more days I will report that all our stores have been used. Shortly after that I will be too weak to make further reports. And after that I shall be dead

"Celestial Anomaly One still remains unexplained. I am beginning to doubt that we even arrived in the right place. Cary has told me that mistakes in the Schubert Drive computers are impossible. Yet the Drive is so new that I cannot help but wonder. Certainly there is no trace of a neutron star anywhere in this region of this galaxy—let alone a neutron star with a captured secondary.

"I am beginning to feel that we may have stumbled onto a more complex mystery than the Institute sent us to find. The map room hints—"

She stopped and threw the microphone across the room. It hit the tapestry on the wall and slid to the top of her bed.

"It only hints," she said, seat-

ing herself on the edge of her bed and rubbing her fists into her eyes. "It only hints—"

THE map room occupied her thoughts for some time that night. That, and the words in her own report—twenty-one days and she would begin to die by starvation. She felt lonely and frightened. She tried to wait up for Cary but he was later coming back than was usual.

She feel asleep.

She dreamed.

She was back on the ship—but instead of Skip, Dr. Cahn of the Institute sat in the control chair. Where the bulkhead and the control panel should have been the hull of the ship was transparent.

A mist like a huge, dirty cloud seemed to form outside the ship. The cloud cleared and grotesquely, horribly, she saw a gigantic head floating in space where the planet should have appeared. It was Skip's head and it was turning around and over, bobbing obscenely back and forth.

"Pulsars," Doctor Cahn said, "may be very peculiar things."

In her dream Skip's head rotated so that they were coming at it from beneath. Where the bloody stump should have been was only a smooth expanse of skin, as if no body had ever been attached there.

She screamed to warn old Dr.

Cahn of the impending crash but he ignored her. Skip's head and terrifying neck loomed larger and larger as they approached it.

"You may find a neutron star,"
Dr. Cahnremarked, unperturbed,
"or you may find something even

stranger."

He laughed,

The ship's orbit carried them around to the other side of the head-planet and she could see that Skip was laughing, too. His eyes were wide and bloodshot. Drool dripped from the corners of his mouth and formed silvery moons around him.

"In nineteen seventy-three," the doctor continued, "radio observatories throughout the world were surprised to find a pulsar with an exceedingly rapid period suddenly transmitting from the vicinity of the Lesser Magellenic Cloud. They were further stunned when, a year later, it stopped broadcasting as suddenly as it had begun."

Skip was trying to say something to her but she could not make him out. Every time his immense mouth moved Dr. Cahn would speak over Skip's voice, which sounded like weak vibrations bouncing off the hull.

"Celestial Anomaly One," the doctor said, "may tell us what the pulsars are, how they were formed and how they die. While the new Schubert Drive is still only experimental, the Institute has wrangled permission to send a probe out to the vicinity of the anomaly —roughly five hundred light years from Earth—"

She noticed that Skip was leering at her. She shuddered.

"Anything you see while you are there, we on Earth will not have a chance to observe for five hundred years—even providing that the pulsar syndrome does begin again."

She could almost make out what Skip was shouting.

"It's a riddle," old Dr. Cahn said. "It's a riddle."

Skip's head loomed larger and larger. Near the end she could just make out what he was saying.

"Help me!" Skip's head said. "Help me, help me. I'm dead. I'm dead! Why didn't you help me?"

The last thing she saw was a huge tear falling from his eye and then they crashed.

She awoke screaming.

SHE told Cary about the dream the next morning.

"Don't worry about it," he said.
"You'd just finished watering
the flowers on his grave. With
everything else that's happening
to us it's only natural you should
be having your share of nightmares. I shouldn't have left you
alone last night. I'm sorry, Natalie, but the more time I spend in
that room, the more I think that

it will take just one more small thing—a clue I almost have and don't see—and the whole thing will come clear. But don't worry any longer about the dreams. You'll take a pill tonight and it will keep dreams away."

"You don't understand," she said. "It was horrible. That head. He had no body at all, Cary. He couldn't move out of our way—all he could do was talk and no one could hear him until it was too late."

Exhausted, she cradled her head on her arms. She listened to the hard clicking noises Cary's boots made as he paced up and down the stateroom.

"No body at all," she mumbled sleepily.

She heard him pull out a chair and seat himself.

"Wait a minute," he said thoughtfully. "Wait just one minute."

She raised her head to glance at him. His face was thoughtful and his fingers drummed on the table top. He stared directly into her eyes and she shivered. His face had taken on the same expression Skip's had worn before Cahn had crashed into it.

"What did you say?" he asked. "Repeat what you said about Skip in your dream."

"It was horrible," she said. She closed her eyes and she could still see it. "He had no body. All he could do was talk. And we couldn't hear him and then the ship just—"

"Come on," Cary said. He stood up and placed his hand on her arm. "Let's go."

"But why, Cary?"

"I think you've given me an idea. I hope I'm wrong, though. I only hope I'm wrong."

Shortly they came to the main quadrangle and, without pausing to look at the statue, Cary propelled her into the map room.

"All right," Cary said. "Start pulling switches." He demonstrated by pulling an oblong switch above one of the speakers. The speaker hissed and a yellow cross turned scarlet.

"You're crazy." Natalie said.

"Pull the switches!" he said; surprised to hear himself shouting. "The oblong ones over the speakers—do it now."

He slammed home another switch.

"But, there are ten thousand of them," Natalie said, angry and confused.

"Start!"

He continued pulling switches, his back to her. But when he heard the clicking as she also began pulling the switches he smiled grimly. In approximately three and a half hours they had finished.

Ten thousand scarlet crosses glittered on a background of stars.

NE entire section of the far wall swung silently open to reveal a short staircase. They climbed the staircase to the second floor of the tower. They were in another map room much like the one beneath it but in this one there were only one thousand maps and one thousand sets of switches and no speakers. Each map had ten yellow crosses. There were one thousand of the oblong switches, all closed. It took them less than an hour to open them all and soon there were one thousand scarlet crosses.

And another door. They lost no time in opening it.

Wordlessly, they entered the third level where there were one hundred maps and one hundred switches, no speakers and one hundred crosses on each map.

They were soon in the last level which proved accessible to them. There was one map. It was a map with ten thousand crosses shining on it and it stretched from one end of the ceiling to the other and covered the walls to within four feet of the floor. The room was shaped like a half-sphere, so that the map appeared to be the actual sky outside the tower—as if seen on a clear night through a glass plate emblazoned with ten thousand illuminated crosses.

There were two switches. One was quite large and was surrounded by a hundred dials, all of

which were registering at the far left of their scales.

But on the other side of the room was a much smaller switch and below it dangled a pair of earphones.

"Natalie," Cary said, "I'm going over there and putting on those earphones. If for any reason you think you should do so, pull them off me."

He put on the earphones. Within two seconds he was clawing at them and whimpering.

Natalie screamed his name. She felt unable to move.

Cary fell to his knees, then full length to the floor. His body curled into the fetal position. He appeared to shrivel. His eyes closed. His mouth opened as if he were about to scream but no sound came. Sweat glistened on his brow and ran down over his eyelids. Small beads of blood dripped from his palms where his fingernails had dug in. His throat vibrated rapidly as his neck muscles worked—still he did not scream.

Natalie finally managed to pull the earphones from his head. For a moment there was no discernible change in his position, or his rigidity.

Then he began to cry. Dry, moaning sobs racked his body. He raised himself to his knees, then to his feet. Natalie drew back as he glanced at her. His eyes seemed

haunted. They did not focus on her. It was as if he had gone blind.

"What happened? Oh Cary!"

"I can't explain," Cary said. His voice was still unsteady. He took the earphones from her. "Put these on for a second—then you'll understand. No, wait—I'll hold them to your ears and then yank them off. More than a few seconds wouldn't be safe. I at least had an idea what to expect."

She was too fearful to protest.

The next thing she knew she was whirling. Her identity spun around and around. Voices, all speaking unknown languages, hammered at her. One, two, one hundred, a thousand, ten thousand voices, perfectly distinct, competing, blending, all battering at her mind.

And all ten thousand of them were voices of terror.

It was like ten thousand heretics screaming at the stake. Like the wails of ten thousand women being stoned—like the screeches of ten thousand hopeless, helpless people about to die.

And all of them were audible. The young ones and the old ones. The women, the men, the babies. Harsh gutteral words and soft, singing Cantonese cants. Monosyllabic grunts and polysyllabic wheezes. All of them like waves wearing away at butter-soft limestone.

She felt her mind eroding, too. She screamed.

Cary's face swam into focus before her. His concerned eyes looked deep into her.

"Are you okay?" he asked.

"They're all dead," she heard herself say. "They're all dead. Aren't they?"

"I think so," Cary said.

"What is this place?"

"I think I know now, Natalie. It doesn't help us any. We're still going to die. But at least we'll be able to think, to know, that we're only a small part of a larger tragedy. That our deaths will be meaningless and therefore unimportant. You may want to die after you know what I know now. They had no body, Natalie—all they had was a voice."

"LOON'T want to go insane, alone." She moved closer to him and sat beside him on the floor under the huge map. But she did not touch him—she was afraid to touch him. She had barely enough courage to listen and that was courage born of the first stages of insanity. To listen was to take the first step to fulfillment of a deathwish. As he began to speak she could see the chasm gaping open before her, ready to receive her mind. She knew that she would fall.

"We discovered a faster-than-

light drive, Natalie, but they missed it. It's not surprising, really. It was mostly an accident that we found it at all and we didn't really need it. But they looked for it when they needed it—and it eluded them."

He was quiet for a moment. He lay back and stared up at the map. The tiny points of light from the crosses and stars illuminated his face dimly and glints of light reflected from his eyes.

"This world found only a voice. FTL radio. And it wasn't alone. There were ten thousand others. It must have been frustrating. To listen to the voices from far worlds, to learn other beings' languages and never be able to meet them. Hundreds of years—and every few years a new voice would be discovered. And then something happened—some threat came. Whatever it was they couldn't meet it and they couldn't escape it."

"So they called for help." Natalie said for him. She heard her own voice fill with the agony that had been in Cary's. She shared the secret with him. "They built this city two hundred years ago, in nineteen seventy-three, as a relay station. Ten thousand worlds cried for help, and this one place blended the called, broadcasted them and waited. No help came and the voices were silent."

"Yes," Cary said. "That would

explain it. Two hundred years ago a pulsar formed here—one more powerful than any other known—and only a year later it had vanished. When Earth could, it sent someone to find out the cause. That's us. We got here a hundred and ninety-nine years too late. But we found a tombstone. One desperate circuit left on broadcasting on a regular frequency on a normal wave. Like a shroud."

It was again quiet in the room until Natalie spoke.

"Is that what happened to Skip? The tombstone broadcast?"

"I suppose so. We knew—or at least had an inkling—of what to expect and we heard it only for a few seconds each. He was forced to listen for nearly an hour. It's no wonder he went mad."

"What can we do?" Natalie asked.

Cary walked to the large switch and threw it open. A soft and genthe vibration shook the room.

"I've turned the pulsar back on," he said. "They'll send someone else out here now. We'll likely be dead by then but we'll leave our notes to be found."

"If only they had used lightspeed transmissions," Natalie said. "We could have deciphered those."

"What good would that have done?" Cary asked. "It would have reached us one hundred years from now—and as it stands we're nearly two hundred years too late."

"Let's go back to the ship," she said.

THEY left the tower and had walked more than half-way back to the ship before they could no longer hear the humming of the generators, the vibrations of the pulsar.

They slept. They ate. Their rations disappeared as inexorably as before but they no longer noticed. They no longer cared.

"We'll die here," Natalie said one night as they lay together. "It seems to be a place to die."

Cary reached across the bed and pulled her closer to him but there seemed to be no meaning in his action. His body was as lifeless as his words.

"There have been so many deaths—I doubt that two more will even be noticed. How many lives could end on ten thousand worlds?"

There was no answer to his question and the silence again covered them. Each lay awake and imagined shapes and night-mares fleeing through the dark. Each of them thought of the towers and the city and of what it would be to share death with so many. They did not make love. They had not made love for many nights. Death had made them friends and they knew each other

too well even to pretend they were strangers. They could not substitute life for death or love for fear—and they would not lie to each other or to themselves.

Day came and they scarcely heeded it. Their actions were routine, automatic, divorced from what they thought and felt.

Cary ran his hands over the controls of the ship. He tested the circuits of the Life-Support Systems as he had every day. He made his daily entry in the log and checked all functional instrument readings.

For a moment he did not believe what he saw on the board. He double-checked the reading and verified it. He waited for the wave of emotion to hit him. He was not surprised to notice that what he had seen did not affect him.

"Natalie," he said and then realized he was whispering. He repeated her name more loudly and she turned to him. "Normal-space radar has picked up another ship just outside atmosphere. I can't signal them but they must be here for us. We're rescued."

He tried to inject gaiety into his voice but he could only think of death.

Natalie leaned over the board to check the reading. When she spoke her voice, too, sounded drab and lifeless.

"So they sent another ship,"

she said. "So old Cahn must carry more weight than we thought—they did outfit a second expedition. How long before they get here?"

"A couple days maybe."

"Are you happy?" she asked. •

"No. I don't know, I guess I am. But it all seems so useless."

They spent the night talking like sad children. They were trying to recapture their images of Earth, their will to live. But in the morning they felt the same.

"There's someone outside," Cary said. "I'll open the hatch for him."

Natalie and Cary watched on the viewscreen as the man outside stepped through thé dilating hatch.

"Not our uniform," Natalie said. "Have you ever seen one like that before?"

"No," Cary answered. "But look." He pointed at another section of the board. "According to our radar the ship is still in orbit. I don't understand—".

"Perhaps they sent down a shuttle vehicle. They're here, I suppose that's all that matters."

The man entered the control room. He was taller than he had appeared on the viewscreen, he smiled at the two of them.

Cary motioned him to sit and gave his report. He told their rescuer about the tombstone they had landed on and about death. He listened to himself talk and was surprised that his voice remained so steady. He saw Natalie standing and crying silently in the far corner of the control room. He knew she was not crying from relief. He wondered how long it would be before he broke down himself—and whether he would ever be able to fit the pieces back together once he let them fall. He doubted he could but he didn't care.

Suddenly he saw that the man he was speaking to was smiling widely. He stammered and broke off his report.

"And where are the skeletons?" the man asked.

Cary was speechless. He forced himself to control his anger.

"I don't know. What difference does it make? Perhaps they had no bone structure. It doesn't matter. They're dead. Haven't you heard anything I've said?"

The visitor grinned.

"Listen to me," he said, "it was decided there is a debt that must be paid. There are things you have to know—it would not be right if you never learned them. I am part of a rescue attempt. But not your rescue—that will not take place for another twenty-two hours. My own rescue mission stretches across seven centuries and involves the people of four galaxies.

"Ten thousand worlds did cry

out for help and you two heard them. But not too late. When you are rescued you will file a report with the Institute. We know this because we have that report, that report which had been saved in the computer files for decades, centuries. Nothing, Cary, is beyond man's grasp. First he wanted to fly and he built himself wings. Then on to the planets of his own system and then to the stars. Whatever man has wanted to do, whatever he felt a strong enough desire to do, he has or he surely will do

"A strong desire." The man repeated the words and he seemed to be holding back his own tears. "To save a life is one desire. To save the lives on ten thousand worlds became nearly an obsession. A way was found. Seven hundred years from now, in your time, that way will be found and it will be applied. In my frame of reference, it has been applied."

He extended his hand toward them. "The people of ten thousand worlds have asked me to extend their hand of friendship and thanks to you, Natalie and Cary, across the boundaries of both time and space. You were the ones who heard their cry for help. It took us seven hundred years to find a way to answer but without your understanding the cry might have gone unheard."

Cary took the man's hand and Natalie placed hers on both of theirs.

"Rescued through time," Natalie said softly. "But still—how can we believe you? How can we ever know for sure? We must be sure."

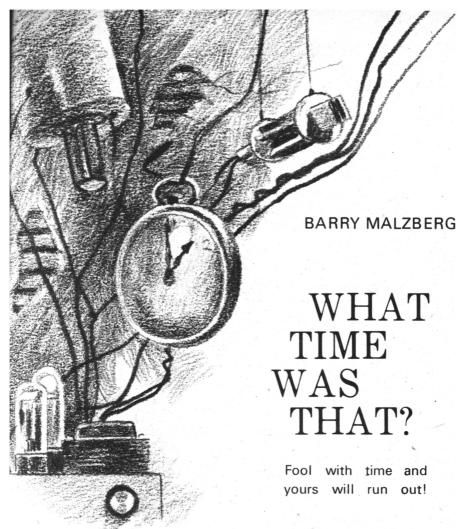
"I can tell you nothing else," he said, "only that you had better go quickly when your second expedition arrives. The catastrophe you thought had already happened will begin two months from this time-date." He laughed, "It wouldn't be healthy to still be around. Be sure and file that report—oh, hell, I know for a fact that you did."

He left then, and Natalie and Cary awaited their own rescuers. For a while they still had their doubts and fears, but then they remembered and understood.

It was Natalie who first said it.

"The statue," she said, and she smiled for the first time in many days. "The statue!" Then Cary remembered also and together they took one more walk on the world that had never died.

They walked to the main quadrangle. There, on the blue lawn, was the small statue. Of a man and of a woman, overcome by a cry for help. A tiny statue—and they now knew whom it honored. •



SOME prefatory notes: the time machine could not be invented, of course. For that reason, it never was invented. Go look it up. The paradoxes negating the possibility of the device are too prohibitively profound. Consider: the jaunts, the murders, the alter-

ations of the past, the assassination of the inventor's ancestors by a disgruntled legatee. That kind of thing. Because it could not happen, it did not happen. There never was a time machine. Was there?

Time is a constant. Think about

it. (Planck and Einstein had some thoughts on the matter, as well as myself.) It moves forward, only forward, creating chains of purposeless causality, tearing at everything that resists it—making shreds and pulp of endeavor, creating what becomes known in retrospect, then, as "memory" or "loss." Turn it around, stumble to the imploding mouth of time and you'll only get a sound, wrenching bite on your meddling fingers. So there.

You can't fool around with time.

As I said, think about it. Max Robin did. He couldn't think very well, of course, having been deprived of the educational advantages of secondary school, undergraduate school, graduate school, professional school. Nevertheless, and within certain crude limits, he tried. He was a born thinker. So much so that he even ended up in the library now and then and struggled with microfilms of obscure professional journals—not that he was sure he understood what they were all about. He went through the almost unbearable exegesis of men who probably looked much like himself-he did so with loathing but nevertheless driven. Eventually, of course, the effort drove him even crazier than he had been in the first place.

Consider Max. He is one of those dim, anonymous men you find eating lunches from paper bags at the Automat, steaming cups of tea somewhere to the left of the numb, stricken, stunned gaze. Or-oh, yes-going through microfilms and ancient newspapers at the public library. Wide, staring eyes slammed into a face emerging almost indifferently from a drab checked shirt, uncashed unemployment check nestling in the breast pocket. That kind of thing. Now and then he cursed strange young women on the subways for displaying their bodies. But Max had (or has) this one enormous obsession. It redeems him. It even purifies, as great obsessions have been known to do. He wants to travel in time. All the way back. All the way forward. What's the difference?

The important thing is to punch through to the end and get some damned answers. Probably looks the same at either end.

Never mind why. Who knows? Why do some men go to the West Coast, some become touts; still others yearn to be published writers—these are the really dangerous ones—or absconding stockbrokers. The analysis of selection is not within our compass. This is a fiction piece. Max Robin wanted to move in time.

It would be really great to know the way everything is—put me one up on the sonsofbitches.

Unlike potential writers or absconders, however, Max's possi-

bilities were not clearly defined for him. He lacked precedent, a sense of history. The writer always has the rejection slip, the stockbroker the SEC.

The potential time traveler, however, is in a bind. As you know, time machines do not exist at present-neither do time travelers (this proves the point that it was never invented—surely we would otherwise have been visited.) Not even what we might call prevailing literature exists on the subject, let alone a how-to kit. Oh, there are science-fiction stories and novels, of course, but for Max at least these did not count. They deal with extrapolation, speculation and so on, usually with an almost apologetic air of clinging disreputability. Despite the increasing popularity of these works in the Speculative Sixties, Max Robin found himself repelled by the category.

It ain't got nothing to do with reality...

Consider him now more specifically if you will, please. Max Robin, forty-eight years old, more than a little battered on the top with white patches which would be less ominous if they were simple baldness, the familiar dull eyes now suspended openly in his skull as he looks at something—a contraption—he has constructed in his room.

I did it. And I ain't even got no

degrees. I built it myself, by golly!

He means this to be a recollection but since you and I are already in the room the thought comes out rather as an announcement.

THE something we are looking at is about four feet high and wide, six feet in depth (the proportions, then, very much like Max's own), made of coils and wires and dangerously frayed electric cords of some sort. Power must be on because static leaps from one coil to the next but it does so without purpose, without even that venom and air of danger which can be associated with bad machinery in abrupt decline, Suspended at the heart of the network is a pocket watch which dangles from an uncoiled paper clip. It ticks feebly. It indicates to us-we have excellent eyesight, the two of us—that the hour is two-thirty and we make the inference that it is morning from the absence of light through the uncurtained windows. Then again, thanks to certain architectural innovations, it is almost always dark in Max's tworoom, furnished. He prefers it that way.

"Son of a gun," Max says reverently. "I think I've gone and invented it. It really looks as if it's going to work. It's my time machine, all mine." He can be excused, after all his months of

struggle, a little megalomania. "No one else would have had the guts to do it," Max says. "Only Max Robin could work it out."

He would prefer, of course, to address these remarks to an audience. Max, like most creative geniuses, is not above a little human contact applied in small doses, used sparingly. Unfortunately he has no companions in these rooms. There have been no since the day several visitors months ago when Max, taking his ease in customary fashion, was interrupted by his landlady's demands for rent. After he subsequently took her firmly by a heavy arm, threw her out of what he called his "chambers" and stated that if she ever returned he would evict her, his rooms have been without guests. Since the lady at issue is something of a sadi-maso (I hope I am using these terms correctly; I am not a specialist) she accepted this dictum without wonder and their relationship, such as it is, has more recently devolved around Max's occasional, convulsive payments of rent. At the moment, locked in his regret, Max would even have settled for his landlady.

Since you and I are already here, however, we may suffice. Ordinary fellows, both of us, but in the "right place at the right time" as they say, and therefore the best of all alternatives. It is necessary, however, to introduce ourselves.

I do so in the most graceful—if abrupt—manner possible. Max is not a man interested in social intricacies. Stepping forward the few necessary inches to bring Max's attention to me, I say, "Congratulations? Is that the time machine? Did you just invent it?"

All questions. I am not sure of anything.

Max considers us with mild approbation, satisfied that we exist and not interested in pursuing the matter beyond that. It would be strange if he did. Max takes most things in his life—there being so very, very few—for granted.

"Yeah," he says, "that's mine. I did it."

"Does it really work?"

"I'm pretty sure it does. I don't know for a fact, though. It's never been tested. I'll be making a trial run in just a minute, now, just as soon as I knock off this cigarette."

I note that Max's eyes, during the last part of this, have wandered over and set on you, without eagerness, but with that slow, dawning suspicion which is, perhaps, Max's most characteristic manner of confronting the universe. Anxious to avert a scene—which for reasons I will not go into would be highly complex—I say hurriedly, "He's a friend of mine. He just came along with me."

You nod to this, beam and try in your various ways to werify this

statement for Max. Like me—although speechless in your case—you do not wish to involve Max in an extended analysis of your presence. But he averts all this by shrugging and turning away. It is difficult, at times, to maintain the fiction that important inventors maintain their own fiction of involvement.

Max knocks out the cigarette, considers the machine for some time and says, "Well, I guess I'd better get going if I want to take it for the trial run."

"We'll be watching," I say.

"It's geared to send me back fifteen minutes in time and leave me there. Just for the trial run, that is. I figure if I'm lucky I meet up with myself and we have a conversation or something—then I vanish. Or go away. I ain't gone any further than that. I don't have that kind of mind."

"That's perfectly all right," I assure him.

"I mean, how much can a man do?" Max asks rather sullenly, I think. "I invented the damned thing. That's enough. How do I know how it's going to work or anything like that?"

"Sounds all right to me," I say. "Doesn't it?"

I indicate that you should nod and obediently you do, roundeyed. With a sharp, covert gesture I indicate to you that you are on the point of sucking your thumb and warn you to withdraw it, sir.

"Of course," Max says, "it could go completely haywire. No-body ever done this kind of thing before. How can I make any guarantees? I don't know if I should be on the trial run. I invented it, after all. I'm too important to waste. What if it blows?"

"I'm sure it couldn't," I say.

I consider him with what I hope he interprets as high admiration, even trust. For reasons which will develop shortly I am not interested in crossing Max.

"You want to go?" he asks.

"Can't do it," I say regretfully. "Wish I could but I have a bad stomach. I can't take conveyances of any kind."

"Oh, you really wouldn't be traveling, you know. You'd just sort of be moving along in—"

"I'm sorry," I say delicately. "All the same principle. Terrible nausea. I might spoil your machine if you put me in there."

THAT stops him.

"That's a point," he says. He tilts a finger to his chin, considers the ceiling. "That makes sense. What about him, then?"

He points to you.

"Oh, he's just along to keep me company," I say. "Here for the ride, so to speak. I don't think he'd make the right subject for an experiment. He can't talk, you see, and he couldn't tell you any of his

impressions. He came out that way. He just couldn't—"

"Well," Max says cunningly. "Well." The cunning is manifested as a subtle flush which cleaves his face in half, gives those halves the preternatural appearance of gloating cross-eyed at one another. "It doesn't matter that he's a dummy or something. The important thing is that he breathes and we'll know if he keeps on breathing."

He reacts in an explosion of agility, a series of motions too rapid to follow even if I have any interest in following them, which I certainly do not. When it is all over you have been hurled into dead center of the contraption, a belt winched loosely around your waist. Max rubs his hands and moves toward a switch.

"Look, Max," I say, trying to explain, even though there is nothing after all, to discuss. "You shouldn't have bothered doing that. You see, you'll only—"

"Too late, brother," he says with some satisfaction. A switch is closed and there is a sound of breaking glass, a dispersion of smoke. When I recover my vision it is quite obvious that you are gone. I take this with regret, if without surprise. It means that I must go almost all the rest of the way alone, now.

"Well, it does something," Max says, considerably subdued by that knowledge. The ultimate pity of his condition is that he did not believe the machine would work. He had not fully realized this truth about himself until this moment and the resultant depression was strong, even for Max Robin. "Now I guess we have to wait and see if the guy comes back in fifteen minutes. If he does, I guess I got it made. I'll get a patent."

"No, you won't," I say sadly. "He's never coming back."

"How can you say a thing like that? Just tell me how you come off saying something like that!" Max shouts. Suddenly, he is completely discomfited, riding on the raw edges of his Automat-nerve, back with the microfilm. "If it works he'll come back."

"They never come back. Because time moves ahead," I say, still feeling the pointless sorrow. "So his fifteen minutes will never catch up with yours. You'll run in a straight line forever, like blind cross-country runners. We could have told you all of this if you'd listened. That's what we came back here for, as a matter of fact. To tell you. But now it's entirely too late and things will just have to work themselves out."

"What work themselves out? What cross-country runners? What coming back?" It is a little too much for Max. "Listen, I don't really have to listen to this. I'll go out for a drink or something and leave you here. The hell with you."

"You can't leave. You see, you can't get out. Max," I say, hoping that he will listen, spreading my arms to convince him of my utter sincerity. "Max, you're already in the machine."

"Me? In the machine?"

"Whom do you think you put in there?"

Max blinks, shakes himself slightly like a confused dog. "This is just like science fiction," he says. "I told you, there's no such thing. I figured it all out. Time is time—you can't fool around with it. You never meet yourself and you never change the past, you just kind of move around in it all the way back and forth. I know that."

"That's your theory. Now, if you'll excuse me, my fifteen minutes are up. I really can't stay, you see. Not any longer."

I leave. Actually it has been extremely close. I clear Paradox by only a matter of seconds. But clear it I do and now I am gone.

Quite alone in his room, then, the inventor Max Robin stands in the silence, looking at his machine. It hums peculiarly and there is a sawing noise, then a sound of distant plopping.

Max stares with wonder.

It is happening now. Right this moment, it is happening. But

there is no one to warn or even to audit him so Max can only watch it occur.

And so, then, from all corners of the mighty time machine—from all the crevices and interior spaces — Max Robin is coming out. There are five of him, ten of him, eleven, fifteen and a thousand and they are all falling on the floor, struggling against one another to wizened, tiny feet, trying to stagger toward him. Their eyes are wild. They are almost as wild as his own. The mouths—wee, gaping mouths—are saying words. They are trying to make some kind of a point.

Unfortunately they are barely coherent.

"I told you not to mess around with this, you bum," is what they are trying to say. "If you had stuck to your rolls and your sex-dreams none of this would have happened. But now, look. Look—"

Since they are all Max Robin himself, however, this fails to come out with the necessary forcefulness. Max never had much selfrespect anyway.

Then they turn on him and begin to strike.

That works.

It should.

He is, after all, severely outnumbered.



all I ever was or might be was collapsing inexorably inward, toward that imaginary point two inches behind my eyes where the essential me had always dwelt. I was dying. I was a bodyless point of ego in a sea of final nothingness, a mote beating frantically against the night.

I was dying. Never to breathe the air of Earth again, never to feel Loy's body against mine, never to know pain, never even to drift in the private world behind my own eyelids.

I was dying and, as men do when they have time to contemplate the moment, I was dying badly, a crazed whimpering thing crying futilely against the dark. I

I shrieked once in my fading mind, had time to think briefly of Loy, to say goodbye forever to the image of her in my mind. And I was not.

I WAS. I lived.
I had gone, I had not been and now I was. For a long moment I could think of nothing else. To have not existed and then to be. What could be sweeter? What more of heaven could anyone ask?
I opened my eyes and knew this was not heaven.

I saw a cave whose walls gave pale blue light. I was lying on my back on the hard, damp rock. I could not move. In a circle around me were things like bloated naked brains, pulsing and squirming hideously, brains supported by slimy green bodies like dog-sized slugs. This was not heaven. This was the fifth planet of a yellow sun far, far from Sol. I was alive and I began to remember.

The first thing I remembered was Loy. Where was she? What were they doing to her?

I found myself screaming her name.

I felt a pressure in my mind, a presence, cold and clammy, without passion, without malice, without emotion, without mercy. A pressure that was a questioning, a search, a leaching. I began to remember more.

Fifth planet of a yellow sun. A fair green world, not like the others Loy and I had found. Loy—my love, my woman, my wife. A honeymoon world, a world fit for colonization, hence a world where, by the terms of the contract, we could spend the remaining six months of our Honeymoon Year enjoying the green grass and the blue sky and the fresh clean air. No more weeks in space in the cramped two-place Scout, no more methane worlds, chlorine worlds, jungle worlds, desert worlds.

The Honeymoon World, the Jackpot World, the Bonus World.

Death World.

"Loy. Loy. Loy."

The circle of gray, quivering brains seemed to pulse faster, as

if with some not-quite-familiar strain, and I felt the pressure in my mind change, reach for language concepts in my brain, pick, choose and form words.

The woman is elsewhere, the words that were and were not of my mind told me. Elsewhere.

The fog began to evaporate from my memory.

We had surveyed the planet from orbit and, finding it fair and habitable, we had landed the Scout in a lush green meadow close by wooded hills.

Loy smiled at me as we stepped out of the airlock and inhaled the fragrant heady odors of growing things.

"There," she said, putting her arm around my waist. "Now aren't you glad we decided to take a Honeymoon Contract?"

"We were so right," I said with a little laugh.

The idea had been hers in the first place. My attitude had been that the government was not about to give something for nothing. A Honeymoon Contract sounded like the best of all possible deals. The government provided any couple who could pass the minimal physical and psychological tests with a two-place Scout to roam the stars together for a year. All we had to do in return was make a brief survey of each planet we found and, if we were lucky enough to find one suitable was for to promote to promote worlds. The most was for to promote to promote worlds we had to promote to promote to promote worlds.

for colonization, we could spend the rest of our year on it and collect a bonus that would set us up for life when we returned to Earth.

Of course, the government did not act out of sentiment. The human race needed room to expand and expansion meant new planets. Perhaps one out of fifty solar systems had a habitable one. The economical way to find it was to send out plenty of cheap, twoplace Scouts. Under ordinary conditions, two people simply could not stay sane cooped up alone for a year in the vastness of interstellar space. But a man and a woman?

Necessity had made a hard governmental policy out of an ancient romantic notion—the stars were for lovers.

Loy had not seen harsh fact. To her all creation was designed for our pleasure and enjoyment. The most natural thing in her world was for a thoughtful government to provide us with a free honeymoon. The succession of chlorine worlds, dead rocks and gas giants we had discovered in the first six months of our Honeymoon Year had left her attitude largely untouched—after all, we had each other.

The most beautiful thing about Loy was that she could make me see things her way.

So we were as children together on a summer Sunday in the park.

It was that kind of world, a world of low, broad-bladed grass, brilliantly feathered birds, high blue sky, small six-legged rodents, berry bushes, fruit trees. A happy, innocent Honeymoon World.

You can see how sappy and wrapped up in each other we had become. No world is a park or a garden. The absence of a full spectrum of predators usually means that something sentient has wiped out the competition—so they told us in our briefings.

Finally, after days of—I don't know what else to call it but romping in the meadow—we decided on a little real exploring in the nearby woods.

Loy was all for traveling as lightly as possible, taking only a sleeping bag and some concentrates to supplement the local fruits and berries, which had proved edible and tasty. We had the closest thing we ever had to an argument when I insisted on taking energy rifles along.

"It's just not right, Bill," she said, pouting and canting her blond head to one side at an engaging angle. "This planet has been so nice to us. It trusts us and it's only right that we trust it. Carrying those ugly guns—it just isn't right, it's being, well, you know, nasty."

I tried to win the argument with a kiss but she turned sulkily away.

"Look, honey," I said, "we don't know what's in those woods. Things may be there that are nastier than we are. An energy rifle can stop an elephant. When it's scary and gloomy in those woods, with strange night noises and things scuffling in the dark, you'll be glad I insisted on bringing the rifles even if we never use them."

"But Bill-"

"Look at it this way. If we don't have the guns, we'll have to be suspicious and cautious every time we hear a strange sound—we won't be able to trust anything. But if we do have the guns we won't have to be leary because an energy rifle can stop anything."

"Masculine logic."

She sighed, but the sound had a giggle behind it. I gave her a hug and we took the rifles.

THE woods were dark and dense with gnarled, thick-trunked trees and tightly interlaced networks of leafy branches. But the undergrowth was very light, we saw no dangerous animals and we made good time. By nightfall we had reached the base of the low, rolling hills. Loy cooked a meal of concentrates, topped off with local fruits and berries. We crawled into the sleeping bag early. After several hours of enjoying the cool woods and the night sounds and each other, we

drifted off into a pleasant sleep.

At some time during the night, half in dream, half awake, I felt an odd pressure in my mind. The feeling was strange, but not really menacing. It was an awareness of an interest not my own, a cold, emotionless questing for knowledge rifling through my mind as if it were some encyclopedia. A questing, a questioning, a knowledge-vacuum, with no form, no flavor, no personality behind it.

I lay motionless, my eyes closed, in that gray borderland between sleep and wakefulness, wondering whether or not I was dreaming and not really caring.

Suddenly Loy screamed beside me. I was instantly wide awake, eyes open, and I saw them.

Encircling our sleeping bag were ten monstrosities about the size of large dogs—bodies like great slimy slugs, supporting what appeared to be naked living brains, wet and pulsating, ten times the size of a human brain. The things had no arms, no legs, no tentacles, just ghastly brains on slimy slug bodies.

Loy was clinging to me, shaking and sobbing. I reached instinctively for the energy rifle close by the sleeping bag. Something froze my arm, then the rest of me. I was paralyzed and now I was aware, dreadfully aware, of the alien presence in my mind.

I felt it grope in my mind for

words, memories of concepts, pick, choose and form words in my mind.

Who? From where? What?

Dazed, numb, only partially in control of the inner workings of my own mind, I found myself forming mental answers to the mental questions.

We're humans from Earth, another world circling another star.

Other intelligences, the presence thought into my mind. Other races. Interesting. Possibilities of much new data. Knowledge-expansion. Good.

There was no emotion behind any of it, unless you consider an almost obscene lust for knowledge an emotion. A million angry questions tried to form themselves in my mind. I felt the mental presence beat them away with casual indifference.

Different, the presence said, growing ever more facile with the borrowed words. You and the other are different from each other. Your physical structures are not contributing to the same mental structure. Do separate races share your planet?

I was in no mood to answer inane questions. Loy had gone quiet in my arms, as paralyzed as I was. I knew that she was still terrified, and I had to act, if only mentally, to remove the cause of her fear. But my mind was not my own. I felt my total mental re-

sources struggling to answer the alien's questions, my entire stock of memories and mental capacities rise to do its bidding, to fill the vawning knowledge vacuum.

I watched, almost as an outside observer, as my mind marshaled itself and answered. I found myself explaining what I had never even stopped to consider: what it was to be a human being, the difference between men and women, how Earth was inhabited by billions of separate organic systems called men, whose mental structures were distinct and separate from each other, billions of unique and separate mental universes arising from an equal number of physical organisms.

I felt the alien presence in my mind boggle, almost stagger, unwilling to believe, yet unable to disbelieve. In that moment of confusion I felt the thing's control over my mind waver for an instant, and I used that moment to shape my own confusion into a demand, a question.

Who, what are you?

Then I tried to reach for the energy rifle again and felt the presence resume its iron control.

I sensed a securing hesitation in the thing, then reluctant decision. I felt words forming themselves in my mind.

Knowledge on your part may facilitate accumulation of data. I...am. I do not think of my

mental structure as "I." The presence detected by your mental structure is that of the mental structure of this planet. This planet bears many species of organisms. The organisms you now see are one such species. They are so specialized that their separate physical structures give rise to one unified mental structure; that is, to what you think of as "me." These organisms have no other function but the erection of this mental structure. The mental structure thus erected may control the physical structure of this planet, the sentient being, the intelligent race. According to all previously accumulated data, I had hypothesized that I was the only such mental structure that existed, the only center of awareness in the universe. Now data is made available to the effect that at least one planet exists where billions of organisms give rise to billions of separate mental structures, so that in effect your planet several billion intelligent has races. This promises a vast new area of knowledge and much data that may now be accumulated.

It was my turn to boggle, to be unwilling to believe, yet unable—by the very nature of the contact—to disbelieve. An intelligent race, thousands, perhaps millions of individual organisms giving rise to but one mind. A mind alone, without companionship,

without love or hate or jealousy—without, I suddenly realized, the concept of death. Emotions, hopes, fear—which in the last analysis is always the fear of individual death—how could a mind alone know any of these? What could motivate such a mind, impel it to action?

Suddenly, I felt myself virtually unable to think. The alien mind was dampening my thoughts with irresistible power. It seemed to rejoice, to loll in a kind of obscene anticipation.

Such knowledge. Such a rich store of new data! Such a wealth of new possibilities to explore, experiments to perform!

And I realized that only one thing could occupy such a mind: a quest for knowledge that was not abstract, not cold and intellectual, but raised to the level of a basic emotion—the basic emotion, a drive virtually sexual in its power and intensity.

I felt Loy tense against me. I sensed her fear and shared it. We had no point of empathy with such a mind. This entity was asocial, hence amoral, to its very core. And we were totally in its power.

Let us go, I said wordlessly to the world-mind. Let us go and we'll tell you all you want to know. When we return to Earth we'll send back scientists, men who specialize in knowledge. You can learn more from them than you ever can from us.

Yes, that will be good. Later. After all possible data has been accumulated from you. Much is to be learned. It will take a long time to exhaust the possibilities. Especially concerning the peculiar states of mental structure you call emotions. And most particularly the emotion you call love. It seems to be the most powerful and the most important. But this other, the one you call death—that will require much, much experimentation.

AND I remembered, now I remembered all. How the alien mind had seized control of our bodies, how we had been trotted against our wills unerringly through the night to the system of caves in the hills, surrounded by the brain-slugs. How Loy had been separated from me in the caves. How I had been lying on the cave floor for an unknown length of time, somehow needing neither food nor water, feeling neither hunger nor thirst, totally controlled by the world-mind.

I remembered the probing, the endless rifling of my mind for things of significance and things trivial until everything I had ever known, every memory I had ever had, matters I had thought I had forgotten or had never known I knew had been sucked from me

and greedily devoured by the knowledge-crazed mind.

And then they had started in earnest the experiments, the endless, horrible experiments. Pain, hunger, ecstasy, fear, lust, the whole spectrum of emotions and drives—the thing made me experience them over and over again, while it hovered in my mind, observing, clucking to itself, recording, evaluating, savoring.

I remember asking again and again what was happening to Loy and finally, when the world-mind was good and ready, it let me know. Loy was conveyed into the chamber by a bevy of our captors, her body thin and drawn and not her own. I was forced to watch, immobilized, while what had been done to me was done to her.

I watched the pain and the fear and the lust play over her features, and all the while I could feel the presence in my mind assessing my reactions, accumulating the knowledge of how a man feels when he is watching his bride being tortured.

Then the process was reversed and Loy was forced to look on while the world-mind did things to me.

Finally the thing was satisfied.

Most interesting, the words in my mind said. Although your two mental structures are separate entities, there seems to be some interaction between them. If one of vou undergoes unpleasant stimuli both of you react. It is as if your mental structures were partially connected. This seems to be at least the major part of the phenomenon you call love. Interesting. Love would seem to be one of the two strongest aberrations called emotion to which your mental structures are prone. One may consider it one pole of your emotional spectrum. The other pole seems to be a fear of this phenomenon you call death. That will have to be investigated most thoroughly.

Loy had been led out and I died for the first time.

Now I truly remembered everything. This was not the first time I had died and been reborn. How many times had I died? I had no way of knowing. Each death had been real—a death without memory of the earlier ones. Each time had somehow been the one and only time, all-obliterating death itself, and—

Very good, the presence in my mind said. You have died one hundred and seventy-three times. Much data has been gathered, much has been understood. This death is the worst possible thing that can happen to you, the permanent destruction of your mental structure. You now understand death totally. You know in detail

just what it is to die. Nothing that you can experience is more unpleasant. The same reaction was observed in all the woman's deaths as well.

I cried aloud, "You filthy-"

It cut me off impatiently, the brain-things pulsing and squirming in the pale blue light.

It was necessary that she undergo the same experiences, both as a control and as a condition of the final experiment.

In my mind I responded fear-fully. Final experiment?

Yes. All possible data has been accumulated, except for one most interesting experiment. It has been established that one pole of your emotional spectrum is love. The other is fear of death. It but remains to determine which is stronger. At the conclusion of this experiment, one of you will be permitted to return to your own planet.

I gasped. One of us?

Of necessity, the presence said. The purpose of this final experiment is to determine which is the stronger stimulus: love or death. You will both undergo the experience of death one final time. This time you will be permitted to retain the memories of all your previous deaths as you die. But this time you will really die. You will not awaken from this death. Each of you will have only one way of saving yourself—you must sacri-

fice the other. You have only to declare in your mind that you wish the other to die in your place and it shall be done. Then you will be allowed to return to your planet. It should be a most informative experiment.

And once again I felt the blackness closing in, numbness overwhelming my extremities, my body sloughing away from me. I felt myself sinking slowly but inexorably into nothingness.

But this time the terror was even greater, for now I remembered this happening before, again and again and again. As each tiny fraction of my universe was chipped away, I was anticipating, knowing how it would be, fearing it an instant before it came, out of my deep knowledge of exactly what it was really to die. And I knew that Loy was feeling it, too.

I felt my consciousness collapsing upon itself, contracting, fading to a point and every moment I was anticipating the next, dying a thousand deaths in one.

Inward, ever inward, the screaming animal thing that was me contracted, faded, beating hopelessly against that final, infinitely anticipated oblivion. And Loy was dying, too.

I was reduced to a mote of consciousness, a thing in itself, by itself. A thing fading, shrinking—and all around was the night,

the consuming, endless night. The end of me-ness, of hope and fear and pain and love. Of all I ever was, ever would be.

And Loy was dying, too. The words were a constant refrain. No amount of bravery could save her. I could not save her. Nothing, no one could. We were both dying and only one of us could live, the one who doomed the other.

I was no longer a man, no longer a husband, no longer a lover. I was a thing, a mewling, screaming, panicked thing, a thing that had died and died and died and remembered every moment of those multiple deaths.

I was a dying thing, an ego hungering for another instant of life and the black was closing in.

And then there was nothing left of me but a howling maddened voice shrieking against the night no!

Screaming and begging, holding on to each instant like a man hanging from a cliff by his fingers, each moment a little more of the edge crumbling beneath his fingernails.

And Loy was dying, too. I could not save her. I could only save me. And suddenly love was a faraway thing of another world, another plane of existence. There was no love. There was no Loy. Only me. And soon there would be an end to me and there would be nothing, nothing, nothing,

howling and empty and everything lost to me forever.

And before I had decided anything, before I realized what I was doing, I was screaming: "Her. Kill her. Not me. Not me. Her. Her. Her."

A presence far away said simply, You shall live.

The blackness closed in but I was no longer afraid.

AWOKE in the meadow next to the ship. Two of the brain-slugs stood beside me.

In front of me stood Loy. She was staring intently at the ground.

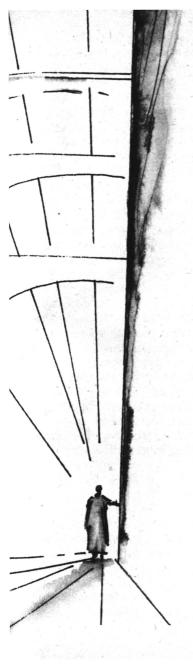
Interesting, said the worldmind. The experiment is concluded, and the results are as anticipated. It was, of course, not necessary that either of you actually die. You are free to leave.

The two brain-slugs began to wriggle swiftly away toward the hills, leaving twin trails of translucent slime in the grass.

Loy and I stood for long moments not speaking, not able to look at each other. Finally, after what seemed an eternity, our eyes met for the briefest instant.

But I knew from that flicker of a moment that all that had ever been between us was dead and gone forever. I only needed that momentary glance into her eyes to know with terrible certainty that Loy had made the same choice I had.





THE NEW THING

JOHN BRUNNER

The most dangerous question in the Universe may be—What's new?

TO WALK across the great hall of the Record Registry was to feel one plodded through deep dust, although the floor was spotless, clean and firm underfoot. A hard heel could make it ring but so vast was the hall that echoes died on the way to the walls and roof which might have reflected them.

That which lay here deep and made the going heavy was despair.

At certain points on the wall, at about the height of a man, red figures shone: a one, a zero, a three, a nine and a four. Last year the group had ended in a three. Next year it would most likely end in a five. Below, above, on every side was a feeling of pressure, a sense that the air was being made to shimmer—from this shimmering sifted down the intangible motes of hopelessness that settled not on the bodies but on the minds of those who came here.

The weight of those particles which were without weight was graphed by apathy: less laughing, more anger; less anger, more sighing; less sighing, more silence.

This was the Record Registry in which had been stored data about the achievements of every intelligent race known to have inhabited this galaxy: the Frotuglize, the Zyphrians, the Homoclawk, the Madgerive—facts garnered from more than a million worlds to serve as a yardstick for the current precariously dominant species, the oxygen-breathing biped known as Man.

This was the place to which proud spokesmen from thousands of the planets that Man now occupied had come, anxious to have their accomplishments also marked in the imperishable pattern of the computer memories as Records: the FIRST time suchand-such was done THESE were they who did it.

This was the Ultimate Arbiter: the passionless machine that ate the energy of the stars for food and stored the knowledge of the galaxy for—satisfaction?

Here, now, hoping against hope that the long, long time they waited for a verdict on the offerings they had brought—the pansensory tapes, the certified time marks, the attestations and documentary evidence and other things by the shipload—indicated

that they would finally secure a place in the Record list and cause the figures on the wall to revert to zero, were four isolated individuals, two women and two men. By turns, each watching for one-third of a standard day, they monitored display panels set into the wall upon which the verdicts must eventually appear.

By custom those who had been here longest waited farthest from the entrance. By custom, also, one did not speak of the hoped-for record-breaking accomplishment that had caused the people of a whole faraway planet to send its delegates to the Registry. All too easily two delegations might have come here to post an identical claim. That suspicion was haunting, inescapable; drawn apart, the four no longer spoke excitedly to one another but remained quiet and revolved in their minds the terrifying possibility of null achievements.

As the red-glowing figures showed, it was ten thousand three hundred and ninety-four years since a new Record had been entered on the list.

WHEN the fifth arrival appeared in the enormous doorway the soft, directionless voice of the automatic enunciator caused those who were already waiting to turn incuriously and look that way, but only the newest

of the former arrivals retained enough spirit to raise a glass and inspect him at a distance. The others were content to wait—he would, by custom, come to them. More than likely he would bring a breath of intolerable excitement with him and be bewildered by their dullness. And it would be too great an effort to explain the reason.

The glass showed, in fine long-range detail, a very old man indeed, his brown skin networked with lines, his scalp showing through the scattered white hairs that crossed it, his back bent, his scrawny arm requiring the support not of an automated walker but of a simple staff. His only visible garment was a long gray robe that brushed the insteps of feet aged nearly to translucency.

Breathing with some effort, he leaned on his staff and gazed across the hall for a long moment, his eyes at least suggesting alertness and vivacity. During that time the voice of the machine that enclosed them all stated some simple facts about him.

"The newcomer wishes to be known as Alexander. He is a human male of the genetic strain qBA. He is aged one thousand one hundred and sixty-four and his planet of origin is Earth. Of the Records in the current list held by human beings twenty-two per cent were established on—or

by citizens of—Earth, more than any other single planet. But the last one hundred applications for new Records by citizens of Earth have all been adjudged unacceptable."

At the startling figure of twenty-two per cent the four who were already present turned in unison to stare at Alexander. At the conclusion of the machine's remarks, they uttered simultaneous sighs of relief. Nothing—nothing in the universe—could conceivably be more galling than to assist at the Registration of someone else's Record, while having one's own rejected.

There was a moment of renewed silence. At the end of it Alexander gathered his failing strength and began to walk.

BY CUSTOM he went first to speak with the man who waited farthest from the door. This was a hulking fellow in a tight garb of dark green. His beard hung untrimmed to his waist and his fingernails were overgrown and chipped.

In a thin voice and a polite manner the old man said, "As you have been told, I am Alexander and I come from Earth."

The hulking man moved only his eyes. The slumped weight of his body remained inert on the folding metal chair that supported him. It was not until it became clear that the intrusive stranger was patient and did not plan to go away of his own immediate accord that he summoned enough energy to grunt a harsh response.

"I'm Cridge, from Balkistan. Anything else you want to know or will you leave me in peace?"

"Thank you," said Alexander sadly and moved to speak to the next in line.

This was a woman, a very stout one, whose gross body matched the inflatable armchair under her, and who leaned one elbow on the side of the chair so that her fingers were conveniently located to pluck at her underlip—brrup, brrup, brrup. She wore no clothing at all but nudity was customary on many worlds.

Alexander addressed her in the same words and after a long-drawn-out sigh she consented to reply.

"I'm Gailalu and I come from Ludgerworld. Welcome to the Registry. And now, if you don't mind, I'd like to go on watching my panel. I'm expecting a verdict any moment."

Alexander inclined his head and moved on toward the third of those waiting—again a man but this time one of middle age and medium build, with the contrast of dark skin, pale hair and a body-harness of flexible gold that located his ancestry to within a few hundred parsecs. While on the

verge of approaching this man's nullgravity couch and a third time uttering his introduction, Alexander checked, glancing toward the door. A man had appeared there, young and vigorous of stride, in gaudy yellow and blue, and at the sight of him the fourth person waiting—a girl with a bright smile and a sweep of clear red hair—had jumped up in delight and gone running to meet him.

His eyes following the girl, Alexander spoke to the darkskinned, pale-haired man and received much the answer he had been expecting.

"I'm Phraticor and I come from Loghious. You're from Earth, are you? Well, I wish you as much luck with your application as I'm having with mine—I've been here three months already. Obviously it's taking a lot of time to process our Loghian data. But the chances are that when the breakthrough comes it'll be sudden—so I'd better not waste time chatting right now. Later, maybe."

And with that his mask of civility gave way to the same expression his companions wore.

A LEXANDER made to move on. But before he had covered the distance that separated him from the stool on which the girl had been keeping her watch, she had brought the newcomer to meet him, her arm linked with his.

"Hugo, this is Alexander and he's from Earth—can you imagine it?" she exclaimed. "The world we all started on thousands of centuries ago! I'm Dolia, by the way," she added to Alexander. "And Hugo, of course, is my relief. He came for me early so we could have time together."

She gave the arm she held an affectionate squeeze.

Alexander looked at them for a long time. At last a smile crossed his face, so that one might have imagined his dry old skin crackling like ancient parchment.

He said, "I see you are very happy with one another."

Hugo nodded and gave an answering smile that turned his features from regular to handsome.

"And you are from what world?" Alexander pursued.

"Oh, from Coraline." Dolia shrugged. She gave her words an embarrassed inflection. "A very new world—you probably won't have heard of it. This is our first application to the Registry and we're terribly excited. Everyone seems to think we have a very good chance because it's taking so long to process our evidence. Usually the first time a new world sends a delegation here it's turned down right away. But we've been here over a month and they're still processing."

"You mean it's still processing," Hugo corrected her gently. "This place isn't run by people—it's all machines."

"Slip of the tongue," Dolia said with a grimace. "Oh, we're holding up Alexander from posting his evidence, aren't we? I'm sure you must be very eager to get on with it." She checked and a tiny frown drew her brows together. Uncertainly she added: "Are you the entire delegation from Earth, by the way? Or are there others to follow?"

"Good point." Hugo nodded. "There are only five of us from Coraline but we're still very underpopulated. I know the Loghians sent sixty—and I don't think I've managed to count the delegations from Ludgerworld and Balkistan."

"I'm by myself," Alexander said.

Dolia gasped.

"But aren't you going to find it terribly tiring—having to watch the screens all the time on your own? Or have you brought enough equipment to let you stay here all the time? Even so—"

She broke off doubtfully.

"You were perhaps going to say," Alexander supplemented, "that it will be a long and tiring wait nonetheless? Ah, there you're wrong, though I appreciate your concern for my well-being. You see, I shall not have to wait. I know that I'm going to set an incontestable Record."

The ensuing silence was not surprised but stunned. It was broken by the sound of movement from behind Alexander. He turned to see that his three other listeners had stirred from their dull postures of waiting and were gazing at him with dismay. Phraticor, the nearest, responded first, jumping to his feet with a display of bluster.

"You say you know you'll set a Record? Then you're mad. You need medication, sedation, psychotherapy. Yours is a delusion of grandeur."

Hauling her ponderous mass to the floor, waddling toward Alexander with a furious scowl, the woman Gailalu chimed in to support Phraticor.

"Yes—yes. You have to submit your evidence to the machines. They compare your claim with all the billions and trillions of bits of data they have in store. No one can claim to predict a Record."

And, disturbed at last from his apathy, the hulking Cridge also strode over shouting, "You're mad! You have to be mad! If any man can say what's a Record—and what's not—there's no point in coming here, no point in waiting all these months and years for a verdict."

"Do you want your verdict, then?" Alexander said and drew his scrawny body up with the help of his staff, so that sudden authority rang in his voice like a brazen bell.

"What?" Taken aback, Cridge stumbletongued. Then he retorted, "Of course I want my verdict. Why else should I have sat here day by day for all these unendurable months?"

"Because you found the waiting more endurable than the verdict," Alexander answered. "The circuits of the Registry work at the speed of light. The verdict on any application may be had between one heartbeat and the next."

"What?" Hugo stepped forward. "You mean we didn't have to come here and waste all this time—you mean we could have just come and gone home again?"

"Would you rather be home again?" Alexander countered.

"Of course! Do you think it's any fun for Dolia and me to be cooped here on this sterile artificial planet with the dreary company we have to keep—always being told to go sit here in this horrible hall for hours of every day—when we could be at home swimming and dancing and being happy together?"

Beside him, in answer to an unspoken question from Alexander, Dolia gave a firm nod.

"It is as I feared," Alexander said and the whole weight of his

years seemed to settle on his shoulders in a moment, so that he had to take a grip on his staff with both hands.

But the others had exchanged glances in the meantime and, with acid formality, Cridge had decided to live up to his declared pretensions.

He said, "I defy you to prove your assertion, sir. I think you're lying—and when I've shown that you are I think I shall have you expelled from the Registry. This place is the repository of the known achievements of intelligent life in this galaxy and as such it might well be termed sacred. It is not to be mocked."

"Oh, for—" Alexander ended his exclamation with a sound epitomizing disgust. "Have your verdict, then, before you rot into the floor."

HE BRUSHED Cridge aside and raised his staff to tap on the nearest of the uncountable wall-panels that displayed verdicts concerning applications for a new Record.

"What do the people of Balkistan think they've done that's new?" he demanded—and his voice faded into a wheeze on the last word as though to suggest that the very concept of newness must be dead by now.

"The people of Balkistan have reorganized their society so that novelty is illegal," said the automatic voice from the air. The wall-panel simultaneously displayed the words. "They claim that this is in itself unprecedented."

"Have we gone that far?" Alexander whispered, while noting that all the other listeners—even Dolia and Hugo—had relaxed perceptibly.

Evidently they are claiming a different Record or Records.

"And?"

"This had already been done by the following species: the Zyphrians, the Homoclawk, the Madgerive, the—"

"Stop," Alexander said. And with reluctance added: "Dead species?"

"All of them," replied the machine.

He saw that Dolia was turning pale and wondered whether she had insight into the terrible suspicion he had just heard made a certainty. But he had no time for speculation. Now the die was cast and he had to hurry.

"Balkistan has its verdict," he told Cridge, "and could have had it within an hour of your arrival. Are you pleased with what you've heard?"

"It must be a lie," Cridge said uncertainly and was interrupted by Gailalu.

"Of course it's not a lie! Something as stupid and obvious as that was bound to have been done already. I'm prepared to hear the verdict on our achievement right away, if you can honestly make it come out of the machine."

"You doubt me?" Alexander said. "No, not me but those who were faint of heart before you. Little by little, ten thousand years ago, people grew discouraged by the negative verdicts that kept coming out of the machine, one, ten, a hundred, a thousand. There is something missing from the air of this place—without which no human being can survive."

"You're crazy. We were told the place was—"

"I don't mean oxygen," said Alexander. "What I'm talking about is hope."

And, not giving Gailalu time for a reply, he asked the machine to utter its verdict on the application from Ludgerworld.

"The population of that planet have turned it inside out," reported the machine. "Now they live on its interior and the hot core is a tiny artificial sun."

Hearing the words, Gailalu drew herself up proudly and sneered at the others.

"There's an unprecedented feat for you!" she cried.

"The Record in this respect is held by the Frotuglize," said the impersonal machine. "They turned the second planet of 198C- Avgrid/H inside out approximately thirty thousand years ago."

"They, too, shut out the universe," said Alexander. "And went their private way to death. Well, Phraticor?"

The dark man, with a glance at Gailalu, whose face had taken on the emotionless expression of someone who has survived an earthquake but lost in it both family and friends, said challengingly, "There's no need to ask the machines what we have done. We made a star—yes! From the separate atoms of hydrogen drifting in nothingness we pulled together mass enough to make it glow, a new light in the pattern of the heavens!"

Dolia and Hugo, as one, drew in their breath in wonder, but Alexander shook his aged head.

"Poor Phracticor," he said.
"Poor people on an isolated world. Machine, tell them the truth and end their misery."

"What misery?" barked Phraticor.

But the machine had already begun to speak.

"The majority of the Population I stars in the galaxy are now known to be the products of an unnamed race of approximately nine hundred and fifty million years ago, whose factory was responsible for clearing the volume between our galaxy and the Greater Magellanic Cloud of all hydro-

gen, totaling approximately—"
"Stop," Alexander directed
and the machine fell silent. The
face of Phraticor had turned
gray.

"But—" Dolia spoke after a terrible struggle with herself. "But I thought the Zyphrians—"

"Were the first race we have any knowledge of?" Alexander sighed. "No, alas, my dear. Only the first race whose achievements we have so far matched—or rather, had matched. To outdo the Starmakers we should have to build a galaxy—and the raw materials for that do not exist anywhere in the plenum." With a wry move he added, "Anyway, where would you put it?"

Recovering slowly from his shock, Hugo said, "In that case—I think it best not to even mention our own petty little application. If the creation of a star turns out to be the pointless reenactment of some previous Record we might as well quit and go home."

Dolia nodded and they turned toward the door.

"Wait." The order came from Cridge, whose despair had given way to rage on digesting the fact that his own world's boasted achievement was likewise the mere shadow of something long ago. "Not so fast. Are we'to be cowed by this—this intruder, this lunatic? Didn't you hear him say

that he was certain of establishing a new Record? I want to know what the people of Earth can do that's so superior, so novel and so fantastic that it'll be accepted here."

"Yes!" Gailalu cried.

"Yes!" Phraticor agreed, marching threateningly close to the old man.

DOLIA was tugging Hugo away but he resisted and spoke over the girl's bright red casque of hair.

"Sir, I think you owe us that, at least. If you do not prove what you claim we shall have no grounds to believe you on any score. I always understood that to secure a verdict from the Registry the applicant might have to wait for weeks, months, even years."

"Fair," conceded Alexander. He repeated more softly, "Fair—"

He grew brisk, "Well, then, since doubtless it will be you who by chance are elected to convey news of this event to the rest of the galaxy—and to do so you'll need all the data you can get—I suggest that we begin in inquiring what the last Record was that was set by the people of Earth. Machine, enlighten my friends on that score, please."

"The largest information-processing system in the galaxy," said the mechanical voice, "the Record Registry, was set up by the people of Earth approximately thirteen thousand two hundred years ago. No known previous and no subsequent installation of the kind outdoes it for (a) storage capacity, (b) speed of response, (c)—"

"Stop," said Alexander. And, turning to Dolia, added: "You have a question?"

"Yes!" She was almost weeping and her nails were dug deep into her palms. "If it's supposed to be so fast, why have people had to come here and sit around, wait months for a verdict, come here day after day after day?"

"Not because of the machine." Alexander sighed. "But because of their own reluctance to face the kind of truth that led us, the people of Earth, to create the Registry in the first place. You see, Earth is-uh-was a very old world. There had been men on it, naturally, who spoke and used tools and fire and were after a fashion intelligent, for perhaps as long as two million years before the dawn of the age of Space and the colonization of all your other planets. We had time to relax, sit back, meditate, hear the news, while you on Loghious Balkistan and Coraline and all the other planets of other stars were busy getting on with your lives, taming strange environments, adapting to new foods, learning to love new mountains and new oceans. You do love your worlds, don't you?"

He glanced at the others, who had grouped before him in a semicircle. Dolia finally answered him with a nod and a smile.

"As I expected," Alexander muttered. "You from the youngest world find it easiest to reply. So I must ask your forgiveness for our disastrous mistake because there is no one else to ask it of and no one else to do the asking.

"It seemed to us—as we saw the people of Earth grow less enterprising, ambitious, adventurous; more complacent, contented, repetitious in their lives—that something had to be done to jolt the species out of such a rut. This is what we did-we created this Registry, where the achievements of every species that to our knowledge preceded us are recorded. It was intended to act as a perennial spur, as a creative force to pose new goals and new ambitions for Mankind. We did not know of the Starmakers when we designed and built the Registry-had we known. perhaps our decision would have been otherwise.

"WELL, for a little time it worked. As we had anticipated, men came from all over the galaxy to inform the machines of new accomplishments and the tidings spread rapidly

when some great breakthrough was accomplished. To spur men on still further, we made sure that anything that was a copy of the work of other species was dismissed as such. But this was a terrible horror—and, I confess, it stemmed from arrogance. What business had we-who a mere two million-odd years ago were grunting in caves and killing our fellows to suck the marrow from their bones—to match attainments with races who lasted as many years in space alone, who—as we belatedly discovered—were capable of shaping the very galaxy we inhabit to suit their tastes?

"You, friend from Loghious who built a star! Your feat was marvelous, fantastic, incredible. I salute you—were it not that these old bones are stiff and slow, I'd go down on my knees to kiss your sandal strap! And you from Ludgerworld who turned it inside out, who made your own small sun to suit your needs—you, too, I admire and salute, for you saw a peak of accomplishment and with single-minded determination scaled it!"

Now the old man's voice was ringing so loudly it could almost call echoes from the far-distant walls of the great hall. He had forgotten his age and the prop of his staff in his excess of pride at the successes of the species he belonged to. "From you and your people, Cridge, I can, however, do no more than beg forgiveness. We unwittingly sent you down the blind alley in which you became lost—and not only you but everyone who has visited this hall for the past ten millennia."

Alexander's staff made a contemptuous jab at the red-glowing figures on the wall.

"We turned what should have been a challenge into a foregone conclusion. It has been lieved for thousands of years that anyone who came here to apply for the listing of a Record was bound to have it rejected—and so the custom has grown up of not asking for the verdict until all patience has run out, until the weight of boredom and desperation becomes intolerable. Once hundreds of planets every year sent eager delegations to Registry—and now, in this hall that could hold a thousand. I find only you people waiting. Oh, it's sad, it's sad . . .

"So, as a result, on thousands of human worlds life grows drab, pointless, monotonous. For everything that one can think of to do has already been done and the unquestionable authority of the Record Registry says it's been done. And in the end..." He drew a deep breath and clutched his staff tightly to him. "Yes! In the end.

"Friends, I know you hate me.

Why should you not? I come here, I tell you why your hoped-for Records are a waste of time. I claim to be about to register a Record of my own—certainly you must hate me. I see you shake your head, Dolia, and I'm grateful. But that's because you're young, and you have your man beside you—and you've not yet been disappointed often enough to become cynical about those good things which are, after all, the real prizes of life. I understand and respect, I even accept, your detestation. I shall make it worse. I shall say that I am about to post two Records-and that in itself will be a third. Machine! Has any delegation from any planet registered two Records on a single visit?"

"No," said the voice from the air.

"I thought not. Well, then, let me deal with the first. Machine, what is the planet which has been longest inhabited by mankind and is now uninhabited?"

"The planet Earth," said the machine.

THE silence this time was terrible—a silence like the implacable noiselessness between the galaxies.

At last Hugo said faintly, "Earth is—"

"Earth is empty," said Alexander. "The reason for that is what

you've witnessed here. You, Cridge. Tell us what went on in your mind while you were sitting here waiting for the verdict."

"I—" The hulking man had to swallow. "I suppose I thought about what we would do to exceed our own Record—if one were granted to us—and I couldn't think of anything."

"And to postpone your confrontation with that terrifying knowledge, the realization that you had nothing left to work for, no ambition, no plans, hopes, schemes, you waited here. You sat and stared at a blank wall panel and put off the moment of truth. Am I not right?"

Cridge nodded.

"You, too, Dolia, and your man Hugo-you'd have suffered that fate," Alexander sighed. "Already, by accepting the idea that one must wait for the machines instead of coming right out and asking for their verdict, you'd taken the first step toward catastrophe. I wouldn't wish that doom on you, young, lively, vital -it was dreadful enough seeing it overtake the tired, bone-weary folk of Earth. First one wondered: why have children since their lives will be a mere repetition of other lives? Then it was: why marry, why choose a lover, if a billion others have already done the same? And at last it was: why live?

"I alone survive to register my Records. You already know the third one. Before naming my first, I must give you instructions. I must tell you to go and rouse your companions. Order them to go back aboard their ships and to leave the Registry. And tell them not to go home at once—but to orbit a million miles out in order to warn other ships not to approach closer than that."

"What?" Cridge's normal hectoring manner seemed to be returning by the second now that he was free of the weight of hopelessness that pervaded the Registry. "Why must we keep everyone else away? For all we know a new Record could be established by

the next visitors!"

"Your thinking belongs to the past," Alexander said sadly, raising his staff before his face. He gave the ends a twist and lowered it again. "My first Record has been set. The machines here are very perceptive—why don't you ask them just what that Record is? You know, don't you?" he asked the air.

"The person who wishes to be known as Alexander," said the machine, "is the first visitor who ever brought to the Registry without being detected a bomb of sufficient power to destroy it."

Cridge, Gailalu and Phraticor exclaimed in horror and instantly took to their heels. Hugo would

have done the same but Dolia clung to him and made him wait.

She asked, "Is it true?"

Her voice trembled.

"Quite true." Alexander sat down on her stool and with one thin hand caressed the staff absently. "I should hurry if I were you. You have only an hour to get away."

"But you-"

"I have nothing to get away for." Alexander shrugged. "A thousand years has been enough for me."

"Dolia, come on," Hugo cried. "He's crazy—dangerous, too."

"No, he's not crazy," Dolia said. "Just sad. Will there be another Registry?"

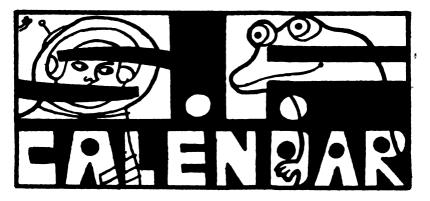
"In a million years, perhaps," Alexander promised. "By then we should have enough Records of our own. For the time being, though, isn't it better to do what one wants to do—without worrying about whether or not it's already been done?"

"I'm young enough to remember what it was like the first time I—" Dolia checked, glanced at Hugo and colored. "Well, the first time, anyway."

"In that case," Alexander said, "you are unusually wise. Remember that to be wise is a very precious thing."

"I'll try," she whispered. She put out her hand uncertainly,

(Please turn to page 154)



March 27-29, 1970. SFCon '70. At Hilton Inn, San Francisco Airport, California. Pro Guests of Honor: Miriam Allen de Ford and E. Hoffman Price. Fan Guest of Honor: Felice Rolfe. Memberships: \$3.00 now, \$4.00 after January 1st, \$5.00 at the door. For information: Quinn Yarbro, 369 Columsa #5, Berkeley, California 94707.

April 3-5, 1970. MINICON 3. At the Andrews Hotel, Minneapolis. For information: Jim Young, 1948 Ulysses Street, N.E., Minneapolis, Minnesota 55418.

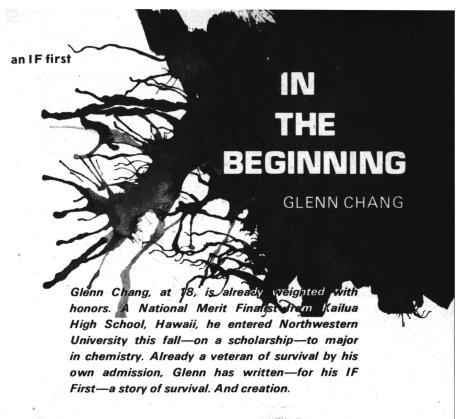
April 10-12, 1970. LUNACON/ EASTERCON. At the Hotel McAlpin, Herald Square, New York City. Advance registration: \$2.00. For information and registration: Devra Langsam, 250 Crown Street, Brooklyn, New York 11225.

July 3-5, 1970. WESTERCON XXIII. Will be held in Santa Barbara,

California. Guest of Honor: Jack Williamson; Fan Guest of Honor: Rick Sneary. Memberships: \$3.00 through June 22; \$5.00 at the door. For information: Westercon XXIII, Box 4456, Downey, California 90241.

August 21-24, 1970. 28th WORLD SCIENCE FICTION CONVEN-TION: HEICON INTERNATION-AL. In Heidelberg, West Germany. All convention functions will be held at the Staadthalle in Heidelberg; members of the convention will find accommodations in hotels in town The accent of this con will be an international one, with fans and pros coming from all over the world. Guests-of Honor: Robert Silverberg (USA), Ted Tubb (England) and Dr. Herbert W. (Germany). Toastmaster: Franke Lester del Rey. Memberships: \$2.50 (supporting membership, receive all progress reports), \$4.00 (attending); after December 31, \$4.00, \$6.00. For information and registration: HEI-CON 70, 6272 Niedernhausen, West Germany. Make all checks payable to Mrs. Molly Auler.

86 IF



WHEN the time came they both realized the implica-

"Dissolution," he said.

"Yes," she replied.

They looked into each other's eyes.

"I do not want this." He stated it flatly.

"Nor I," she breathed quickly.
"Oh, my love, can't we go on even for a little while longer?"

He shook his head. "No, impossible. I am old and the law must be obeyed."

"We are both old." Her tone was dull and resigned.

He leaned forward and clasped her hands tightly in his. "Yes, that is true. We are old. But we have lived—and we have lived together. And I—I remember." He looked deep into her eyes and saw longing there. "I remember when I first saw you and realized that I loved you. I remember the quiet walks we took, the children's games we played, all the joys and sorrows we shared. I know the beauty of your soul, the

gentleness and the deep sensitivity of your manner. That is the essence of you, my darling, that I have loved all these long ages of existence."

"And I love you, too," she said tremblingly, eyes bright.

For a space the two bowed figures sat facing each other, seemingly oblivious of their fate—to have their ancient, decrepit bodies Dissolved, the chemicals and particles transformed into pure energy, their existence snuffed out.

The two last humans in the universe.

Suddenly his head snapped up. She looked at him, startled, and then, noting his expression, hopefully.

"We cannot ask the Machine for continuance," he began, "for our ruler's word is irreversible. Yet possibly—yes—I believe I have thought of another way—"

He took her hands again and rose to his feet.

"Our physical selves are not important. They are only so much organic material that dies and regenerates again and again until it is worn out—it has no soul. Let the Dissolution process take it and break it down into atomic components—we do not need it. We can find an alternate to flesh, a body not of organic compounds which wear out so quickly. We can go to the machine and peti-

tion for rebirth," he finished excitedly.

"Oh, yes!"

And so they went before the Machine—the vast, mile-square electronic complex that was their god—and pleaded their case. Their request was irregular, though not the first of its kind. "I can grant you no organic

though not the first of its kind.
"I can grant you no organic hosts," the Machine said. "My postulate must remain unchanged, even though you may be the last survivors of your race."

"We know that," he said. "We merely ask that you grant us a receptacle—just so we may still exist and retain sentience."

The Machine paused as if in thought. They waited silently. Finally, the Machine spoke.

"I will do it," it said. "You will have your rebirth. You will become parts of me, each of you controlling a component computer section. You will have no organic bodies but metal-and-integrated-circuit hosts. End of transmittal."

"Thank you, Machine," they said humbly.

WHEN all was done they reached out for each other.

"I cannot feel you! I have no hands!" she cried—yet she did not cry aloud though he received her message.

"Nor can I feel you." She received his thoughts in the same manner that he received hers—on

the swift wings of quark energy.
"No arms, no legs—I have no body!" she radiated. The force of her panic pounded at his mind.
"No eyes to see you, ears to hear you, lips to kiss you—"

"They are only tools of your senses. You can feel me but not that way. This way—" And his mind reached out, touched hers gently with hesitant, probing tendrils.

She felt him and reached out likewise. Her touch was soft, gentle, wondering.

"It is strange," she emanated. "My physical senses are gone but I can feel you, touch you, even though we are trapped in these metal prisons. I can sense your soul, your strength, your firmness of character. For the first time, I can really feel you."

"Which is enough," he said.

ND so they existed, doing their part of the work for the Machine, with only free moments now and then to communicate with each other. But at least they were permitted this small privilege and they were content. Yet Time is unstoppable and brings with it decay and change. The millennia came and went with amazing speed. Even the Machine was not immortal.

So the year came when they knew that the Machine was running down—perhaps even dying

—and would soon be gone and with it would go their own existence. Nothing could be done. They could only take comfort in each other's mind-touch.

Reality often encounters strange accidents—in this case a nearby star was going nova. The cataclysmic nature of its death let loose strange and destructive forces—these enveloped the surrounding area in a holocaust of heat and hard radiation. All matter was violently transformed into billions of quanta of hard radiation and energy, including the metal-and-circuitry substance of the Machine—save the two life-essences that had been trapped in its immobile metal body for eons.

"What happened?" she asked.

"A miracle. We are free. The nova has somehow pried us loose from the Machine and now we are pure energy."

His life-essence twisted and darted in space joyously, easily and with the speed of thought skirting the nova-caused scenes of destruction.

"Come," he radiated to her. "Use your powers. We are free—free to do anything."

She joined him and the two tumbled and cartwheeled among the galaxies, traversing millions of miles in mere minutes.

"Oh, my love!" Her message held cosmic laughter. "We have succeeded beyond our wildest hopes! We shall be together for- born. Yes, we can do it, for sure." ever!"

"Yes," he replied, coming back to her side. "We shall be immortal—an undying monument to our love."

But their joy was short-lived, for as they traveled through the cosmos they found no sign of life. The entire universe was barren of any other living things. A terrible loneliness possessed the two lovers.

And even as they realized this, they noted something else. Everywhere they went they passed dead stars, lifeless planets wandering aimlessly in deep space, entire galaxies glowing with the radiation of their death-throes. Watching all this, seeing that their cosmos was crumbling around them. it was plain to them what was happening. The universe was dying.

He drew her attention to the stars. "Look, already it begins to contract."

And, indeed, the very fabric of space-time was pulling closer together—the universe was collapsing upon itself.

"Is there nothing we can do?" she pleaded.

His answer was negative. "Even we cannot halt its death."

Yet an idea began to dawn on him.

"But," he said excitedly, "perhaps we can survive oblivion by transferring ourselves somehow to the next universe, one yet to be "How?"

"Maybe like this." Hesitantly, fine lines of coruscating energy began forming in the area surrounding them. As she watched, wondering, the lines thickened, grew more profuse, became almost solid.

"There—and there. Ah, like that." The energy net became a wall around them. "Do as I do and make it as strong as possible. It will protect us against the final holocaust."

When they had finished, the energy net was like a huge cocoon completely enveloping them. He examined it, satisfied.

"Yes, it is good. We shall lie dormant here and perhaps-" he paused. "Perhaps we may survive the final death and the violent rebirth." And so, unwilling and apprehensive, they cut off their consciousnesses and waited.

The universe contracted rapidly until all remaining matter was clustered so close together that tremendous mutual gravitational forces induced great collisions, giving rise to energies that initiated new collisions. The chain reaction was so devastating that every bit of matter was transformed into free energy and the cosmic egg lay there, seething with rampant energy-rampant except for a strange energy cyst that had somehow resisted the tendency toward absolute entropy.

Then rebirth began. With another violent upheaval the compact mass began to expand—and with expansion, energy transformed into elementary particles -matter-and clumped and coagulated into shapeless masses. The seething proto-universe gradually cooled. Galaxies of dust formed, then stars, then, molten and primeval, the planets.

And the energy cyst opened.

Consciousness returned. He looked out and saw the new universe.

"We did it."

She saw, too. "Yes," she said unbelievingly. "We live!"

He wanted to fly, to cavort in triumph—but he could not. In his dormancy he had offered much of his power to buffering the energy cvst and so had she. The two survived—but with only a small fraction of their former capabilities.

"I am weak," she said. Indeed, her emanations were fluctuating and hard to read. He felt the same way.

They drifted together, each

helping the other.

"We cannot exist long like this," he said. "Our powers are ebbing steadily. And if each transferral to a new universe is so taxing-I am not sure I would like to continue after this one is gone."

"But we have love still," she said hopefully.

"Yes, we have our love."

Suddenly he guided her to a bright, hot star, its newly formed planets just beginning to orbit.

"A monument, then, to our love," he declared. "We return to matter, from whence we came."

Her aura seemed to brighten. "Yes, I see what you mean!"

"I will be this star," he said and his life-essence diffused into the ball of plasma and gas.

"And I will be this planet," she stated, doing the same to one of the molten satellites.

They sucked up quarks and quintessences of energy.

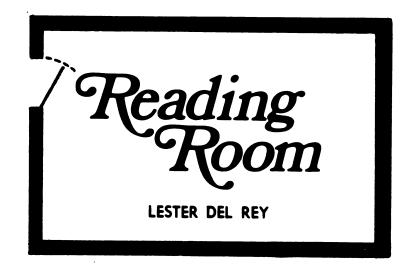
"Oh, I feel stronger already," she exclaimed.

"I, too." The sun seemed to burn brighter. "You alone, of all these planets, will receive my blessing. On you will I make life flourish as a symbol of my love for you."

"Then I will return that love and bloom rampant with life. Our monument will live for as long as this universe endures."

"And that," he said, "is enough."

▲ ND when the life-forms gained sentience they marveled at the vast profusion of life on their world. Looking up at their star, they paid homage to the power that had bestowed its blessing on them alone and called it Sol. And his mate-their mother-planet—they called Terra.



NCE upon a time it was almost impossible to find a book by an unknown writer in the fields of science fiction or fantasy. The author either had already established himself with shorter works or his novel had been serialized in the magazines long before it appeared in book form.

This no longer holds true. From even a hasty scanning of the shelves, it is obvious that a great many writers today are breaking into print initially in books. Delaney and LeGuin built their reputations outside the magazines and many more current examples exist.

It is still a happy occasion when a first appearance represents both good writing and a gift for storytelling, however. The Warlock in Spite of Himself, by Christopher Stasheff (Ace, 75c) probably has the year's worst title and it is the work of a writer unknown at least to me. He also, unforgivably, combines science fiction and outright fantasy in the same story. On top of that, the publishers make the book seem one of those repulsively mechanical attempts at humor in a singularly unappealing blurb.

Nevertheless, this rather fat book is a cracking good tale and a well-integrated story, told with a smooth command of the language. After the first few pages even the humor quiets down to a gently effective sense of fun.

The story takes place on Gramarye, a world colonized and then lost to the records. But appar-

ently this planet was settled by rich and eccentric members of the Society for Creative Anachronism who were determined to recreate feudalism in all its aspects. Rodney and Fess—an epileptic robot horse—are sent to Gramarye to bring some measure of democratic government into its medievalism.

They soon find evidence that other forces are tinkering behind the scenes, trying to create either absolute dictatorships or total anarchy. The young queen is wilfully busy alienating all her lordly friends by experimenting with a feudal welfare state.

Rodney naturally winds up in the middle of things. His general attitude is properly science-fictional, as are many of the trappings. Even such things as time machines don't phase him and his wizardry is based solidly on technical tricks.

But at least half of Gramarye works by magic. There are witches galore and elves all over the landscape, all mixed up in the government. There is even a group of fine, upstanding ghosts who dutifully haunt an ancestral castle. And Rodney is recognized by all as a genuine warlock. Maybe he is, despite his protests.

In the end most of the magic elements become integrated into the science framework. But it isn't one of the horrible "logical" endings that so often ruin science fantasy. The Little People are far more than mutations and the ghosts remain honest ghosts.

The mixture should not work at all—but somehow everything comes together into a good and satisfying adventure. The story is not a major one or particularly significant but it's more fun to read than anything I've seen by a new writer in much too long a time.

There's room here for a sequel, since Rodney really should be proved an authentic warlock eventually. I hope Stasheff is working on it.

MICHAEL CRICHTON was also unknown before his book The Andromeda Strain (Alfred A. Knopf, \$5.95). And though his book is currently on the best-seller list and has drawn rave reviews as science fiction all over the country, I rather wish he'd stayed unrecognized.

This is just the sort of thing that the general reader will take as science fiction. It has a future setting, a threat to the world, lots of talk of science and innumerable tricks, all too clever. It labors desperately to let the reader know the writer is aware of every little detail. It has computer pictures and even a bibliography of reference works from its future time. And to me it's about as convincing as pink

cheese as the basic Lunar surface.

The initial situation isn't bad, though we've all seen it before. A satellite set to probe near space brings back a sample of something from a few hundred miles up. That sample turns out to be, apparently, a deadly plague from space. The men who locate the thing immediately die and investigators find a whole village where death seems to have come almost instantaneously. There are, however, two puzzling survivors—a crying infant and a drink-sodden old man.

Four doctors are chosen to find the nature and cure for this danger. (They all have names and carefully worked out characters but I find almost nothing that sticks in my memory about them since they never quite came to life.) With the survivors and samples, they are sealed into a great underground laboratory that has already been constructed to meet the danger of plague from space.

All the scenes you might expect are there. Every theory turns out to be wrong, of course. And there's even a faulty computer and an atomic power pile set to blow up and wipe them out when the emergency button is pressed. Naturally it gets pressed and the people have to run about until the last second to turn it off. (Obviously, however, they must have succeeded for their names to be

mentioned in the bibliography. Some of the too-conscious work of making this all "real" backfires here.)

The chief plotting trouble, however, comes in the nature of the plague. It's impossible to accept long before the story ends.

Apparently Crichton felt that science-fiction touches should be used with a shotgun and without aiming. We're told that this plague acts as a blood disease. Then we find it's a crazy crystal that needs nothing from the blood it can't get from the air. We learn next that it somehow works by "atomic fusion"— which is interesting indeed, since it seemingly produces no great amount of energy.

And about then the plague seems to realize that with all that gadgetry it has no need to infect humans in its development, so it stops infecting them and begins to infect machines! Anyhow, it only worked for people who had a normal hydrogenion or pH reading; no reason we can see, it just worked that way.

In the end, the whole intent of the book becomes anti-sf. The plague killed off perhaps a hundred people—one village and a few others. It then began mutating into something harmless. But somehow the result of this unmanned flight accident proves conclusively to the nation and the scientific community that all manned (sic!) flight into space must be discontinued because of danger.

If you're looking for social significance the book has a message in its final chapter. That message can best be summed up as: "Man wasn't meant to..."

THE theme of danger to Earth from space aliens is also covered in *The Pollinators of Eden*, by John Boyd (Weybright & Talley, \$5.50)—but with a completely different approach. Here the basic idea is made convincing by some rather sharp characterization and a much higher level of writing. Boyd is still a new writer but hardly an unrecognized one—this is his second book. His first won excellent reviews.

The basic situation here is developed directly. The material is familiar but its handling is fresh and the developments of the basic idea are generally good.

Freda Caron is a botanist. Her fiance sends her some seeds and two "tulips" from the newly discovered planet of Flora, where flowers have filled most of the ecological niches. The tulips are not only singularly beautiful—they emit sounds and even mimic words. The big problem is that nobody can figure how they pollinate.

She sets about discovering this in collaboration with a young

man who had been with her fiance, Paul. Hal, their assistant, is a brilliant theoretician, though somewhat sloppy in his methods.

Through these people's eyes, we see a step-by-step development of the danger from the flowers. The tulips take over, adapt hornets to pollinate themselves and begin to exert a strange sexual influence on Freda. And they refuse to be restrained. Every effort to limit their spread seems to be doomed.

The plants succeed in killing Hal by supersonics.

Freda is faced with other difficulties. Her career at her university is being undermined by academic politics and she is forced to testify with disastrous results on the national political scene. Her own character is changing during this time, increasing the tension.

The author does not, however, merely tell another story of the plants that conquer a world. The menace is real but solutions are possible. The plants can be subdued. The factors in Freda's personal life are less easy to cope with.

All this builds up nicely through more than eighty percent of the novel. Then everything changes.

Freda manages to get herself sent to Flora to join Paul in his Eden island where he is studying some extraordinary orchids. And the final twenty percent of the book manages to undo almost everything that the author has developed to that point.

Every character undergoes a sudden change. Paul, portrayed as a puritanical intellectual, turns out to be a sloppy hedonist, easily dominated by his plants. Freda's sexual problems vanish immediately as she imitates her fiance. Dead Hał is recast into a man capable only of claiming credit for another's work. And when Freda is sent back to Earth the story development manages to deteriorate even further.

From now on, she has one simple solution to every problem—she reads men's minds and satisfies their bodies, gaining her goals with all the ingenuity of a female turtle.

On page 174, this was a darned fine book. By 190, it had gone pretty much to pieces, with most of what had gone before destroyed. The final twenty-two pages simply grind along somehow to an ending that means nothing emotionally (except for minor shock value) to anyone but Freda—if she has any real emotions left by this time.

THE schizoid story seems to be a rather standard trap into which many beginning writers fall after their first success. (The first book usually has to be more traditionally organized to sell at all,

and writers with any talent seem to know this by instinct.) It usually has a sort of set pattern, known by some editors as the "steak and whipped cream" story. The first part will be a sort of wish-dream fluff, filled mostly with yearning and hot air.

I've heard a lot of theories about why this is so. My own guess is that the writer has some grandiose idea dear to his heart but one he never could quite turn into a story. Now, flushed with initial success, he digs it out and insists on writing it. It won't really work by itself, so he goes back to his skill to construct a story before it. Then he tries a "daring" or "experimental" trick of breaking from that over to the thing he wanted to write with total lack of critical judgment all along.

The pattern is usually the same. Aside from the sudden break in the plot, there will be a radical change of character. This has to be, since the real characters of his hard section would not fit with the nebulous grandeur or emotional wallowing of the second. And the second part is usually an emotional dream where every wish is gratified or an intellectual one where vast ideas are displayed.

A fully developed writer would spot the danger in his idea and never write it. But such self-analysis comes to many only after long practice and a spate of well-argued rejections.

We can understand the writers, perhaps. But there is more difficulty in seeing why an editor lets his authors get away with such stuff. When he lets something as obvious as the "steak and whipped cream" story get by, he is neither protecting his readers nor helping his writers to develop.

There was enough material in Boyd's first eighty percent to justify a complete reexamination. Almost certainly, Freda could have met her problems on Earth by simply facing them. Or the affair on Flora might have been developed into a novel. As it is, the reader has been robbed of two stories.

BOB SHAW'S latest book suffers from some of the same trouble, though to a lesser extent. And that's something I regret very deeply. I feel that Shaw is potentially one of the finest of the new writers who are beginning to emerge. His short fiction has been excellent and his first novel from Ace presented a writer in full control of his abilities.

The Palace of Eternity, by Bob Shaw (Ace Special, 75c) is even better for much of its length. It has good characters, good background and a quite interesting situation featuring aliens. The writing is sharp, the action deft.

Tavenor has been orphaned by a seemingly senseless alien raid and has spent most of his life in the military, fighting to avenge his parents' death. But now he has retired and moved to Mnemosyne, a planet that seems to have attracted all the artists and poets. For some reason inspiration flows there as nowhere else.

Suddenly Tavenor finds that his Elysium has not only been embroiled in the Earth-alien war but Mnemosyne is now the very center of that war. Completely understanding both sides, he watches the military bureaucracy trample down the character of this unusal planet.

He's almost alone in this understanding, save for a few rebels whom he recognizes as gallant but futile visionaries. His only real contact is an odd, fey girl-child of three years—a serious tot with a strange touch that heals.

A series of events forces Tavenor to help the rebels. His position as a professional soldier of thirty years' experience tighting the aliens offers them their only chance to survive.

Yet he cannot deny the need for the military forces, particularly since it is obvious to him that men are losing the war and that Mnemosyne may soon feel the wanton killings by the aliens.

Good. It's a complex story, just moving forward toward its mean-

Tavenor.

Then we get a sudden jarring kid. development that's like an ice cube down the back. Tavenor is taken out of the action. I read on. hoping that this meant Shaw had something big enough in mind to dare a trick that only seemed outrageous. But I was wrong.

The steak is done and from that point-about two-thirds of the way through the book—there is only a spate of uncritically presented "big ideas" filled with hokum. We're given immortal souls that are being killed by men. (What these souls really do with all their time is left unstated. Look, they're souls, dig? Ain't that a big enough idea? Souls don't need development, characterization, purpose beyond survival, all that guff. This is deep philosophy, man! Like love.)

Tavenor gets his own soul planted in his infant son. And all the fun begins.

Once a strong and thoughtful man, he now becomes a human iellvfish. The mother, fine enough to attract Tavenor in his original form, is now a lump—literally, al-

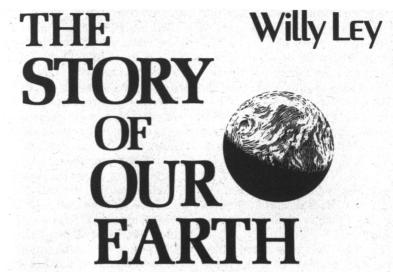
ing, toward a resolution for the most. The little girl grows up in planet, the human race—and for the background but is abruptly a selfish and badly spoiled normal

> Tavenor no longer acts. He has things happen to him, while he vaguely feels unhappy. He and the now-grown girl are caught by the horrible aliens. Okav, now we get the motivation for the strange actions of the aliens? We do not! They were great as distant menaces but they're pretty silly when we meet them in their cages!

> All the toughness and reality developed through most of the story are gone. When we finally find that our girl is a new kind of man, the savior of mankind and soulkind, the discovery is convincing as learning the new reality about a rather nasty and selfish Little Nell!

> After a fine beginning, it's hard to take a conclusion that is emptily grandiose. And for most readers, I suspect the few rewards won't make it worth while to try to take it.

> A fairly bad book—as a totality-doesn't bother me much. But the loss of the story Shaw could have made from the first twothirds is a tragedy.



THE only thing classical writers had to say about coal was that it emitted a bad smell when burning and that it was inferior to "true coal"—meaning charcoal. Still, the classical word for coal—carbo—was used to designate the geological period during which most coal originated. (Lignite, also called "brown coal," originated much more recently, during the Tertiary period.) The Carboniferous Era endured nearly 90 million years.

Twentieth century man has the tendency to ask what people thought about this or that at a certain time in history. The answer is that often they did not think. In our particular case nobody wondered about the nature of coal—it

was something you found in certain places just as you found iron ore or copper ore in others.

The first man who speculated on the nature of coal was that French all-around genius, the Count de Buffon, who lived from 1707 to 1788. Coal, he wrote, was the result of the luxuriant forests that grew when the continents were first formed. When the trees died of old age and collapsed they either decayed on the spot or were carried by river floods to the sea where they finally came to rest in a quiet bay. And there they became coal.

To strengthen the picture Buffon mentioned travel reports. He was director of the *Jardin du Roy* (the King's garden—or botanical garden in our terminology) and saw many travelers' written accounts of their journeys. "The number of trees which a river like the Mississippi floats to the sea is incredible -at times the number of floating trees is such that navigation on the river is rendered impossible. It is the same with the Amazon river and the majority of other rivers in thinly settled countries . . . Travelers in such forests (in Guiana) pick the spot where they intend to spend the night by the health of the nearby trees so that they might not be killed in their sleep by a falling tree."

The fact that many coal mines feature a number of coal seams separated by stone seemed to go well with Buffon's idea. The coal seam was plant matter scooped up and brought to the sea by a river's spring flood. The stone was the condensed result of the sand, mud and clay carried by the same river during the rest of the year.

The theory worked out so neatly that nearly a century passed before its major error was recognized—namely, the water transport of the vegetable matter. Evidence grew that the coal seam was where the forest had flourished; large root-like fossils (called stigmaria) were found and occasionally a whole tree trunk that had turned to stone got in the way of miners who hacked away at the coal seam. The important point was that these

trunks did not lie across a seam but stood upright.

Naturally scientists wanted to know what plants had gone into the making of coal. There were two ways of finding out. One was to look for recognizable fossils—the other was a microscope examination. Both courses of investigation strangely enough, were difficult, though for different reasons. Fossils simply were rare—only occasionally did a fossil leafprint turn up and always in the stone layers that separated the coal seams. The ones that were found usually looked like fronds of large ferns.

Microscopic examination suffered from coal's blackness. In the last decade of the nineteenth century, all microscopes required light shining through the specimen. The specimen was mounted on a thin piece of glass, about 3/4 of an inch wide and 3 inches long and placed under the microscope. A mirror below it sent natural or artificial light through it into the tube. Coal, no matter how thin the specimen, simply blocked the light.

Could one bleach coal?

It could be done only by using low-strength nitric acid. The process entailed an element of risk. An organic substance bleached by nitric acid becomes an explosive. The danger could, however, be minimized by gentle handling of the slides and by avoiding open flames in the room.

ICROSCOPIC examination showed clearly that the coal consisted of the cells of plants. Moreover, a botanist could tell what kinds of plants. All the cells that could be identified were cells of what was then called "diversified cryptogams." The modern botanical name of this group is pteridophyta. It included all ferns, club mosses (Lycopodium, and no matter what the popular name says they are not mosses), and scouring rushes, also known as horsetails (Equisetum).

Except for the ferns which still are trees in the tropics, these plants now grow small. But during the Carboniferous period they formed enormous forests with four main types of trees. One type was tree ferns; two others, Lepidodenand Sigillaria were club mosses while the fourth, Calamites, was a horsetail. The name Lepidodendron was constructed by combining the Greek words lepidotos (scaly) and dendron (tree) because its trunk looked as if it were covered with scales. The trunk of Sigillaria looks as if somebody had stamped his seal on every available square inch of the trunk.

Artists who painted scenes showing a coal forest—and there are many such paintings—instinctively arranged the various kinds of trees in clusters, a bunch of *Calamites* at the left, a group of tree ferns background center and

a copse of Sigillarias to the right. In all probability they were right. Plants have a tendency to cluster together and exclude other species in a given and usually small area.

A man of our time who has an eye for trees and could walk around a coal forest (high rubber boots are recommended) would soon be able to tell the different types at a glance. Calamites would differ from current horsetails mainly by their size—they grew fifty feet tall. Tree ferns would pose no recognition problem. The Lepidodendrons could be recognized immediately because they were old-fashioned in the evolutionary sense—they formed neither twigs nor branches as we use these term.

Like one of the trees of that old Devonian forest (called the Naples Tree, because it was found near Naples, N. Y.) the Lepidodendrons simply forked. First the trunk divided, then the two prongs—and so on until death or infinity. The Sigillarias, on the other hand, thrust a straight trunk up to one hundred feet, with a maximum diameter of six feet and a bundle of sword-shaped leaves on top. The seal-like impressions on the trunk are the marks where leaves grew when the tree was younger.

One of the most interesting trees belonged to the fern group but only a botanist might recognize it. Smallish, it bore nutlike seeds at the tips of its leaves. All living ferns, including the tropical tree ferns of today, bear spores. The carboniferous seed ferns (there were several) formed a separate botanical order that has been named Cycadofilicales to indicate that they must have led to the seed-bearing cycad trees. Cycad trees are still with us, though they are not common. But the seed ferns became extinct soon after the end of the Carboniferous period.

A variety of detached fossil seeds have been found but it is not always known which trees bore them. They cannot be pigeonholed as fern seeds because we know of a seed-bearing tree that was not a fern. Its name is *Cardaites*, a slender tree often a hundred feet tall with dagger-shaped leaves twelve to fifteen inches long. It bore small winged seeds and it was clearly an early member of the order of *gymnosperms* ("naked seeds") which at present is mainly represented by the pine trees.

Do we know anything about carboniferous plants that were not trees? We know of some. Of course there were many small ferns of the size we are most familiar with. Some ferns of the period were climbing types that used the bigger trees for support. Then there was an interesting plant named Sphenophyllum that grew to a height of about two feet. If it grew now no layman would pay much attention

to it because it would look perfectly natural in a wet area.

It was shaped—though the two plants are totally unrelated—like today's goosegrass, Galium aparine to the botanist. In Sphenophyllum a dozen or so vertical stems grew from a common root. The leaves made whorls around the stems—six, nine, or twelve usually leaves forming a whorl. Between twenty and forty whorls grew per stem, depending on its length. Most of what we would call underbrush in the carboniferous forests consisted of Sphenophyllum.

The animals of these forests included our first fliers—dragonflies in shape and by relationship—but they had wingspreads of up to twenty-eight inches. In some forests they had yard-long but thin centipedes for company—remains of them came to light only in recent years in West German coal mines. Arachnids were present, too, both scorpions and spiders. They were not gigantic forms and the scorpions may still at that time have been water-breathing, a fact recently established for their Devonian ancestors. Three-inch cockroaches crawled over fallen tree trunks.

In the waters of the Carboniferous period lurked the first fourlegged vertebrates known. They were long-tailed amphibians with five toes on their hindfeet and four toes on their front feet. They were

not large, averaging four to six feet in length in their early forms, though by the end of the Carboniferous period some attained lengths of eight and nine feet. The general shape of one of them (Diplovertebron) reminds one of a big fish with four legs and a long mouth full of teeth. Because of the construction of their skulls the name of the whole group is Stegocephalia or "roof skulls." One geological period later they were to give rise to the reptiles which, in turn, would produce the mammals and finally the birds.

The Carboniferous forests were swampy lowlands covered by generations of growth. Trees fell into swamp water which, being virtually devoid of oxygen, prevented rotting. It is easy to visualize the build-up of a thick layer of plant matter under these circumstances.

A river that changed course after especially heavy rains flooded the whole forest, bringing with it a cover of mud and sand. After the flood had run off, the original forest was drowned, dead and buried. But the mud-and-sand cover was not infertile—in time a new forest would grow on top of it, making a second coal seam. One site in Silesia showed clearly that such cycles had taken place there twenty-seven times.

But a time came when the plants that formed the coal forest would not grow again. In some places a topographical change might have caused such an area to become too dry for a coal forest—but the Carboniferous period as a whole seems to have ended because the climate grew too cold for its plants.

And the Permian period began.

—say 60 years ago—geologists ran into a problem. The collision was first hinted at in a relatively harmless manner. Somewhere in South Africa, not too far from Cape Town, glacier scrapes had been found in rocks dating from the Permian period. Glacier scrapes, in case anybody wonders about the meaning of the term, are scratches in rock caused by the slow motion of a glacier which has stones embedded in it.

The discovery did not disturb anybody's sleep. It simply indicated that the site of the scratches must have been in the path of a glacier which had come from a nearby mountain range. Soon after a similar discovery was made elsewhere in South Africa. Another one was reported from India. Then the Russians began to talk of signs of a cold period in their territory. Logically enough, their findings centered in the District of Perm, which had furnished the name for the period. Everyone, of course, knew about the glacial period that had preceded our own—was it pos-

sible that there had been one like it much earlier in geological history?

Astronomers and those scientists especially interested in our sun were most doubtful. Their concern was the source of the energy the sun radiated into space every second of every day.

The only large-scale source of energy anyone could think of at the time was the heat produced by contraction of the sun under its own weight. But if this were the case the sun should once have been hotter then than it is now-so how could there have been an early glaciation?

At this point the Swedish chemist Svante Arrhenius (1859-1927) appeared on the scene with a new idea. It did not matter so much how much heat was received from the sun-what mattered was how much of that heat could be retained by the earth. It is obvious that dense clouds and especially areas covered with freshly fallen snow will reflect sunlight back into space. Dark ground will absorb the sunlight but reradiate it as infrared (heat) which can escape into space as easily as visible light unless stopped by something in the atmosphere. That something, Arrhenius stated, is carbon dioxide. Carbon dioxide absorbs the infrared, thereby warming atmosphere.

Ergo, the temperature of the at-

mosphere would depend on its carbon dioxide content. The producers of carbon dioxide are fires of any kind, especially volcanic ones. The main consumers are certain chemical processes that go under the overall name of carbonization -carbonatization to purists. Plants also consume carbon dioxide as long as the sun is shining (they don't at night) and the size and thickness of the coal seams show how much carbon dioxide was consumed by the plants during the many millions of years of carboniferous luxuriance. Unless the volcanoes were very active at the same time, the vegetation itself must have impoverished the air as far as carbon dioxide is concerned. During the same period the oxygen content of the atmosphere must have increased considerably.

Arrhemius' theory was at first greeted with enthusiasm. Then it was more or less forgotten (in the United States it was not even taught) but it is now back in favor, partly because of the high temperature of Venus and its carbon dioxide atmosphere. In any event, it agrees with the cold climate of the Permian which no geologist denies. General glaciation may not have occurred but evidently the climate was cold enough for glaciers to form on what may have fairly modest mountain been ranges.

Since the word Karroo will be mentioned often in what is to follow it might be practical here to explain its meaning. Karroo is the name of some landscape in South Africa, divided into the Little Karroo between Cape Town and Port Elizabeth, and the Great Karroo to the east of it. Originally the world was the Hottentot word karusa, meaning "dry" or "without plants." It is a mountainous area and geologists saw without much trouble that the "Karroo formation" showed four subformations.

We now know that the whole Karroo formation is "old Permian"—though it probably does not represent the very beginnings of that period. Its duration is estimated at five to six million years. The duration of the whole Permian period is put at twenty-five million years. The telltale signs of glaciation in the Karroo occur in the earliest of its four subdivisions.

As far back as about the year 1897, South African geologists began to look systematically for fossils and soon the Annals of the Transacl Museum, the Transactions of the Geological Society of South Africa, and Geological Magazine (London) and the Philosophical Transactions of the Royal Society of London carried reports on Karroo fossils that fully deserved the alleged remark of a farmer seeing a giraffe in a zoological garden: "There ain't no sich animal."

TN DISCUSSIONS of extinct Life forms place names are often used-such as the Atlantosaurus Beds of Wyoming, the Pikermi Fauna (after a place in Greece). The term in this case was Karroo Fossils. Somewhat to my surprise found repeatedly that laymen think that such names imply exclusiveness—i.e. that this or that fossilized life form once existed only in the place mentioned. This is not so. The place name sometimes indicates the site of the first discovery-but usually it points to the site of the best-preserved fossils of a specific type. Karroo Fossils are found in Russia and Texas-but they first became known from sites in South Africa. And while I am correcting misunderstandings let me add here that it is wrong to call a reptile a dinosaur just because it is extinct and was fairly large. Reptiles are often called "saurians" (because sauros is Greek for "lizard") but just as not every bird is a chicken, not every saurian is a dinosaur. Dinosaurs did not even exist when the Karroo layers were formed.

One of the most famous of the Karroo reptiles is *Bradysaurus*—from Greek *bradys*, meaning "slow." It is also one of the largest 1). It was about 10 feet long, with

In older books it is usually listed as Pareiavaurus. This name is now used to designate a group of similar reptiles of which Bradysaurus is a member.

an enormously massive skull and heavy jaws. The teeth in these jaws, as is customary with reptiles, are all of the same shape and fairly even in size. It has been said jokingly that a paleontologist looks at feet first and at teeth second.

A joke—but true. The shape of the feet, or rather of the whole leg, reveals the mode of locomotion—usually one glance is enough to show whether the animal was a runner, a jumper or a climber. The teeth show what the beast ate—in the case of bradysaurus there can be no doubt that its teeth were used to grind up tough and dry vegetation. Its sturdy legs and massive bones made it clear that it walked slowly. The tail was stumpy and short.

What makes this reptile unique is not its shape—a plant-eater does not need speed because its lunch cannot run away. The strangeness of this saurian lies in what can only be called the exaggeration of its skeleton—every bone looks two or three times too thick for its length. Please don't ask me to tell you the reason. No explanation exists.

Another puzzling Karroo reptile received the name *Dicynodon* ("two dog teeth") because its jaws were innocent of teeth except for two very large ones in the upper jaw. Just to make its appearance more incredible the upper jaw is beaked like a turtle's. Because a turtle's beak is both hard and

sharp it can be a flesh-eater without needing teeth. But large tortoises are vegetarians—so the jaws of *Dicynodon* do not tell us anything about its diet. And the two large conical and slightly curved "dog teeth" make no sense, unless one takes the easy way out and declares them to be secondary sexual characteristics of the males.

In size reptiles of the Dicynodon type range from that of a small cat to forms about six feet in length. The larger ones could not have been very fast and are therefore believed to have been vegetarians. A late form, Lystrosaurus, apparently grew tired of dry steppes and semideserts and went into the water. These three-foot reptiles assumed the style of living now practiced by the Florida manatee.

It has been mentioned earlier that the teeth of reptiles, though they may differ somewhat in size, are all alike in shape. The Karroo reptiles violated that rule, too. Many have a dentition that looks so much like that of a mammal, especially carnivores, that they have been given the collective name of theriodons or "mammal teeth." Most of them were dogsized, though they had shorter legs than dogs. They probably hunted by jumping their prey instead of outrunning it. A fairly large representative of that group was found near the Dvina river, District of Vologda, in Russia. It received the beautiful name of *Inostranzevia*Alexandri. The first part of that
name is a Latinized version of the
Russian word for "foreigner."

The multitude of differently shaped reptiles from the Karroo did not make much sense at first, beyond demonstrating that the evolutionary process was active during the Permian period. Then many Permian fossils came to light in Texas and were thoroughly investigated by the American pale-ontologist, Samuel Wendell Williston.

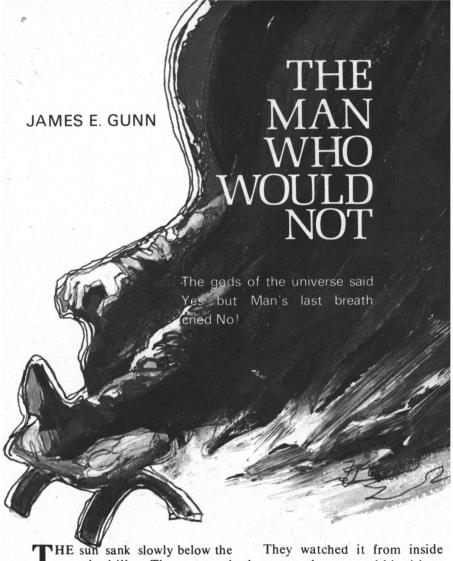
Most important of the Texas fossils was one discovered at West Coffee Creek in Baylor County. The nearest town is Seymour, so the reptile was named Seymouria baylorensis. It was not quite two feet in overall length and it looked like a lizard with an unusually large head and an unusually short tail. The skull was rare for a reptile's in being completely closed. Most reptiles have either two or four holes in their skulls, named fenestrae (Latin for "windows"). The fenestrae do not expose the brain which is small and protected by a bony capsule of its own.

The lack of fenestrae was important because here was a reptile with a skull like those of the amphibians of the preceding Carboniferous period. One group of the carboniferous amphibians, called the labyrinthodons, 2) could be singled out as the direct ancestors of seymouria. It was the most primitive reptile known but it certainly was a reptile, not a peculiar amphibian. Reptiles like seymouria were soon found elsewhere and they go under the collective name of seymouromorphs. Perversely, none is known from the Karroo so far, but an American descendant of sevmouria has an African counterpart so a seymouromorph must have been around in Africacourse, during the Permian period all continents were still huddled together.

Williston reasoned that there had to be a group of reptiles that were the earliest and most primitive and he called this group the cotylosaurs (Greek kotylos means a small cup—I presume that this refers to an anatomical characteristic). Seymouria was a fine example and then it was realized that the Karroo reptiles and their relatives elsewhere all had to be considered diversified cotylosaurs.

The period was simply an evolutionary explosion. Many of these early forms died out before the Permian reached its end. But some were the ancestors of the later reptiles. And even during the Permian a few showed that they were on their way to becoming mammals.

²⁾ So named because of the complicated construction of their teeth.



THE sun sank slowly below the purple hills. The tattered clouds that streamed up the western sky were orange, red and violet banners flying above a tragic army marching beyond the horizon to some final glory.

They watched it from inside the room, the man and his visitor. The window that framed the scene was the only place in the room, except the door, that had not been submerged in a tide of books. They had mounted the walls and toppled into corners and reached tooled-leather fingers across the floor.

The visitor stood in front of the window, his stocky figure silhouetted against the light. He was a little blurred around the edges, like an afterimage that is beginning to fade. But he was solid enough.

The room was silent. But the silence was rippled with words that had been spoken—the way a still pond remembers the pebbles tossed into it.

As the colors faded in the west a husky voice spoke out of the silence and out of the darkness that clasped one corner of the room, revealing only the arm of a tapestry-covered chair, a hand that rested motionless upon it and a foot stuck out stiffly onto a stool, the thin sole touched by a single orange ray of sun.

"How will it end?" the voice asked.

The answer came over the visitor's shoulder in cultured resonant words with a hint of accent like those of a foreigner who has learned to speak the language better than the natives.

"In fire, in ice, with a bang, with a whimper, by cosmic accident, by man's own will and hand. What does it matter?"

"I would know."

"That is the most persistent trait of intelligence."

"You will not tell me?"

"Perhaps I do not know. Perhaps I cannot say. We are not gods, you know."

"What are you, then?"

"Scientists, experimenters. In your language those words might describe us best."

"And we are your experi-

The visitor turned around. His face, too, was shadowed.

"Yes."

"And now the experiment is over."

"We have found out what we wished to know. We clean the test tube, sterilize the equipment. You should understand."

"Understand? I should not even believe—and yet I do. Without knowing why."

"All your life has been preparation for this moment. You cannot help but believe. But you also must understand."

"Intellectually I do. Emotionally I cannot accept the statement that this experiment has achieved its purpose—that man cannot achieve more."

"It is not men, you understand, but the experiment. Men have had millions of years, hundreds of thousands of generations, thousands of civilizations. What men can do further is repetition. And yet—"

"Do you give me hope?" the husky voice asked.

"There is no hope. There is only this odd contradiction in man that you mention, this tension between his intelligence and his animal instincts. He calls it emotion. The curious interplay between your reason and instincts has kept us fascinated long past the experiment's planned duration. But there are many more odd facets to the universe that we would explore and this small complication has preoccupied us too long. We can deal with the curious fact of man in ways that are not so complex-nor so expensive."

"Leave us. Let us live out our destiny."

"We are your destiny. You exist only as an experiment. Does the scientist leave his laboratory to build another when one experiment is completed? Neither do we. And although this laboratory—the very concept of which staggers your imagination—is only one among many, we do not waste. To us waste is unimaginable."

"If you have no love for what you have created—have you no pity?"

"None."

"No feeling?"

"None. We are rational beings. Our only motivation is the search for knowledge. Perhaps once—so far back in the mists of our beginning that even we have forgotten—we had that confusion of intellect that you call feeling. If so, it has

been lost irretrievably. We can no more keep from doing the rational than you can stop breathing. On the other hand, you have evolved recently and rapidly. You are an accretion of characteristics, some of them incompatible."

The man said nothing.

"We had speculated that intelligence is the superior and dominant characteristic," the visitor continued. "But we found that among men this is true only occasionally. These men you call monsters. We find them dull. But you confused and emotional ones have fascinated us beyond your allotted span."

"You are the monsters."

"You would consider us so. And yet we do nothing that is not rational, whereas you use your intelligence largely to rationalize the crimes you commit against your fellows."

"'We create," said the man.

THE visitor stepped forward. His shoes and trousered legs looked ordinary in the light cast from a distant corner by a floor lamp. His shoulders and face still were in darkness.

"Yes, you create—far beyond your predictable powers. Insanely, without plan or reason. Your creation is a magnificent waste; we cannot understand it because we cannot waste. We do not have what you call art or music or

literature. We do not understand what you call beauty or what you call ugliness-except in theory."

"Then man has something to offer-something you do not have. He can complement your rational existence with his irrational creativity. With his assistance there is nothing you cannot do, no goals to which you cannot aspire."

"We do not wish to do anything. We aspire to nothing except to knowledge. And that we seek in our own rational ways-which the addition of emotion would only muddle. And now, of course, man seeks to move beyond this test tube in which the human experiment began and to infest and to destroy other experiments. To allow you to do so would not be rational. Your defense of mankind is futile. Man cannot be saved. He is doomed."

The man in the shadows sighed. After a moment he said, "You let slip the fact that there are other ways to deal with the fact of man."

"I let nothing slip. We make no mistakes."

"What are these ways? Would you try to understand us intellectually? Will you run us through your computers until we make sense?"

"That is not possible. But ever since the end of the experiment has been obvious-for the last three millennia-we have chosen the most creative among you. They have been-there is not quite the word in your language to describe it-translated into another existence. We have chosen religious innovators, military leaders, political geniuses, philosphers, artists, writers, composers, scientists-"

"Christ and Mohammed?" "And Gautama Siddhartha."

"Machiavelli?"

"And Solon and Jefferson." "Plato and Aristotle?"

"And Kant and Nietzsche."

"Michelangelo?" "And Praxiteles and Picasso."

"Shakespeare?"

"And Homer and Hemingway."

"Bach and Beethoven?"

"Brahms and Berlioz."

"Archimedes?"

"Galileo and Newton and Einstein. There are thousands more and thousands whose names you never heard-all of them creators. And that is why I am here tonight."

"I wondered. I am none of these. I have never created anything."

"You are one of them," the visitor said. "The fact that you have not exercised your creativity vet is incidental. We may not have it ourselves-we may not understand it-but we have learned to recognize creativity and its signs. In the relative eternity to come you will have time to be creative."

"Me. Among them?"

"You are one of them-of equal stature. You can be one of them for long ages, interacting with them, learning from them as they will learn from you and we from all—in a way that you have only imagined here among your books."

"Incredible-"

"In your terms-yes."

"My dreams. Heaven."

"So we understand."

"If I were a superstitious man of another age I would think you an emissary of the devil come to tempt me."

"We are all the devil and all the god you im gine—both and neither. In another age we spoke in their language and in their frame of reference, as we speak to you in yours."

"In what way would existence continue?"

The man had leaned forward until his upper body, clothed in a gray sweater, was in the light, although his face still was in the shadows.

"In a way much like what you experience now, with certain measures taken to delay your mortality."

"And where would it continue?"

"In a place removed from here but one you would find pleasant, stocked with all the things you enjoy—the food, the drink, the books, the music and the art—and the people and the talk and the ideas and the time to contemplate and to create."

"Stop. You describe heaven."

"So you would consider it."
"You know me well."

"What we can know we know well."

The silence returned while the man sank back in his chair and the visitor looked back toward the west where the sunset had faded and the twilight had darkened into night. The evening star gleamed brilliantly alone above the hills.

Finally the man spoke again.

"What of my wife?"

The visitor turned back to the room. "The person who let me in—but only when I insisted? Who called you a fool?"

"Yes."

"You do not find her attractive."

"I did once."

"You do not love her."

"Once I did."

"She is not exceptional. We cannot save her. In any case, you will not lack for feminine companionship of a more congenial sort in the place where you are going."

The man laughed.

"Not only heaven but paradise."

"So you will consider it."

"I believe, after all, that you are an emissary of the devil-you

know so well how to tempt a man."

"We are rational."

"And you want to understand the irrational. What about the rest of humanity?"

"A few, like you, we will save. The rest will be destroyed. They are worthless, redundant. Even you will admit this."

"In my more rational moments—perhaps I would. But why do you come to me this way and explain these things to me? If I accepted them as reality—as more than the strange ravings of a madman or the stranger imaginings of my own mind—why should you not merely take me away when you destroy the rest?"

"Perhaps your understanding is a condition of the translation. Perhaps it is part of the experiment. Perhaps it is both."

"Or neither. What if I should refuse?"

THE visitor stopped in the act of speaking. For the first time he appeared uncertain. He stepped forward. He wore an ordinary blue jacket.

"Why should you? Why should you throw away what you desire most?"

"Would you take me anyway?"
The man leaned forward into
the light. He was in his middle
years — still vigorous but no longer
young.

"No. It would do you no good to refuse, however. You would be throwing away your chances of eternity and the satisfactions of creation in a foolish gesture. You cannot save markind."

"I cannot be a party to its destruction either. If the others before me agreed to your proposal—perhaps they did not have to contemplate the imminent obliteration of the rest."

The visitor stepped forward fully into the light. He had an ordinary face. Now it seemed disturbed.

"You would refuse?"

"Yes. I refuse."

"But why? What do you gain? What can you hope to achieve?"

"Perhaps I refuse the essential conditions of your offer. Perhaps by this act I refuse to join those who would profit from the sufferings they inflict on those capable of understanding the nature of their plight. Perhaps I refuse to profit personally from an act which destroys my race. Perhaps I choose to demonstrate to you in this conclusive fashion that you do not understand man at all, that the other experiments you might perform are meaningless beside this one, that you wipe it out not because it is finished but because you cannot understand it.''

(Please turn to page 154)



PART III
CONCLUSION

THE SEEDS OF GONYL

KEITH LAUMER

WHAT HAS GONE BEFORE

JEFF MALLORY awoke. The dawn was strange and misty. His war wound throbbed. He seemed to have fatigued and aged during the night,—even his clothes, business suit and shoes, shirt and tie, were worn, all but used up, and he needed a haircut.

Dressed, he looked through his bedroom window. The good suburban neighborhood was unkempt this morning. The neighbor's lawn featured cast-off junk. His own usually well-kept home showed neglect.

He went down to breakfast.

and had married, looked tired and slovenly. The normally well-stocked cupboard was bare. The two younger children—MARLY and RANDY—were ruder than they usually were. The kitchen stank of garbage. And LORI, Jeff's teenager, was missing entirely.

She seemed to have been been erased. Gill denied that Lori had ever existed. The neighbors did not remember her. Her room in the house had vanished. Other pertinent bits of Jeff's life had melted away as if he had merely dreamed them—his burgeoning business, his plans for the future.

Gill explained, as she would to a child or a sick man. Jeff owned no business. She and he worked—as did everyone else they knew—at the Star Tower. She pointed at the window.

The mist outside had lifted. Jeff saw a huge tower in the distance, dominating the town. The structure, several hundred feet in diameter, seemed to have grown there overnight but Gill behaved as if it had stood there forever.

Becoming aware of an intruder—at once human and nonhuman—in the house, Jeff tried to fight. The intruder easily knocked him out and when Jeff came to, Gill was gone. Where and what was reality? Jeff knocked a hole in a plaster wall where Lori's room used to be and found the room but no Lori.

Outside—neighbors who had known Lori had no recollection of her. They all seemed enslaved by the alien masters of the Star Tower, remembered no other existence. Jeff encountered more of the aliens, fought them and managed to escape. His hunt for Lori took him to Sally Hodges, once Lori's friend—and at Sally's he encountered a lawless group of refugees who believed that the country had been invaded by the Russians.

Jeff was unable to convince them otherwise, finally had to flee for his life. Sally, although she thought he was suffering from delusions, accompanied him in a commandeered truck. They were captured by soldiers and taken to a U.S.—Russian military encampment under the command of Colonel Strang.

The encampment was isolated, self-contained. Both Strang and the Russians were convinced they were fighting Chinese Communists and Jeff's theory of semi-human aliens failed to impress anyone. He and Sally separated. Then Jeff was forcibly "drafted" into Strang's "army."

Mallory meets Lori at Strang's encampment, finds Lori had thought him dead. They are not permitted to associate with each other but Mallory forces his way to the women's quarters after hours and they talk. Lori believes Chinese occupy Beatrice, Mallory's home town—she thinks her father insane when he tells her about the aliens. She is in love with Strang, has implicit faith in him. But she helps Mallory and Sally to escape. Sally, however, is wounded in the action and Mallory goes on alone.

He seeks shelter in a lighted house, is captured by crossbowmen who take him to their leader, Brother Jack Harmony of Revelation College. Brother Harmony is a religious fanatic, attributes Earth's invasion to the devil. While trying to convince Brother Harmony of what has actually happened, Jeff sees Harmony commit

a murder and once more has to flee.

He accidentally kills Harmony, steals a car, escapes. Desperate with fatigue and lonely, he talks to himself while driving—finds another voice chiming in from his subconscious, directing him to "the old house."

He finds the place—seems to remember it. He discovers a dead man in the front hall and a living but very old man, kept alive by a machine, in a bedroom. The old man mistakenly addresses Mallory as ALGORIC, introduces himself as GONYL.

When he realizes his error about Jeff's identity Gonyl rantingly tells him that he and Algoric are representatives of an intergalactic organization and had been posted on Earth to save the planet from the alien invasion Jeff has witnessed. The aliens are MONE—"an intelligent virus with a genius for adaptability and a hunger for interstellar conquest."

Gonyl and Algoric had been sent to Earth as young men to await and warn of the arrival of Mone. Algoric had proven faithless to his trust, had fallen in love with an Earth woman and deserted his iost. Now that the Mone has arrived, Gonyl is unable to send the alarm to his intergalactic superiors because Algoric had the other neccessary half of the code pattern needed to send the message.

As Gonyl talks it becomes increasingly clear to Mallory that he has "known" Algoric at some stage of his life—and abruptly he remembers an "imaginary" uncle who had taken him on magic trips, one a visit to this very house.

The memory dates back to Jeff's childhood. He compares notes with Gonyl, who decides that Mallory is a descendant of Algoric's association with the Earth woman and that Mallory probably controls the missing code pattern.

He demands that Mallory divulge it. But suddenly Mallory distrusts the old man.

"I've heard enough of your lies," he says. "Now tell me the truth."

VIII

GONYL raged. He wept.

In the end he babbled, "Ah, you've taken advantage of me, a weak old man—but all my life I've been a victim of circumstance, driven by forces outside myself, by the wilfulness of others. Listen, Jeff Mallory. The no-space transmitter can be used in more than one fashion. It will remove me—and you as well—to a place of safety far from here. There I will make my report. The planet will be sterilized, robbing the Mone of their prize and—"

"You plan to run out, in other words. Isn't that what you accused Algoric of?"

"This world is doomed. Had we acted in time we might have saved it—but that time has passed. We can do nothing now. And as for myself—I'm dying. Your arrival was a miracle, the only small stroke of fortune that's come to me in all my long exile. But once on the other side I can live again, restored to full vigor! What will be accomplished by my remaining here to die, sick and alone?"

"The holes in your story show, Old Man," Mallory said. "Algoric was the villain of the piece, eh? He wanted to run out—but you were true-blue?"

"I was faithful to my duty—"

"Is that why you killed him?"

"But—as I said—he escaped—"
"His dead body is lying in the

"His dead body is lying in the front hall, Gonyl. There's a strange thing about that corpse. It's dressed in old-fashioned clothes. And he was still young—and you aren't. I think you were the one who was locked out, Gonyl. I think he let you in because you swore you came to help—and after you got inside you shot him—perhaps by accident—and then realized too late that you were still trapped because he'd locked everything in the station against you."

For a moment Gonyl's face twisted as if torn by conflicting forces. Then he uttered a snarling laugh.

"Very well. What does it mat-

ter now? You've guessed a part of the truth—but I robbed Algoric of the sweetest fruit of his folly. I fled and took his woman with me. She bore his child and died—so his victory was a hollow one. But all that is past, long past. Into the transmitter—come, a whole new world waiting, a glory you can't conceive!"

"I suppose he called you as soon as he detected the Mone's approach. He thought that now, with the enemy on the way, you'd be willing to bury the hatchet, do the job you came for. But you were still thinking only of your own skin."

"Lies!" Gonyl howled. "And while you evolve these fantasies our moments of opportunity dribble away like wine from a leaky flagon!"

"I think in that last moment, when he knew he was dying, he called to me," Mallory went on. "That's what brought me out of my coma, brought me here. Now you're ready to use me to help you escape and never mind the fate of six billion human beings."

"You said six billion humans? Jeff Mallory, you don't know—you haven't yet grasped the situation—"

"I've grasped enough of it to know that as long as there's one forlorn chance of stopping this cancer before it's too late, I'm going to take it." "But—Jeff Mallory—there is no human race to save. Surely you know! The first act of the Mone Pod on picking a breeding site is to broadcast a killing gas which wipes the planet clean of organic life except in the protected area of the nest. The people of your city of Beatrice live as mindless slaves of the Mone. All the rest, Jeff Mallory, are dead!"

T SEEMED to Mallory that he stood for a long time stunned, his thoughts groping over the shattering concept of a murdered planet, of cities filled with corpses, of deserted farms and airports and silent factories and drifting ocean liners—groped, unable to come to grips with so vast a disaster.

"Now you see why we must make haste to save ourselves," Gonyl was saying. "Join me, Jeff Mallory. I'll show you wonders to make the proudest capitals of this dreary world seem no more than the wattle huts of savages."

"All dead?" Mallory said. "All but my home town? But still—a few thousand people are enough to start with again. There's still a chance."

"Their minds are gone," Gonyl shrilled. "They died, too, in a more ghastly way than the billions who coughed once and knew no more. Death will be a mercy to them—"

"Not while I'm alive," Mallory said—and staggered as a phantom blow struck at his brain, this time with massive power.

It was as though a steel glove had gripped his mind, were crushing it, blanking out all thought except the command that rang like a trumpet in the turmoil. He felt himself driven back, felt his grip on reality dissolving. Vagrant memories flashed before his waning consciousness—the walled-up door to Lori's room; the pale tower rising in the city; Sally's upturned face; the wild eyes of Brother Harmony; the old house, standing dark and silent in the night—flashed and were gone.

One image lingered, dim and unsubstantial: the figure of Uncle Al, tall and commanding in the moonlight that streamed through the window.

You know what to do, Jeff lad. I've taught you . . and you learned well . . .

Mallory rallied, gathered himself, with a quick, decisive effort broke through the shell enveloping his mind, turned on it, shattered it into a thousand fragments.

Gonyl's thin wail of despair rang in Mallory's ears. He saw the ancient limbs jerk, sending the withered body over the edge of the cot to slam against the floor, saw the clawed hands reach out to scrabble at the threshold of the goal he had sought for so long, saw the skeletal arm fall limp, the skull-head drop to rest against the floor.

"Fool, and worse than fool," Gonyl whispered.

His eyelids fluttered, came to rest half open over glazed corneas. Looking down at the dead man, Mallory sensed that his last words had been directed, not at Mallory, but at himself.

TT WAS all clear now—the en-Lirety of the message so long ago impressed on the sleeping brain of a child by the man who had called himself Uncle Al-Algoric. agent of a vast and distant civilization to which the highest cultures of Earth would seem as primitive as the first rude hearths of Neanderthals. And vet, to Algoric this world had been more than a pawn in the game of Galactic war. He had loved a woman here, loved her well enough to give her up in the cause of his duty to her planet. And after she had gone—thinking him dead he had followed her in his mind. had known of the birth of her daughter. And after her death he had watched the development of the child, had seen her grow to womanhood, marry and bear a son.

A son named Geoffry Mallory. From his place of exile Algoric had reached out with his mind to touch that of the infant—had visited him in dreams, walked with him through enchanted lands of light and shadow, had shown him the great Galactic civilization, taught him the history of the long war with the creatures called Mone, revealed to him the secret of the station, taught him its uses, the keys and codes that would unlock its powers.

And more—he had informed him of the nature of the renegade Gonyl, warned him of the man's hidden strengths and fatal weaknesses and had prepared a trap.

The no-space transmitter could not be activated without both portions of the code-complex. If the day came when one of the robot sensors in trans-Plutonian orbit screamed its alarm, Algoric knew he would have no choice but to call Gonyl back, permit him entry into the station. Perhaps, in the face of the evidence of the threat he had denied could ever exist, Gonyl would undergo a change of heart, forget his oath of vengeance, let down his guard and join with Algoric in transmitting the warning signal. Algoric had no choice but to trust him. It would be necessary for him to open his mind, drop all defenses; join in the creation of the complex mental pulse which alone would unlock the transmitter. And if in that moment Gonyl

chose to strike—he would meet disappointment.

With utmost delicacy Algoric prepared the booby trap within his own mind. He set up a pattern of mental forces that would, at the first hint of treachery, fire a killing pulse into his innermost ego-center. Instead of looting Algoric's unprotected mind of its secret, Gonyl would find himself linked mind-to-mind with a corpse.

And in that moment of total disorientation, before Gonyl could break the numbing contact with death—Algoric's final command would imprint itself on the other's mind, unknown and irresistible.

Having completed his preparations, Algoric had buried the entire Gestalt under a hypnotic command, leaving Mallory with only the superficial conscious memory of the dream visits of his "imaginary" uncle.

Then he had waited. The years had passed. Mallory had grown to man's estate, taken up his career, with only an occasional fleeting recollection of the shadowy dream-figure of his childhood. Until the day when Algoric, dying, sent out the call summoning Mallory to the station.

Even then Algoric had withheld the final stroke. It was possible that in the eleventh hour Gonyl might recover his lost sense of the duty at which he had failed. If so, he would link with Mallory to transmit the warning message. If not—if, instead, he used this final opportunity to attempt to loot Mallory's mind of the Algoric-symbol—then the overriding command would come into effect.

To Mallory: the order to strike, take the pattern from Gonyl's mind.

To Gonyl: the command to deliver up the prize without a struggle.

STANDING alone in the transmitter chamber, Mallory looked with wonderment on the dazzling concept-structure that rose in his mind on command: the unified Galactic command code, both halves joined in a fusion that was more than the sum of the parts.

He reached out along the intertwining lines and planes of thought, touched the transmitter control. Instantly the disk narrowed, closing in on itself until the original silvery globe rested on the squat pedestal. Another touch and the black portal opened wide again.

The utter simplicity of the device fascinated Mallory. A touch—so—and the globe would fold in on itself, its latent energies dissolved in a single shaped pulse of no-space oscillation that would flash across half a galaxy to record the alarm, pinpointing its

location on a minor world far out in the Galactic Arm.

A different touch—so—and the energy configuration would reform itself, become a matter transmitter of limited range, using no-space energies to thrust a material pulse across space at light-speed—a pulse consisting of the entity which was Jeff Mallory. He would sense no lapse of time, though years would pass before the quantum-bundle impinged on the receiving station on an artificial planet a tenth of the way to Galactic Center.

There he would deliver the news of the Mone investment of another world. Too late, then, to salvage the native population. A crew would be dispatched at once to deal with the tainted world—and Jeff Mallory would be alive, a free citizen of the glittering Galactic society.

It interested him to note that he had not the slightest impulse to avail himself of the latter opportunity. Uncle Al's instructions had been simple and imperative: relay the warning which would be instantaneously delivered and instantaneously acted on. In hours, the special-alert crew would arrive via no-space. If they were too late—if the Mone had already spawned—it would be necessary to mind-bomb the entire planet. If not, it would be sufficient to dissolve the Mone nest and steri-

lize the planetary surface for a hundred miles around the center of infection. Despite Gonyl's pronouncement that most of Earth's populace was dead, insofar as Mallory knew, the spawning had not yet taken place.

If he acted swiftly most of the planet would survive.

Mallory looked at the gleaming sphere that waited for his command to send the alarm flashing across space. He reached out and switched it off. It fell in on itself, dwindled to a blazing point of brilliance and died.

"You counted on me, Uncle Al," Mallory said aloud. "But I'm not a Galactic. I'm a poor, instinct-ridden primitive. You left me with two choices. I can't take either of them."

MALLORY left the house two hours later, after searching it from attic to subcellar. He had turned up nothing that might be useful as a weapon against the Mone but he had found a pair of good boots—of Galactic make—a warm coat, food.

In early evening gloom he made his way back down through the dense shrubbery, emerged on the unsurfaced road he had followed coming in. The searchers were gone. No lights moved anywhere in the broad valley spreading below him. His present position, as well as he could estimate by dead reckoning, was some fifty miles northwest of Beatrice. He set off across an open field toward a distant line of trees, impatient at the slow pace, wishing for a car.

Time was running out—might have run out. Hundreds of billions of spores, Gonyl had said. Mallory scanned the skies, wondering what appearance such an outpouring of alien seed would present. A gray cloud, spreading over the stars? A murky overcast, rolling forward like a fogbank at sea?

But the sky was clear, swept clean by a bitter wind. Dry cornstalks, unharvested, blanketed the ground, blown flat with their burdens of ripe ears by the winter winds. A doomed species, incapable of reproducing its own kind now that the hand of man was gone.

Next year a hardy crop of weeds would spring up all across the empty plains of the continent. Succeeding years would bring new varieties and in half a century the old grasslands would have reclaimed their own. The cattle and horses grazing wild there would burgeon enormously and the timid bison, brought back from the brink, would again darken the plains with their numgaunt timber bers. And the wolves, emerging from the remote wilds of the north, would run in packs, pulling down the weak and the lame and the aged and the very young. And it would be as if man had never been.

And even that picture, Mallory reflected, was an optimistic one, presupposing that plant and animal life would somehow survive the invasion and/or the Galactic counterattack. Hundreds of billions of creatures, matured from the broadcast spores, would blanket the world like a plague, building toward the critical numbers that would trigger the next broadcasting of seed pods to race across space to infect the next ring of worlds. Was there any stopping of such voracious fecundity? Was the battle in vain, doomed before it was joined?

He did not know, would never know. Out there—across light-years, across ages, the war had raged. A war—or a vast Galactic pest-control program. It was a thought that seemed to reduce all human struggle and aspiration to the minuscule level of the buzzing of bees in a hive. How humbling to the vaulting spirit of earthly man if he found himself destroyed in the overkill of a Gålactic Flit Gun.

A road ran behind the line of trees. Mallory crossed it, traversed a patch of dark woods, came upon a dirt track leading in the correct direction. He tramped on. About midnight he paused to rest under a tree before an empty farmhouse where a gutted convertible squatted on flat tires. An hour later he encountered a stalled car in the road, the badly decomposed corpse of a man slumped behind the wheel visible through the cloudy glass. He told himself that there was no point in opening the door and trying the starter—the battery would be long dead.

Three miles farther, in front of a deserted gas station, he found four cars. One, an elderly Ford with a manual shift, gave a faint groan as he tried the starter. The road had a gentle downward grade at that point. With difficulty he manhandled the vehicle out onto the apron, jumped in, coasted downhill, let out the clutch. The engine fired, sputtered and caught.

Mallory covered twelve miles before running out of gas. He left the car on the shoulder, walked on into the outskirts of a lightless town announced by a faded sign as Beaver Crossing. He passed empty houses, the dry leaves drifting the street crunching underfoot. There was a sidewalk beside the main street. His dim reflection paced beside him in the dusty windows of abandoned shops. A block of buildings had burned. The acrid odor of charred timber still clung to the blackened remains of collapsed buildings.

There was a small automotive

repair shop in the next block. As Mallory paused to cast a speculative eye over the vehicles packed inside the closed garage, two men in khaki uniforms with the shoulder patch of Strang's army stepped out from a doorway and aimed rifles at his chest. One put a flashlight on his face.

"It's about time," Mallory said. "I was beginning to think you'd never make your move."

NE of the two men was a stranger to Mallory; the other was a tall, big-wristed fellow he had seen during his stay in camp. The latter held the light on him while the other frisked him awkwardly, declared him clean.

"You made a mistake hanging around here, boy," the familiar one said. "Sarge will be pleased to see you again. He was kind of put out when you left without saying so long."

They prodded him along to a dusty jeep parked around the corner, drove at breakneck speed along bumpy back roads that brought them up to the encampment gate in half an hour. The dirt streets were full of armed men carrying packs and rifles and being lined up and counted off by tense-looking NCO's. There were floodlights beyond the camp, along the edge of the pasture. Mallory heard the rumble of big engines warming up.

The jeep made its way through



the throng, turned down an alley between dark cook tents, pulled up before the barbed-wire enclosed stockade.

"I don't have time for this," Mallory said. "I have to see Strang, fast."

"Not tonight, chum—the colonel's busy tonight. What we got to do—we got to lock you up and get you off our hands. There'll just be the one man to watch the compound. Kudnik. He's got a

sprained ankle but he's damn good with that ought-three-oh. His order'll be to plug you if you just look at the fence. Come on. Out!"

"What's going on?"

One of the men caught Mallory's arm, hauled him out of the jeep.

"Tonight's the night we hit Beatrice, Bud. The Chinks'll think it's World War Four. They won't know what caught 'em."



"Don't waste time, Gus," the other man said, giving Mallory a rough shove toward the guard shack.

Mallory half closed his eyes, feeling out gingerly for the mindglow of the man. He sensed it, studied it, then probed gently.

"We got orders—" the man was saying.

His voice faltered. He came to a halt, stood uncertainly, as if not sure in which direction to go. Mallory turned his attention to the other man, was caught by surprise as he saw the gun coming swiftly up.

He struck.

The man dropped the gun, fell forward on his face and lay without moving.

Mallory turned quickly to the first man, who was blinking his eyes dazedly, shaking his head.

"You were going to take me to the colonel," he said urgently. "No time to waste."

"Yeah—sure," the man said blurrily. "Come on."

Without a glance at his fallen comrade he led the way toward the main house.

STRANG stared hard at Mallory, motioned to a chair.

"Well, I hope you had a nice stroll around the countryside, Mallory," he said in tones of heavy sarcasm. He narrowed his eyes. "See anything interesting out there?"

"Enough. Strang, you've got to call this raid off."

"Oh? Anything else?"

"Plenty. Among other things, I found a man who's seen the Mone—the aliens."

"Anybody I know? Where is he?"

"He's dead."

"Oh? Too bad. In that case, I'm afraid I'll just have to go ahead—"

"That's not all, Strang. I now know what the Mone are," Mallory said.

Strang sighed. "I was hoping you'd be over that one."

"The Mone," Mallory said, "are a life form about halfway between organic machines and what we think of as living creatures. They aren't precisely what we'd call intelligent. Their actions are directed by a kind of super-instinctive pattern—like insect behavior but a thousand times more complex and with a few dozen million years of evolution behind them."

Strang slapped the desk with both hands.

"Damn it, man, knock off this crank talk. I don't know what you're trying to prove—but it's not working. You're no more crazy than I am. I need every good man—"

"There's a time element involved, Strang. The Mone pattern is to pick their spot and build in effect a nest—using local labor to help. When everything's ready their queen, or brood sow or whatever you want to call her, settles down to spore production. The whole hive is directed toward feeding and supporting her while she gestates a few hundred billion germ cells. They're broadcast when the time is ripe. That's what the tower is for. The spores are microscopic. They're fired all

the way into the stratosphere and spread out to blanket the planet. In a few weeks they've settled in, found food supplies—"

"That's enough!" Strang roared. "By God, Mallory, I promised Lori—" He broke off, took a deep, calming breath. "I've had a talk with your daughter—a fine young woman in whom I have implicit confidence—and I gave her my word I'd give you every opportunity to show me that you deserve a place on my staff. I need officers, Mallory. I need—"

"You need to listen to me, Strang. I came here to tell you what I've found out and to enlist your cooperation. I—"

"Came here, hell. You were marched here at gunpoint, at my orders. You cost me valuable gasoline and man-hours beating the brush for you."

"If I'd wanted to stay lost, do you really think I'd have walked right up to your picket line? Start thinking straight, Strang. I came back here, as I said, to tell you something. Suppose you listen before you waste the pitch on me?"

"I'm not interested in your ravings, Mallory. I was willing to let bygones be bygones for Lori's sake. But—"

"The spawning could take place at any time, Strang—any hour, any minute. Once that's happened, it's all over. If even one per cent of the spores survive—and they have a fantastic survival rate—in a few weeks there'll be billions of them infesting every square inch of the planet. They're tough, strong—not intelligent but effective in their own way—and they have just one objective: breeding more of their kind. They—"

"All right, that's enough." Strang came to his feet. "You've taken this line and you're stuck with it. Fine. If you'd rather swab pots and pans than help me plan strategy—"

Both men turned as a side door to the room opened. Lori came in, looking pale but determined in a tailored khaki uniform.

"Dad—I've been listening to what you've been saying. I—I can't believe you're insane. So there must be some other reason for your ravings. I don't know what it is and I don't want to know. But I'm appealing to you—"

"Wait, Lori. I'd like to take the time to convince you you ought to listen to me, that what I'm telling you is true, to go into the matter of proof—but I can't. I came here because I want help in what I'm going to do."

"What are you planning, Dad?"

"I'm going into Beatrice and do what I can against what's there. A few good men with guns would help." Lori's face was tense, wooden. She turned to Strang.

"I'm sorry, James," she whispered. "I was wrong. I withdraw my request. I release you from your promise. Do—whatever you must."

She turned quickly and reached for the door.

"Wait," Mallory said softly. The girl grasped the knob, pushed the door open—and paused.

It's like reaching out with a gentle hand to the softly glowing intricacy that was a living mind, touching it delicately...

Lori turned, a faintly bemused expression on her face. Not looking at either of the two men, she went to a chair, sat down carefully, folded her hands in her lap. Mallory went to the open door, closed it on the curious face of the sentry posted outside.

"I'm glad you've decided to hear me out, Lori," he said. "I'll make this short and to the point, Colonel. I'm going into Beatrice. I want your army with me—all of it—armed and briefed for a hell of a fight."

Strang snorted. But before he could speak, Mallory went on: "Nobody will get sick, Colonel. There may be a bout of nausea as we go through the outer protective field but it won't be fatal. Once in the city, no civilians are to be molested. The enemy won't be hard to identify—they're alien. You'll

understand as soon as you see one."

"You're raving, Mallory. I'm hitting Beatrice, yes—but not with infantry. I have half a dozen tow planes and more cargo gliders than I need—and plenty of high explosives. I'll fly half a dozen sorties over the town and pound it flat. Then I order my armor in. The Chinks won't know what hit them—"

"Colonel, I've told you the city is full of innocent non-combatants—"

Strang's hand reached for the intercom button on his desk.

Mallory struck quickly, without thinking.

Strang's face went chalky white. He made a strangled sound and fell sideways from his chair. Lori uttered a horrified cry. Mallory whirled as she came out of the chair, her eyes straining wide, her mouth ready for the scream.

He touched her with a swift, controlled thought. She sank back into the chair, sat awkwardly, her face slack and amazed

Mallory bent over Strang. The unconscious man was breathing hoarsely. His face was flushed. Mallory lifted him into his chair, then probed delicately.

He saw the point of impact, an area of dimness in the surrounding glow. With a gentle precision he reactivated the energy flows, saw the stunned portion of the man's

mind begin to warm back toward consciousness.

STRANG stirred, raised his head, focused his eyes on Mallory. Lori moaned softly.

"Listen to me, both of you," Mallory said in a flat, clipped voice, looking from one to the other. "You've just encountered something outside your experience. Accept it, recognize the fact that there's something here you don't understand. Your picture of reality was wrong in one respect—it could be wrong in others."

"How—how did you move that fast?" Strang asked uncertainly. "It was like a snake striking."

"I haven't moved," Mallory said. "Tell him, Lori."

Her expression was stricken. "He—didn't move at all, James. You just collapsed. I thought—"

"He's all right," Mallory said quickly. "I'm sorry, Lori. I had no choice."

"Who—what are you?" Mallory's daughter stared at him with an expression of horror. "I felt something—inside my skull—"

She clamped her hands to the sides of her head.

"I'm your father, Lori," he said harshly. "I wish I had time to take you along slowly, explain it all to you in detail, coax you to understand—to trust me. But I don't. Just face the fact that there's more to what I'm saying than a mani- Mallory turned to see Lori on her ac's fancies." He turned to Strang. "You're a military man, Colonel, a realist. When the first A-bomb hit Hiroshima the Japanese might not have understood what happened—but they couldn't ignore the results. I'm asking you to accept the fact that I know something you don't. I'm asking you to take me on trust, give me the men I need."

"You're crazy," Strang said, making an effort to pull himself together. "Crazy men sometimes have superhuman strength; maybe they have superhuman speed, too-"

"I told you-Lori told you-I hit you with my mind, not my fist."

"All right-suppose you did what you claim. What's that got to do with sending my troops into a plague area?"

Mallory leaned on the desk with both fists. "There's no plague. There is an occupying force. At the present moment there are only few hundred of them—the workers who protect and feed the Queen Mone. We can take them, Strang. At least we have a chance. If we don't act now-today-it may be too late."

Mallory saw the change in Strang's expression; he reached, touched lightly. Strang lurched backward, uttered a gargling groan, clapped a hand to his head.

feet.

"Lori-for God's sake don't push me."

"No-not God's sake. I don't know what this is—what terrible power vou have—but—"

Strang was struggling up.

"Wait, damn it," Mallory said urgently. "Hear me out-"

Lori moved toward him. He brushed her mind lightly. She staggered, caught herself. Strang had come around the end of the desk.

"He can't handle both of us at once," he said in a low, faut voice. "Lori, get out of the room, call—"

Mallory touched her again as she started for the door. She went to her knees. He hit Strang as the man charged him, stepped aside as he fell.

"I can handle you, Strang," Mallory said. "By knocking you out. But that won't help. I need vou conscious—both of vou."

"Looks like a stand-off," Strang said through clenched teeth. He was on all fours, shaking his head. Mallory went to Lori, lifted her.

"Please—I'm begging

Listen, then judge."

"I-all right, Dad," Lori said in a whisper, and pulled herself away, "I suppose we haven't any choice."

▲ LL RIGHT," Strang said A fifteen minutes later. "I've



listened. What I've heard confirms my conviction that you're out of your mind."

"Wait, James," Lori spoke up. "What Dad says does explain some things. If it were possible—"

"But since it isn't," Strang cut in harshly, "we can-"

sible, Strang?" Mallory broke in. "Or do you know? Aren't you just guessing? Damn it, think like a tactician. If the opposition comes up with something brand new, do you deny it-or deal with it? Chinese Communists? Holed up in Beatrice, Nebraska, waiting for "How do you know what's pos- you to bomb them out? Does that



of war?"

"James—couldn't you send someone to look at the city, fly over it in a glider, maybe—take pictures. If there really is a tower, as Dad described it-"

fit what you know of the realities "You'll have to take what I tell vou on faith."

"And that I won't do. Can't do. Suppose—for the sake of argument—that there is something to your story. How do I know these aliens of yours won't wipe us out "There's no time for reconnais- on sight with some kind of Buck sance, Strang," Mallory said. Rogers death ray? These men

trust me, Mallory. They're my command. I'm their leader. You talk about tactics and you expect me to walk into a blind ambush not knowing what kind of fire-power the enemy has?"

"I've told you the conse-

quences."

"And I've told you no, damn it."

Mallory nodded.

"All right," he said. "I wish I could take over your mind and force you to issue orders but I'm not that good. Maybe I will be some day—if I live. I haven't begun to explore what I have." He turned to Lori. "I'm sorry, Lori. Sorry I couldn't make you understand. Maybe some day you will." He strode to the door, looked back at Strang. "Don't try to stop me, Colonel. Under pressure I might hurt someone. I just don't know enough about the mind to control it."

"Where are you going?" Lori blurted.

"Where I said I was going, Lori."

"Alone?"

"It looks that way."

"James—you can't let him. He'll die. And if he is right—"

"How can I stop him?"

"You can give him some men a few men. Something. You have to do something, James!"

Strang stared hard at Mallory. "Would one man help?"

Mallory nodded. Strang punched his intercom key.

"Tell Brozhny to come in."

They waited in silence. In less than a minute the door opened to admit the Russian.

"You're in temporary command," Strang said. "Hold the attack until I come back."

"James—you're not going yourself?" Lori burst out. "It's too dangerous—"

"What do you want me to do, girl—send another man to take my risks for me?"

"But James—you're the leader."
"Vass can handle it." Strang
turned to Mallory. "How close do
you have to be to see the tower?"

"Five miles, maybe."

"All right. Five miles. And if there's no tower—we'll both forget this story of yours. Agreed?"

"And if there is?"

"Then possibly I'll have a little rethinking to do."

"Then you'll go a little farther?"

"How far?"

"Far enough to see proof of the rest of what I've said."

Strang nodded, caught the Russian officer's eye.

"If I'm not back by sundown tomorrow—it's all yours. And Vass, when you take the bombers in—if you see a tower hit it first."

"As you wish, Colonel."

"All right, Mallory," Strang said. "Let's go have a look at these little green men of yours."

"Not little," Mallory said. "Not green. And not men." waved and, with a scatter of gravel,

SALLY, her right arm heavily bandaged and carried in a sling, and Lori, stiff-faced but tearless, stood by silently as Mallory and Strang stowed their rifles and supplies in the Jeep.

Strang started the engine, waved and, with a scatter of gravel, gunned down the winding drive. He opened up on the highway straddling the faded yellow centerline.

"Mallory, I've been thinking about your story," he called over the buffeting of the wind. "Trying to put my finger on all the logical flaws in it. Funny thing is—I have to admit it's damned ingenious—once you get past the basic premise. Accounts for everything. It worries me a little, Mallory. Your being nuts is a lot easier for me to handle than an invasion from space."

"If you don't see what I told you you'd see I'll go back and enlist for the duration," Mallory said curtly. "In the meantime, let's let it go at that."

For the next half hour Strang drove at breakneck speed, slowing only when necessary to skirt a stalled car or tank. They passed a sign announcing Beatrice in ten miles. Mallory took deep breaths

to quiet an unease in his midriff that was rapidly growing toward burning nausea. Strang was frowning fiercely. He drove on two more miles, then slowed.

"I don't like this, Mallory," he said. His tanned face was sallow and sweat beaded his forehead. "Damn it, man, the air is poisonous. It's making me sick to my stomach."

"I told you about this effect," Mallory said. "It's not plague, Strang. It's a protective field designed to keep out any interlopers who survived the killing and escaped the hypnosis."

"You've got an answer for everything."

erytning.

"Is that supposed to prove I'm wrong?"

"Damn it, man, you've got to be wrong. Otherwise—"

"Drive on, Colonel. Prove I'm wrong. We ought to see it any time now. Maybe around that next bend."

"Sure. You'll point and say, 'There it is.' And I'll take a look and won't see a damned thing."

"You'll see the tower. Sally told you they could see it on a fair day from the farm."

"They saw searchlights, that's all."

"Colonel, quotes, you've got an answer for everything," Mallory said sardonically.

Strang gunned the jeep savagely.

"Sure, but my answers make sense."

The vehicle topped a low rise of ground. Ahead lay a cluster of crossroads gas stations. Beyond were scattered houses, the beginnings of the first outlying suburb of Beatrice. The jeep slowed.

Strang gripped the wheel, his face taut, staring toward the misty green column rising above the roofs across the plain. He braked to a stop, unstrapped himself, unslung the binoculars from his hip, adjusted them, stood for half a minute in the jeep, studying the scene. He lowered the glasses, resumed his seat. His tongue touched his lips.

"Yeah," he said abruptly. "Let's go take a closer look, Mallory."

He eased the jeep into gear and drove more slowly.

STRANG halted the car in the shade of a strand of leafless sycamores beside an elderly, sagging house just outside the CITY LIMITS sign.

"It's quiet," he said. "Damned quiet—and no corpses."

He climbed out of the jeep, stood with his head cocked, listening to the utter stillness.

"All right, you see the town," Mallory said. "And no Chinese Communists. Now let's get out."

"Damn it, Mallory, you don't expect me to go back and tell

Brozhny I've bought your whole story on the basis of a building that maybe looks a little different from what you'd expect to see in a prairie town. Let's take a little walk."

"This isn't a good idea, Strang. This is enemy territory."

"I want to see all there is to see."

"All right, but remember what I told you. If you have to use that gun aim for the navel—or where the navel would be if you were shooting at a human."

They walked along past the empty house, an abandoned gas station.

"It all looks so damned normal, Mallory," Strang said, an almost pleading note in his voice. "All but that damned tower."

"You'll even see lawn sprinklers working," Mallory said. "And milk bottles on back porches. They're trying to create a normal environment for their workers and they don't know what's important. They reason like a boy putting a grasshopper in a bottle with six different kinds of weeds."

"Hold it." Strang's hand shot out to block Mallory. "Listen."

The sound of a distant engine running raggedly, as if it were being started up after a long period of idleness, reached them.

"Time to go," Mallory said, speaking softly.

"Aliens," Strang said. "Flying saucerites from another planet.

They settle in a small town, take over our shapes, our houses, our cars—and start a factory. Nuts." He said the last word flatly, without intonation. "I don't believe any of it, Mallory. Come on. Let's nab the mayor or the chief of police or whoever the hell is in charge here and find out what's going on."

He started forward. Mallory caught his arm.

"Wait a minute, Strang. I brought you here to show you something, not to get you killed. The city's occupied by the enemy—can't you get that into your mind? Now, let's get out of here and come back loaded for bear."

"Damn it, man—it looks as if this city lived through the Chink attack by the grace of God—and if you think—"

"I think it's time to go back, Strang."

"I haven't seen enough."

He froze to listen to the sound of an engine approaching swiftly.

"Get behind that signboard—fast," Mallory rapped.

"Wait a minute. Maybe-"

Mallory sprinted for concealment. Strang followed him presently. They lay flat, watching a white bread truck come into view, slow, swing the corner, approach the sign. It stopped in the middle of the street a hundred feet away. Two men stepped down, stood attentively, as if listening.

"Those are men, not monsters," Strang whispered. "I want to talk to them, find out—"

Mallory caught his arm.

"If you saw them up close you wouldn't think they're men. And we're not going to get that close."

Mallory turned at a sound. A

Mallory turned at a sound. A tall man in a gray coverall was approaching across the lot, walking with a curious, shambling gait.

"You get your wish," Mallory said. "Stand still. Maybe we can bluff our way through."

Strang eyed the oncoming figure, fingering his rifle.

"For God's sake, Mallory," he said in a low voice. "The fellow's as human as I am—even if he does walk as if he had two artificial legs."

"He has," Mallory said flatly. "Don't say anything. Just be ready."

STRANG made a disgusted sound, rose to his feet, his eyes on the stranger. Mallory stood beside him. The figure stopped ten feet away, stood in a curiously lifeless stance, body poised at an awkward angle. At this distance the doughy textures of skin and garments were obvious. The face was a mask painted with flat colors on porous rubber.

"Mother of God," Strang whispered.

"Why are you not at your benches?" the simulacrum in-

quired in the unctious tones of a television pitchman and, without waiting for a reply, advanced on Strang. The colonel took a step back, set the butt of the rifle against his hip and fired. The shot was deafening; pale flame spurted. The impact of the bullet spun the creature—it regained its balance, resumed its advance, a pit the size of an olive gaping high in its chest.

"It will be necessary to give you pain," it said.

Mallory brought his rifle to his shoulder, fired, rode the kick, fired again. The effigy stumbled, fell face forward with a sound like a mattress striking the ground.

Strang aimed his rifle at its head. Mallory caught the muzzle, thrust it aside.

"That way," he snapped and shoved Strang.

The two men sprinted across an open field, between two garages, through a gap in a hedge. They emerged in a narrow alley behind a warehouse. The white vehicle was visible at the corner, catching up rapidly.

"They must have detected us as soon as we got into their screens," Mallory said as they ducked back. "We walked right into it."

"Not human," Strang muttered. His face was a strange, blotchy color. "My God—like a rag doll—walking and talking. Those eyes—"

"We're within a block of the jeep," Mallory said. "We'll let this car pass, then run for it."

Crouched in deep shadow beside the house, Mallory felt a wave of dizziness pass over him. For a moment the scene faded, as if a transparent curtain of sparkling black silk had dropped down around him. Voices seemed to clamor at him from a distance. They had a strange urgency.

With an effort he squeezed his eyes shut, shook his head. He took a deep breath, gathered his fading consciousness, focused it.

He was on all fours, listening to a distant humming that faded, died, as color washed back into the scene. An engine was idling nearby. Footsteps sounded, coming closer.

"Strang," Mallory whispered. "Get set. As soon as he's past, we duck out and run like hell—"

A shadow fell across a patch of sunny lawn. A man in Western costume, complete with cowboy hat and holstered guns, paced past their hiding place. His footsteps receded.

"Let's go."

Mallory came to his feet, glanced back as Strang failed to move. The colonel stood against the wall, the rifle in his hands pointing at the ground.

"Strang-snap out of it."

Strang's eyes had a glazed, outof-focus look. Mallory caught his arm. Strang blinked at him vague- a shaky step and stumbled to his knees. Mallory heard returning

"Release me," he said tonelessly. "I must—my work—"

"Strang—they've gotten to you. Fight it, man. Throw it off."

Strang pushed at him, struggled to free himself. His movements were uncoordinated, clumsy. Mallory caught his wrists.

"Strang—remember Lori? Remember your army, waiting for you to come back and lead the attack?"

"The work waits."

Mallory felt the dizziness touch him again. This time he pushed it away more easily. With a sudden wrench, Strang tore himself free. He straightened, brushed at his khaki shirt.

"Well, I have to be getting along," he said briskly. "It's time, you know. We're all needed—"

Mallory closed his eyes, concentrating. He sensed Strang's mind-glow, dim and cramped, locked in a web of blackness. Gently, he probed, found an interstice, slipped inside.

Strang—wake up . . .

He sensed faint stirrings of alarm, of partial understanding, partial recognition.

Mal—Mallory. Can't—think. Like—drowning in tar—cold hurts—

Mallory opened his eyes. Strang sagged against the building, his face pale, his mouth open. He took a shaky step and stumbled to his knees. Mallory heard returning footsteps. The car was coming closer. He reached again for Strang's mind, forced Strang to totter to his feet.

▲ DUMMY made of cheap plastic lunged into view six feet away. It pivoted, eyes staring fixedly, blankly. This time the Mone's mental blow was sharp. precisely aimed. Mallory's counter lanced out at the gleaming pinpoint that was the other's mindfield, clashed against alienness, absorbed a brief, shocking pain, then held and clung. He was peripherally aware of Strang stumbling back against the wall, of the pseudoman standing frozen in mid-stride. He thrust harder. searching for entry through the other's defenses, found a line of juncture, jabbed.

Light exploded in his mind. He was in a vast room lit by a greenish light, filled with an alien stench, alien sounds. The space was almost completely filled by a vast sponge-like structure of translucent cells, filaments and tubes—like the interior of a human lung seen under high magnification, the thought came to him. All around the central mass men and not-men hurried, involved in incomprehensible tasks. Mallory sensed an air of extreme tension, of time stretched to the breaking

point, of events swollen to bursting.

It is the time. Now existence rushes toward fulfillment in the fruiting of the spore-body...

With a violent effort, Mallory wrenched against the paralyzing contact with the Mone thought-field. He knew a sense of being torn, of a bubble bursting, a vessel smashed, of life-force seeping away.

The not-man before him settled into a boneless squat, head dangling backward, hands flat, palms up, fingers fully extended. In death all humanity drained from the puppet, leaving it a thing deflated of any semblance of life.

"My God," Strang said. "What —what was that? How—"

"It's too late to go back now, Strang," Mallory said swiftly. "Time has run out. The Mone is about to spawn—in minutes, maybe even seconds—"

Strang jerked as if a rope had been pulled. He took an awkward step, shuddered, stood straight.

"Now we must go to our benches," he said carefully, looking toward the great tower soaring above the rooftops.

The sound of the vehicle engine was close, idling. Two not-men appeared, came toward them, ignoring the dummy slumped in the path.

"Now you must go to your benches," the smaller, thinner one

said in the voice of an earnest young pharmacist recommending a patent tranquilizer.

"Yes," Mallory said in a flat tone, "Now we must go to our benches."

Led by the not-men, with Strang striding confidently beside him, he walked out to the street and headed toward the tower.

THE downtown streets had the same derelict look they had had a week before. A few more papers were being blown along the sidewalks. More weeds had sprouted in the cracks in the pavement. Mallory's footsteps had a hollow, echoing quality.

The air was cool in the shadow of the tower. The gate in the wall opened as they came up. The flat ground beyond it was as hard and grassless as a school playground. A few not-men were moving with an air of compulsive haste. Off to one side a man lay on his face, his arms under him. His color indicated that he was dead. None of the not-men seemed to be aware of the corpse.

Mallory and his escort passed through a rounded opening in the base of the tower into a curving chamber that suggested the interior of an immense seashell. The walls were a translucent, nacreous green, flaring up and over, bending away until they were lost in green gloom. An acrid, kelplike odor hung in the muggy air. He heard a persistent murmur of sound, like that of a restless crowd in an auditorium beyond closed doors.

The two not-men who had conducted him and Strang here separated, one moving off to the right, the other continuing toward a small passage opening in the curve of wall. Strang unhesitatingly followed the latter. Mallory took the cue. The route led downward in a gentle spiral. There was no floor as such—in cross-section the passage was nearly circular. A narrow drift of dust and debris formed a ridge along the centerline.

The light grew dimmer, the sounds louder, the odors more pungent. The passage opened into a wide room cut into a maze by a system of waist-high partitions that extended out of sight around a central core of dull, dark green. There were hundreds of people—Mallory saw familiar faces, drawn and haggard in the sickly light. Strang's guide halted. Two figures were approaching, oddly colorless and amorphous.

At close range Mallory saw that they were faceless, hairless versions of the not-men he had seen above ground. Their bodies were smooth, featureless, a uniform dull gray in color.

Mallory extended his awareness cautiously, contacted the pin-point brilliance of the mind-field of the not-man who had led him here, the brighter, more complex emanations of the newcomers. He was aware of a swift, flickering interchange among them, then of a tentative probe at his own mind. For a moment he knew an intruding sense of uncertainty. Then all three aliens turned abruptly and walked away.

With the air of one who knows exactly where he is going Strang stepped through an opening in the low wall. Mallory followed.

Inside he stopped, caught Strang's arm. He closed his eyes, willed his consciousness outward. The glow that was Strang's mindfield was almost obscured by an enveloping blanket of gray. Mallory stripped it away. Strang staggered, caught himself, looked around with an expression of bewilderment. His eyes fell on Mallory.

"We're inside the tower," Mallory said quickly. "You've been unconscious. How do you feel?"

"Godawful," Strang muttered: "Dreams—then—nothing—"

"We're all out of time. We have to try to get to the spawning chamber. I'm guessing that will be central. We'll play it by ear. Come on."

He strode along a narrow passage. Strang followed.

A low shelf lined the inner surface of the partition here. At intervals of a few feet men and women were posted—genuine men and women but dull-eyed, slack-featured, thin and pale, their clothing in various degrees of neglect. It appeared, Mallory saw, to be an assembly line of sorts. He saw heaps of small objects resembling carved beans before each worker. They were being strung on wires. No one paid the slightest attention to the intruders.

Mallory turned through an opening in the low wall, followed another aisle, lined like the others with toiling, blank-eyed men and women. He recognized a dentist who had once filled a molar for him. A complexly intertwined rope was coiled on the counter before the man among scattered beans, some of which had spilled to the floor.

Mallory reached out, plucked the work from his hands. The man hesitated only a moment—then he plucked a coil of the hair-fine black wire from the disorder, seized a bean, threaded it onto the wire.

"Dr. Foyle," Mallory said in a low voice. "Can you hear me?"

Foyle gave a violent twitch. The bean fell from his fingers. He looked wildly at Mallory.

"It is time," he mumbled and turned back to his work, grabbing for a new bean with an air of frantic haste.

Mallory reached carefully to touch the other's mind—the

pseudo-glow was barely perceptible, submerged under multiple layers of inhibiting anti-thought. Delicately, Mallory penetrated the maze, touched the paralyzed ego-center. Foyle's hands froze on his work.

I need your help, Foyle. I need information. Where is the spawning chamber? How can I get to it?

THE former dentist's head jerked. He put his hands to his head, made an ugly noise.

"Get out—got to get out—get away—get—filthy thing—out of my head—"

Foyle's voice rose on the last words

"Quiet," Mallory whispered. "I want to help you."

"Late. No time. She'll spawn now—in a matter of minutes must—complete—"

Foyle grabbed for the beans.

"Where is she? How can we get there? What can we do?"

Foyle seemed to respond. He stared at Mallory.

"Big room—Great Queen—God, the urge to let go—give in to it—loyalty to Green Queen—"

"Where is she, Foyle?"

"Must—complete genetic package — response — environment — modification. Almost ready—pressures—nutrients—"

"How do we reach the Queen's chamber?"

"She's-almost ready. Need-

all genetic data. These—among—genes. I'm building chromosomes. They're like—tapes, fed into her—into it! The horror—the beauty. Strange. Torn two ways. Must add my contribution to adaption—best chance for survival—second generation—"

A hoarse, gargling sound came from Foyle's mouth. He made an abortive attempt to rise, then fell forward over his bench. Mallory thrust to the center of his fading thought-glow, saw it collapsing inward under the unbearable pressure, saw it dwindle, wink out.

"He's dead," he told Strang.

They resumed their prowl along the curving aisle. Mallory reached out to scan the minds of the humans as they huddled over their work, met only blankness co-cooned in fields of negative energy. Once a pseudo-human passed them, hurrying in the opposite direction. It was only a half-hearted counterfeit—the face was a blob, the garments vaguely outlined. Mallory felt the pale heat of its mental aura brush him. He held his barrier steady and the contact was past.

The aisle dead-ended at a vertical wall of a gray, papery material. Strang examined it.

"It doesn't look very strong. Take a chance on kicking it in?"

There were no not-men near. Strang felt over the surface, pushed at it, then swung his boot.

The barrier split. Although workers were busy within six feet of them, none showed any awareness that anything unusual was taking place.

Strang hammered the material back, dropped to all fours and crawled through. Mallory followed.

They were in a long, narrow space. Ducts of lumpy and irregular shape led through it, some branching upward, others down. There was a steady, drumming sound as of the flow of dense fluids driven by busy pumps. The far wall of the chamber was a glossy dark brown. The pipes that passed through it had no visible joints.

Mallory tested the strength of the wall. It was as solid as armor plating.

"We have to get past it," he said.

"We won't make a hole in that."

Mallory was examining a duct
two feet in diameter.

"Check the input end?"

They traced the pipe back. Thirty feet upstream it made a right angle turn to rise vertically, passing through an aperture in the ceiling.

Strang set himself. Mallory stepped on his back, reached, caught a handhold and pulled himself up. The duct ended at a manifold, where four smaller pipes came together. Mallory tested them, found an apparent struc-

tural weakness at the point where the tributary lines entered the plenum chamber.

He wrenched at one. It yielded slightly but did not fracture.

He lay beside the hole, lowered an arm; Strang jumped, caught his hand, pulled himself up and through. Mallory took a position on one side of the duct, Strang on the other. They pushed, pulled, alternately, timing their pressures to the natural period of the pipe. The amplitude of the oscillations increased; with a ripping sound, the material parted at the point of juncture; dark green fluid gushed forth, splattering on the floor.

They set to work on a second duct, tore it free, then a third. The last of the four came away easily, tearing the top of the plenum out with it. The floor was ankle deep in olive-drab muck that flowed down through the aperture through which they had entered, splattering on the floor below.

Slowly, the level in the plenum sank.

"We can't wait," Mallory said. "I'm going in."

"I'll wait two minutes and follow you," Strang said.

MALLORY lowered his legs into the viscous sump. The fluid was warm, lumpy, like thin gruel. He took a deep breath, released his grip. The fluid rose around him, washed up over his

face as he submerged.

He sank slowly. The inside of the duct was smooth. He counted silently. At twenty-eight his feet struck a curving suface. He bent, slid down and around the rightangle turn. It was another thirty feet to the barrier wall. Mallory pushed ahead into the horizontal section, feet-first, paddling awkwardly.

By thrusting alternately against the side walls he was able to accelerate his progress. The fluid was moving with more force now—he sensed that the duct had narrowed. He had lost count of the time. Surely it had been more than a minute—his lungs burned; a rising blackness obscured his thoughts. In a moment he would have to breathe—but first another few yards—another few feet—one more foot.

His shoulder thumped the side of the duct. Abruptly a swift current was sucking at him. He locked his throat, concentrated his waning control on the single concept of not allowing his lungs the convulsive filling they craved.

The support dropped from beneath him. The pressure was gone. He fell, struck, was sliding across a smooth floor, snorting to clear his mouth and nostrils of a cloying reek as of stale bread multiplied a thousand times. He came to rest on his face, groping for traction on a slippery surface.

The air was steaming hot, filled with cluckings and gurglings as of bubbling tar. It was difficult to breathe. Mallory coughed, spat pasty nutrient material from his mouth, cleared his eyes. The space in which he found himself was almost totally dark. A faint glow from an obscure source showed him a vast, swollen, spongy mass that he had seen before in a dark vision gleaned from an alien mind.

He reached out, sensed for a moment a play of pseudolight in patterns of not-color across a convoluted surface of pure mind-stuff.

Then an impact like an ice avalanche struck him, smashed him into dust, whirled the dust away into timeless infinity.

HE DRIFTED in total blackness, afloat on a sea of nontime, non-space. Far away, like memories of a forgotten childhood, lights and sounds moved with the bustle and clamor of great events reaching crisis—but not here. He was alone, paralyzed, without senses or sensations.

Except for the agonizing awareness of total defeat.

Like a falling man, Mallory reached out for contact—for any point of reference with which to relate himself.

He sensed a hint of texture, an impression of structure like the grain in wood. Pressure counter to

the grain met total resistance. He tried to reorient himself, reach out parallel to the laminar polarity of the enveloping inhibitory field.

E BROKE out into a roaring cacyphony of sight/smell/sound/touch/—a blended kaleidoscope of multi-ordinal sense impressions that sleeted at him like interlaced blizzards of color, pitch, texture, stench.

He could perceive a great, pulsing glow that spread from zenith to nadir, aswarm with clustered, hurrying points of vivid white and other lesser but more variegated brilliances that stirred sluggishly, more distant from the nucleus of the array.

In the flow and churn of pure energy below/beside/around him he perceived an evolving pattern of interlocking complexity building inexorably toward completion and consummation. Like a driver on a multilaned freeway, he assessed the shifting, jockeying flow of intermingling forces which maintained the developing but ever-balanced equation.

He sensed the vast energies flowing, saw how they drew on the supportive structure provided by the lesser mind-fields of the ancillary Mone creatures—recognized the vast intellectual potential created by the linkage of lesser brains to create a superbrain of a capability that was the product, not the

sum, of the constituent parts. He scanned the lesser, dimmer individual thought-nexi which had been excluded from the compound mind, recognized them as the stunned, controlled minds of the human workers. In comparison with the concentrated brilliances of the not-men they seemed diffuse, unoriented.

Unharnessed:

In the instant the concept formed in his mind he knew what he must do.

X

MALLORY visualized his physical body lying dead—or dying—on the feeding-cell floor. It required a major effort to reorient his thinking to the limited dimensions of a physical brain in an organic body, to trace back along the tenuous linkage that bound him to the inert flesh, to shape himself again to conform to a matter-energy shell. He knew an instant of pressure, of constriction...

Pain burned in him as if he had plunged into a ladle of molten metal. His lungs heaved. His heart gave a convulsive leap. His hands felt thick and numb. His limbs were cast in lead. His vision was cloudy and blurred. Normal sensation seeped back into his tortured body slowly.

After half a minute's breathing—deep, gasping breaths as though he had run a mile at top speed—he was able to roll over and sit up. His wristwatch told him that he had been unconscious for just over three minutes.

Strang sprawled on the floor six feet away, awash in the greenish slime that still oozed from the duct. Mallory touched his mindonly a faint, diffuse glow indicated a lingering residual vitality in Strang's individual cells. He channeled energy to Strang's egocenter. After a moment he sensed a weak response. He persevered, felt the mind quicken under his touch. At once he expanded the mind/mind interface, creating a point-by-point correspondence that linked his mental field with Strang's. There was no need now for verbalization. In the moment of contact, the Strang mind absorbed in instantaneous gestalt the status-dynamic Mallory presented. As swiftly and completely as a fluid shapes itself to a container, Strang's mind and Mallory's interpenetrated, locked into mutual balance, became one.

Mallory was simultaneously aware, on multiple levels, of a multitude of forms and relationships and entropic flows that wove a network encompassing the timespace locus in which he existed; of a precise set of matter energy interlocks that was the Mone; of his

own impingement on the greater pattern; of the potential implicit in the unorganized play of random energies which flickered peripherally to the central reality-matrix. In immediate, instinctive response he extended his newly augmented sensitivity to the next adjacent human mind-field, probed through the inhibiting control layers to the inner ego-core.

Awareness of a woman's self-picture flooded into his mind—all the memories and complexities of a full human existence were comprehended in a single polyordinal gestalt. For a fractional instant he sensed her amazement at the strange touch invading her identity, the beginning of a flash of atavistic fear; then he had shunted aside her feeble ego-assertion reflex, added the computational and conceptualizing circuitry of her mind to the Mallory/Strang duality.

Again the level of illumination rose. New vistas of ever-expanding, ever-convoluting mind-structure slid into focus. With new sureness, the compound mind touched half a dozen more brains in swift succession, adding their powers to the growing complex. The seventh mind broke like a bubble—its colors faded, dissipated, were gone. The Mallory overmind reached farther. Two more minds were added. The tenth resisted violently, fighting like a

drowning man against submergence—impatiently, the newborn thought-creature that had been Mallory overrode the fragile defenses, engulfed the central thought-node.

He paused, assessing his new self-awareness, sensing the expansion of his capabilities to encompass the hundred-fold increase in computer capacity. For the first time now he was able to integrate the entirety of the Mone mind structure and his own relationship thereto. The shock of what he saw rocked him to the basic suture of the initial Strang/Mallory union.

My God—I'm like a chip in a millrace compared with that . . .

The thought flashed and was dismissed in the immediacy of his reaction. He launched himself outward on all fronts, sweeping in numbed human minds, spilling out the resident egos as rudely as a starving man shelling oysters, erecting a defensive mind-structure with frantic haste. He felt only a remote pang—a ghostly echo of a forgotten emotion—as he recognized the identities of his last acquisitions: Gill—Randy—Marla.

His outward sweep complete, he paused, consolidating his position. The Mone mind-array seemed to have shrunk somewhat. It no longer loomed like a planet—but it was a mountain to his boulder. He saw the truncated force-lines that had been sheared

by his sudden action, recognized the developing Mone reactionpattern, computed the force and direction of the counter-stroke, reoriented himself, marshaling his defensive capabilities.

His Universe burst in an explosion of white fire.

SPACE/TIME reformed itself around Mallory. The flow of mighty energies roared past and through him like an explosion without end. Out of the chaos he abstracted those qualities from which he was capable of formulating a conceptualization.

And he was face to face with strangeness beyond his ability to comprehend.

The mind/face of the Mone.

In a single glimpse that scanned back down the endless avenue of time he saw the dim beginnings of this incredible being; the long, slow evolution of form and structure, the advent of neural responsiveness, the birth of mind, its growth and flowering into a mighty fountain of intellect. He observed as the Mone, achieving direct mental control of the mechanics of genetics and heredity, formed itself for expansion, launched itself on the ages-long campaign of destruction-absorption of competing intellectual species which ended in its sole and undisputed possession of its home galaxy. He was witness as the great intelligence pruned itself, perfecting the purity of its cerebral function, trimming away the extraneous physical bodies which housed the multitudinous facets of its communal personality. The time came when the Mone—a race implicit in a single, integrated galaxy-spanning thought-complex-found itself faced with entropic death. Having mastered its environment too perfectly, it faced sensory deprivation of a degree commensurate with its frustrated abilities. Unless new challenges, new spectra of experience could be found, it was doomed to wither, lose coherence, wink out of existence.

The Mone integrated the data, arrived at an inescapable conclusion. In order to retain even an attenuated continuity of awareness, it would have to divest itself of its total victory. It must resume the trappings of physical life, reenter the lists of life-death competition.

But it was the sole surviving life in its galaxy, all other forms having been either annihilated or absorbed along the evolutionary paths. The neighboring galaxies must serve as the arena for the next evolutionary advance of the Mone.

Stimulated to a new outpouring of creativity comparable with the vast accomplishments of its youth, the Mone created an infinitely flexible modus operandi. It selected suitable inert minerals,

shaped them into vessels capable of the long voyage; stocked them with thought-absorbent material of complex structure on which were impressed the cerebral patterns basic to the Mone identity and launched its intellectual offspring in a vast seeding that radiated at light-speed from the home galaxy.

And in that instant it comprehended a basic truth of the Universe: having spawned, it must die. The primordial intelligence that had become the Mone knew for one infinitesimal—and eternal—increment of time the basic axiom of existence: That which once was is eternal; that which is to be has always been.

Then it existed no more.

But deep in intergalactic space, each individual repository of the Mone-pattern knew and recognized the extinction of the ancestor-mind and drew from this knowledge a new awareness of the depth of its commitment to the continuity of the parent-concept.

Space is vast. One by one the original spore-pods, each receding from all its fellows at a noncomputable velocity—the sum of light-speed plus light-speed—passed out of the awareness-range of the others. Alone in immensity, each fractional simulacrum of the original, faced for the first time with the fact of solitude, reoriented it-

self—and reached the identical conclusion:

Each was the sole, lone repository of the galaxy-devouring force that was the Mone life-concept. On each devolved the ultimate responsibility for survival of that-which-must-not-die.

Eons of utter solitude ensued. Mallory was present when at last a star swam close, its gravitational field reaching across dwindling space to awaken the response-pattern of the pod. He followed it, with it participated in the planetary approach, using, by encoded instinct, the versatile organomechanisms designed and created for this moment. He experienced the entry into atmosphere, the gathering of data, extrapolation, reaction: the selection of a precise landing point—a vacant lot in the inner suburban area of the city of Beatrice.

NOW, ensconced on a world inconceivably distant from that which gave it birth, the Mone identity proceeded with that-which-must-be-done. The football-sized pod, buried beneath a heap of brick rubble, released the precautionary poisons designed to rid the planet of possible competitive life-forms—forms capable of physically competing with the embryonic Worker-forms when they first crawled forth to grow to swift adulthood.

Within seventy-two hours the wave of death had passed around the globe, vectored not only by natural atmospheric forces but carried by the swift craft on which would-be escapees had fled, carrying their fates with them. Doomed airliners had crashed as their crews succumbed to the killingmould. But the deadly spores survived the impacts, were spread again, renewed from each new center of infection.

For a week, the local life had survived, fighting back blindly with all the weapons at its command. The killing agent had been identified, a counteracting substance devised, emergency programs put in effect for mass production of the antitoxin.

The last organized resistance had been the release of a counterphage which spread total destruction over a ten-mile-wide patch of scorched earth surrounding the research station at Point Charlotte, Virginia. Two hours later the Mone had reoccupied the area.

Within the inner circle at Beatrice twelve hundred and fifty-one brain-stunned natives had been imprinted with the necessary data to enable them to provide the requisite additional labor for the preparation for the secondary seeding; in a band around the city approximately fifteen miles in width, some hundreds of native

survivors existed, free. A sensebarrier was erected to bar them from the next area and the work forward.

Supervised by the pseudohuman constructs created for the purpose—designed to mimic the native workers in order to create the minimal adjustment-gap—the impressed workers first erected the tower which housed the birthchannel through which the tailored seed of the Mone would be ejected at supersonic speed to enter the jet stream and spread over the world. Then they had been reprogramed to process the specific nutrient molecules required by the growing spore-body-and at last, in the final phase, to assemble the final genetic increments that would determine the prespawning inprinting which the myriad offspring would be endowed to best fit them for their task—the construction of the sites from which a new wave of spore-pods would go forth to infect the galaxy.

The maturation of the seed had proceeded smoothly. The precomputed statistical determinations had been satisfied. Imprinting was almost complete; the moment of release approached, when the voracious instinct-appetite would be sated at last. And in this penultimate moment, a curious phenomenon had blossomed on the Mone existence-horizon.

For long billionths of a second the great Mone mind had failed utterly to comprehend what was taking place. And then, with a blinding insight that rocked its cosmic image to the core, it had understood.

It was not alone.

For the first time in all the inconceivable eons since its inception the Mone had encountered an intelligence co-equal and external to itself. The impact of that realization coursed through all of its vast data-collecting and collating capacity like a storm, upsetting the basic theorems of its existence. For an immeasurable instant the great mind teetered on the edge of dissolution:

And in that moment Mallory struck.

LIKE an overstressed dam that collapses when a single vital pebble crumbles from its base, the immense complexity that was the Mone overbrain began to disintegrate. The far-flung sensory and manipulative fabric split, broke apart, withering back on its sources. The inner network of regulatory and sustaining fieldcircuitry, bereft of input, went into oscillation, disassociated itself into its primitive components and self-destructed. The ego-core, stripped of all sensation and power, closed in on itself, encysted, winked out of existence.

In a silence that seemed to reach to the end of infinity the Mallory mind-construct hovered, straining outward, sensing the nearby star-crackle, the remoter hiss of the neighbor-galaxies, the pervasive tone of the over-galaxy.

He/it withdrew from the brink of mind-shattering emptiness, shaken and awed. In haste he/it irised in on the source-point shrinking back and down, compressing, dwindling, fleeing. . .

Pressure, pain, the return of

physical sensation.

Mallory sat up, rose unsteadily to his feet.

Strang groaned and stirred, Mallory squatted beside him.

"Wake up," he said, hearing his own voice as an echo from a time and place more remote than the farthest star. "Wake up, Strang. We've won."

MALLORY and Strang found IVI the exit passage from the inner chamber, made their way out into the workroom and a scene of pandemonium. Over four hundred men and women, released abruptly from the tight mental control that had held them for over three months, with no memories of the lost days, had reacted in their individual ways. Some sat mute and numb. Some had made frantically for the nearest exit. A few had become hysterical. Othhad attacked the not-men ers

who wandered, mindless, among them, had torn them into bloodless fragments.

Mallory searched through the crowd, failed to find Gill or the children.

"Maybe they've gone home," Strang suggested.

They left the tower, ignored by the gaunt, ragged, mad-eved crowd now streaming away across the barren courtyard, staring incredulously back at the tower that had apparently sprung miraculously from the ground overnight. In the street Mallory heard the first screams of those who were beginning at last to understand the full scope of the disaster that had befallen them. A man in the remnants of a gray business suit stood as if stunned before the gutted ruin that had been his newly expanded department store. A woman sat on the front steps of a house, sobbing, holding a mouldy doll in her hands. A hollow-faced teenaged boy walked unsteadily down the middle of the street talking to himself.

Gil! was lying face down on the sidewalk leading to the front steps of the house. Mallory turned her over gently. She was barely breathing.

"We'd better get her inside," Strang said.

His voice seemed to Mallory to come from far away.

"Yes."

Mallory lifted her, carried her up the steps into the gloom of the curtained living room, along the passage to a bedroom. Strang checked her pulse.

"Not good," he said. "Damn it, we need a doctor, Mallory."

"Everet," Mallory said. "Get him."

He jabbed at the man's mind, implanted the information that Everet's house was three doors away. Strang was staggered by the impact of the invasion of his brain. He looked at Mallory with an expression of amazement tinged with fear.

"What—" he started.

Get him.

Mallory turned back to Gill, probed delicately at her mind, found it closed and shuttered against him. He stood by the window and stared unseeing at the street.

He was distantly aware of Strang's movements. He observed Strang's encounter with the doctor, monitored the conversation:

Doctor—a woman—Mrs. Mallory. She's in a coma, pulse weak, respiration way down; cool to the touch. I think she's dying.

Later, sir. As soon as I can. There's a young fellow—badly cut up. Fell into glass. Bleeding like a stuck pig. And John Bates—broken leg, I think, and probably internal damage.

It's just a few doors down, doctor. Can you—

As soon as I can. A boy's dying.

Mallory thrust through, implanted a command. Everet broke off in mid-sentence, turned, started toward the Mallory house. Half a minute later he entered the room. He glanced at Mallory, went to Gill's side, examined her quickly.

"She's in a bad way," he said.

His voice was ragged.

"Restore her to health," Mallory said flatly. "She's needed."

"Of course I'll do what I can." For a few minutes, Everet worked swiftly, preparing and administering two injections. He listened to the woman's heartbeat, shook his head solemnly.

"I won't lie to you, Mallory," he said. "I'm afraid we're going to lose her. There's no response. She's sinking."

Mallory stood at the bedside. He touched Gill's mind, noting the feebleness of the glow. He reached deep into her brain, found the fading spark that was her life.

She stirred faintly in response. He sensed her recognition of him. Gill—you mustn't die...

I tried, Jeff. For your sake and the children's—I tried to go on. But the weight was too much. I had to let go. . .

Live. . .

"Mallory—are you all right?"

Strang's voice rasped at him.

He struck the interruption aside, clinging to the fading contact with the diminishing mindglow.

You have to live. . .

He sensed her silent cry of pain, her recoil from the power of the mental blow.

No...no more...you're not ...Jeff...Jeff is gone...all gone...nothing left...

And then there was no response from the gray vacancy like cold ashes that occupied the point where the last spark of Gill's life had winked and died.

STRANG and Everet stared at him as he turned, pushed past them. Two small, white-faced people met him in the hall. A long moment passed before he recognized them as Randy and Marla.

"Your mother is dead," he said tonelessly and went past them and out into the street.

He walked but was unaware of walking. The sun sank. Twilight fell. Here and there the glow of firelight shone through windows. The power had failed at last. A cold wind blew along the dark street. He came to an open field. Moonlight shone whitely on dead grasses, a leafless tree. Stars glared down impersonally from the deep black sky. Without warning, a wave of desolation swept down like a tidal comber

and smashed the breath from his lungs.

"Alone," he groaned. "Oh, God, so alone."

He felt he was drowning in a bleakness more terrifying than the prospect of death. He fell to his knees, impaled on torment like a worm impaled on a thorn.

A soft voice said, "Jeff—please."

Sally kneeled beside him, put her hands on him, held him to her. He pushed her away.

"Jeff—I only meant—"

You think I'm weeping for Gill? His thoughts raged, unspoken, unspeakable. You're wrong. It's not that at all. It's not humanity I weep for—or anything human...

"Jeff-you look so strange-"

You don't know, you could never understand. No human on earth ever could understand. For one moment—for one tiny instant—I held the Universe in my hands and looked across that vastness of space and time and beheld another mind that was my equal. And what did I do? Did I meet it, join it on that level beyond human comprehension? No. It lowered its defenses to me—and I killed it. It's not Mankind I'm mourning. It's the Mone.

Out of darkness, a shaft of light, dazzlingly pure, lanced to the center of Mallory's consciousness.

Man, I still live, the voiceless voice of the Mone said. Now may we speak together?

IT WAS a conversation held without words in a timeless place of pure thought.

I did not know, Man. This does not excuse my crime—nor bring back that which is lost. Yet I would make amends...

Mallory strove to penetrate the word-screen, achieve again the one-to-one rapport that he had known in the moment that he had confronted the Mone's naked mind. He found the barrier impenetrable.

No, Man—you are not yet ready to exercise the full powers inherent in your destiny, the Mone admonished him. I blundered when I failed correctly to assess the mental capacity of your race on my first approach—and again, when I too-quickly opened myself to you. There are powers here which would rend this planet to dust if not controlled.

Angered, Mallory strove harder—and found himself gently seized, held.

Man—you are a young species, inexperienced, still closely linked to material flesh. In your hour of crisis you showed qualities that will one day make you great. But you have much to learn, a long apprenticeship to serve before you evolve so far along the trail as to

know the true function of mind, the true glory of thought.

Mallory would have protested but the Mone went on.

Your world has been cruelly depopulated of your kind by my heedless act but the remaining genetic pool is large enough to restore your numbers in a few short millennia. I will provide an adequate number of life-artifactslike those you destroyed in your frenzy but of functional formto assist you during your period of rebuilding. Your cities are in the main intact—an empty but fruitful planet awaits you. And perhaps in your rebirth you will escape the errors that marred your first rise, as I glimpsed them when our minds met. And as the years of your primal age pass I will watch over you, guard you from dangers without and within, until I have expiated the evil I unwittingly did you. Then I will pass on my way. Perhaps some day-ten million years from now -we will meet again as friends and equals among the galaxies.

Wait!

Mallory hurled the plea with all the force of his compound mind. But before the echo of the thought had died he had forgotten it. For a moment longer, as his briefly held powers slipped away, he clung to the lingering sense of something sublime, glimpsed once and never seen again.

Then that vision, too, was gone. And he was only a man, crouched against the earth that had brought him forth.

HE WEPT for Gill and put flowers on her grave. March came with clear skies. The strange. faceless beings who had emerged from the tower-curiously, no one feared them or recoiled from their appearance— toiled day and night to restore and rebuild, to farm the abandoned acreage outside the city, to operate the power generating plant, the water system, to staff the hospital. Vines grew up around the tower and wild flowers sprouted along the wall that crumbling rapidly was and six hundred The citizens of Earth learned live again, to pick up the fragments of old relationships, to begin the long process of building new ones.

On the first day of April Jeff Mallory and Sally were married in a ceremony attended by the entire population of the world. They held carnival for a day—then they picked up their tools and returned to the task of forging the future of Man.

THE NEW THING (Continued from page 85)

found his and kissed it. Raising her head again, not letting go his old thin fingers, she said, "And—do we not even know your name? I just realized—the machine said not that you are Alexander—only that you wish to be known as Alexander!"

"This, too, has been done before," the old man said. "There was once a knot so complicated no one could untie it. A man called Alexander rose up, cut it with a sword. To loose the bonds we heedlessly used to hobble the human race—it seems I, too, must be crude. It is not something I

would wish my own name to be remembered for. My second Record."

He smiled and gave her hand a final squeeze.

"Go, then, my friends—and remember. Always do the best you can."

WHEN they looked back from the door of the great hall, he was sitting calmly with his staff in his hand. And when the hour was up there were no staff or Registry or Alexander—only a little hot dust drifting on the light of the stars.

SUBSCRIBE NOW TO THE NEW

IF

The Magazine of Alternatives

THE MAN WHO WOULD NOT (Continued from page 113)

"You are willing to risk so much?"

"All."

"You will not change your mind?"

"I will not."

"So I see."

"Thank you for your offer. It was enticing—but I must regret-fully decline. I think you can find the way out."

The man in the book-cluttered room sat quietly in his chair for

a long time after his visitor had left. Then he rose, walked to a desk in the corner, took paper from it and a pen and began to write.

In the street outside, the visitor looked toward the house he had just left and then toward the dark hills where the evening star now had set and Orion was sinking. He stood there for a long time before he faded like an afterimage and was gone.

HUE AND CRY

(Continued from page 2)

the Editor's seat, I should hope that the magazines' quality will improve in a like fashion.

But there are two pieces in the latest IF which get my goat. The first is, unfortunately, your editorial. I don't begrudge Dr. Menzel's conceptions if he means them only as jokes—but if he actually believes in them, I shudder to think of the names of the farside craters. Mare Elron? Oceanus Flatearthers? Shaver Crater?

(Incidentally, Dr. Robert S. Richardson of Griffith Observatory has proposed that a farside crater be named after the late Uncle Willy Ley. He seems to think that the best location for Crater Ley would be near Craters Tsiolkovsky and Jules Verne.)

And speaking of Tsiolkovsky—it was with great dissatisfaction that I muddled through Dr. Tsvetikov's article. Tsiolkovsky was a great rocket pioneer but you must remember that he owed a great deal of his philosophy to the Revolution. I am not condemning you for publishing Communist philosophy. It's always interesting to see what people of other political viewpoints are doing, say I.

Now, Tsiolkovsky as a science fiction writer is vastly different from Tsiolkovsky as a rocket man. Isaac Asimov, who came to the U.S. from Russia at the age of three, a great science fiction writer in his own right who has read, with interest, some Soviet Science Fiction (he has contributed introductions to two anthologies of SSF), has pointed out that Soviet sf is severely limited when it comes to sociological science fiction,

by the very nature of the USSR government. GALAXY was edited by Horace Gold and was originally intended to be a gathering of fresh sociological sf ideas—it still is, I guess, though most science fiction seems to be somewhat sociological these days.

For another thing, I cannot either understand or agree with the "Razve mozhmo somnyevat 'sya'' theses. In them, Tsiolkovsky begins with a deceptively simple statement (though it is a statement which. I am told, is some news to most Russians), and then proceeds into an entire series of non sequiturs which seem to me to reflect Tsiolkovsky's own inferiority complex, combined with the wishful thinking of the Soviet state that "Communism is the best form of government." Tsiolkovsky has used, apparently, the same odd Soviet logic here that enabled Ivan Yefremov to call Murray Leinster a man with the heart of a serpent.

But still, as I said, it is always nice to know what the Communists are thinking. This same odd Soviet logic that I mentioned above may perhaps be the reason why Richard Nixon's signature now rests upon the Moon, instead of perhaps Podgorny's, Brezhnev's and Kosygin's.

I notice from the bar of black on your front cover that IF has skipped another issue. It is sad to see a magazine skip two issues in one year, because IF hasn't missed one since September, 1964. But then, ASTOUNDING skipped several issues in the early 1930's—before it was finally resurrected by Street and Smith.

And GALAXY has missed an issue, too. Maybe two issues—I haven't seen any GALAXIES around since

the August one, and the Sunset Distributors, hell take them, have a favorite sport of delaying science fiction magazines to Greater Los Angeles. GALAXY hasn't missed an issue since December, 1955. And I certainly hope that the new format won't cause it to go back on bimonthly format. Heavens! It went monthly only recently!

Now, a few suggestions: I congratulate you for giving IF a book column and hope that you will give GALAXY a long-needed letter column. Simply because Horace Gold polled the readers back in 1951 and decided not to include one is no reason why there cannot be one now.

Maybe you could start a sort of story-review feature rated by the Readers, where we Humble People could make our preferences and desires known to the Editor. This isn't an original idea, but the person who first used it uses it to this day, so it must be a successful idea.

Also, please bring back the SF CALENDAR.

Now, about authors: it would be nice if you could round up the following authors in the next year or so: Isaac Asimov, Robert A. Heinlein. and Arthur C. Clarke. They are obviously the Big Three Science Fiction Writers In The World, and not much of their writing has appeared in recent months. And, of course, fiction by such other greats as del Rey, Anthony. Anderson. Simak. Laumer. Herbert, Brunner, Budrys, Clement, Ellison, Dickson, Garrett (hey! I'm runnin' outa space!). Leiber, Mc-Caffrey, Leinster, Niven, Panshin, Pohl, Tenn, van Vogt, Williamson,

Zelazny and so many others whose names I momentarily forget. Sure, you can print stuff by such trite and unexperienced hacks as Tepper, but just as long as you've got the good writers—

In closing, I would like to reiterate my fond wishes that GALAXY and IF will continue to be Two Great Magazines. In the more recent days, Pohl catered too much to "the mothers of some of the readers," and all too often had an artist do a cover, and then commissioned a writer to write a story to fit the cover. I hope that this last practice will be abolished completely-after all, the cover of a magazine is intended to be an artist's image of something originally described in words-not just any wildlooking thing that the artist conjures up out of nowhere, and to which the poor writer must confine his work.

But I have to stop somewhere, and it might as well be here.

Good luck!

M. B. Tepper Santa Monica, Calif.

And luck to you, M.B. You and I will get along—you're one of the people an editor works for. When you write for IF/GALAXY don't write for me—dig it out of yourself and pitch to the readers. You know them.

Dear Mr. Jakobsson:

After subscribing to GALAXY for more than ten years, I feel as though I have been HAD. You raved about the new Dune story by Frank Herbert. I used tremendous restraint and did not start the story in July. Then no August issue, not even one on the newsstands.

I have written once and received no answer of any sort. All I really want is a copy of part II of Dune Messiah. Is that really too much to request?

Keep up the quality of GALAXY and I will still love you despite the mixup in August.

Harriette Schapiro San Diego, California

An August GALAXY is coming your way-and my love, too. You're my kind and so is the next guy. Why don't you two say hello?

Dear Mr. Jakobsson:

You have the most miserable subscription service of any sf magazine. Perhaps if you told us in the current issue when the next issue will be out you could relieve yourself of some very annoying letters.

Mark Lee Orange, Conn. P.S.: An IF subscriber and proud of

And I'm proud of you. Subscription has been notified.

Dear Editor:

it!

The two worst mistakes you made since your advent as editor of GAL-AXY and IF were very bad ones. Reducing GALAXY to 160 pages was the worst. I'd rather have 194 GAL-AXY pages than the return of WORLDS OF TOMORROW. Or perhaps you could take thirty pages from IF and add them to GALAXY. You see, we were all very proud of having the largest magazine around and we've just got to get it back.

Taking the illustrations away was the next one. They really added a lot to the story—especially with artists like Morrow and Reese (the only things I liked about the Spork stories were the illustrations).

In reply to Anne Mc Caffrey's letter (September issue): why did you take Gaughan's poetic illustration from Hue & Cry? You said you would keep the features. And what happened to Authorgraphs and SF Calendar (I didn't care for IF-and When)?

In closing—how about lining up a Zelazny serial? A fine writer. Does he have a book out that didn't win an award?

> Craig Grant Saskatchewan, Canada

You wrote some time ago. How do you like our looks now? Despite the fewer pages you're getting as much reading matter as ever. Type size does it. The reason for the 160 pages in both IF and GALAXY is a purely mechanical one-to hit our schedules now that we're underway we have to be processed together at the bindery.

WORLDS OF TOMORROW will have an entirely new look and will steal no stories from IF/GALAXYor pages for that matter. The Calendar is back and Authorgraphs will appear when authors have something to say they can't express in their stories.

The new Hue and Cry heading was designed by Brian Gaughan, Jack Gaughan's young son. Jack feels, and I agree, that it too has poetrythe poetry of reality and tomorrow.

Dear Editor:

You seem to be keeping GALAXY and IF as good (if not better-I was impressed with the last few and coming editions) as it was before. As my contribution to this—I would like to suggest that you keep publishing the authors that you have been, especially Robert Silverberg and Larry Niven. And get some stories by Zelazny, Harlan Ellison and some long work by Samuel Delany. He is the world's best sfauthor.)

What will the new WORLDS OF TOMORROW be like? GALAXY and IF are far better than any other magazine in the field. I hope adding another won't force you to print worse stories.

Will you publish all the Hugo and Nebula winners to date and the guests of honor at the conventions? And for your 20th-anniversary issue, how about getting stories from the main New Wave authors?

I have just finished reading Starchild by Frederik Pohl and Jack Williamson and I was quite surprised to find two of Larry Niven's main themes, the body banks and currant addiction, in the book. Is it actually Fred Pohl who thought of these and suggested them to Niven?

Good luck in the coming year—and keep Hue and Cry.

Jon Raz Berkeley, California

Ideas, like seeds, travel on the wind—and no two writers handle them alike. Usually there's no connection—several authors may hit on similar themes independently.

Dear Mr. Jakobsson:

As a reader of GALAXY since 1952, I would like to make a few comments on the GALAXY magazines, as to what I would like to see retained

and what I would not like to see any more.

First of all, please maintain the listing of sf conventions, etc. in IF. This is invaluable and takes up very little space. Secondly, the Authorgraphs and Galaxy's Stars are interesting, at least to someone who's been reading sf long enough to wonder whether or not SF writers are really human. I enjoy them immensly.

I hesitate to say keep Algis Budrys as book reviewer—there have been many issues of GALAXY when his review was the best thing in it. But I do miss his fiction. (I think that's a left-handed compliment to Budrys.)

There have been many complaints about GALAXY's art and the paper used for printing. Personally, I like it as is

I would like to see a lot less serials. I seem to be alone in this, too. And, for God's sake, no more of those damn science nonfact articles.

Finally, I hope you will continue the yearly contest that Fred Pohl initiated last year. And please include me in the next mailing of ballots.

Grant Carrington
North Haven, Conn.

Okay.

Dear Mr. Jakobsson:

I found the IF first writer, Jack L. Alston, to be a fine and promising beginner. Though he was a little sketchy on technicalities (such as how the hell did he get off that sun?), Alston seemed very original in his details—a captivating imagination.

Please print him in the future. Joseph Zabel Youngstown, O.

SPECIAL TO GALAXY & IF READERS... THE BEST IN

SCIENCE FICTION BOOKS...

worth adding to your library...stories you will treasure... available to you at a special 10% discount

Conveniently obtained from GALAXY Magazine. No searching, no book clubs, no commitments. Here are the books of enduring value that you will want to own...for hours of science-fiction pleasure, to be read, reread, and discussed with your friends. These are the books that have proven themselves...filled with all of the features you look for in S-F...written by the acknowledged masters of the art. Just circle your choices below, mail to us, and the books will be in your hands shortly, ready to transport you to new, thrilling, imaginative worlds.



FREE-with every order for 2 or more books...

AWARD SCIENCE FICTION READER. 188 pages, containing stories by such masters of science fiction as Arthur C. Clarke, Theodore Sturgeon, A. E. van Vogt, Clifford Simak, Poul Anderson, Leigh Brackett, John W. Campbell, Jr. All of the stories belong to the excitingly modern era that swept SF to its greatest pinnacle of popularity.

8-1

NONE BUT MAN by Gordon R. Dickson. Aliens from Moldaug, inhuman stars from the last human settlement, are gathering together for war. Old world inhabitants are willing to sacrifice the new world colonies in order to avert this war. But not rugged individualist Cully When, the type of man who has pioneered frontiers in all times and all places. Set in some future time, this action-filled adventure depicts space-age guerrilla warfare and age-old human stupidity with excitement and ends with an explosive climax.

253 pp. List Price...\$4.95 Discount Price...\$4.46

8-2

A CASE OF CONSCIENCE by James Blish. Two separate and complete worlds—idyllic Lithia and a culture on Earth that has literally gone under ground, provides the basis for the story of four extraordinary men. There is the priest, dedicated to the glory of God; the scientist working for the glory of man; the realist who works only for himself; and the man who is content to ask nothing of any world, any man, or any deity. The author presents a compelling moral problem. This book is something of a tour de force.

188 pp. List Price...\$4.50 Discount Price...\$4.05

8-3

BUG JACK BARRON by Norman Spinrad. Explore the edge of tomorrow...who will be chosen for immortality? Who will make this ultimate decision—the government, free enterprise, or private monopoly? A new, highly controversial novel, infused with blood and guts, examining the disease of power as well as the responsibility. Both praised and damned before it was even published, this novel deserves your personal attention.

327 pp. List Price...\$5.95 Discoufit Price...\$5.36

8-4

UBIK by Philip K. Dick. If Joe Chip was alive why was he riding in a 1939 Willys-Knight? If he was dead why wasn't he beginning a chilly half-life in the year 1992? And Gene Runciter—murdered—but sending him eerie messages from beyond the grave? Everywhere and anywhere Joe turned, in sky-writing, on a traffic ticket, graffiti, matchbook covers was the word UBIK. But what did it mean and did Joe really want to know the answer? Read this exciting, new novel that starts as an important Luna Mission and ends as a living or dying diabolical nightmare.

202 pp. List Price...\$4.50 Discount Price...\$4.05

6-5

THE MIDWICH CUCKOOS by John Wyndham. For an entire day, a small rural village in England loses contact with the outside world. Soon after, all the women, married or not become pregnant, eventually giving birth to remarkable golden-eyed children who exhibit a strange kind of sinisterism. They are dangerous and Midwich must make the ultimate decision—if the children survive, then mankind must join the dinosaur among Nature's discards. A gripping account of man's fight for survival.

189 pp. List Price...\$4.50 Discount Price...\$4.05

S-9

8-8

THE PAST THROUGH TOMORROW, Robert A. Heinlein's Future History Stories. Twenty-five years ago Robert A. Heinlein began to write stories about an imaginary future that is fast becoming a reality. Discover, through the pen of the master of space-age fiction, about man's first step on the moon; weather control; manufacture of synthetic food; interstellar exploration. Now, for the first time, in chronological order, are Heinlein's 21 compelling stories—all depicting a glimpse of a possible tomorrow.

BEST SF: 1968 edited by Harry Harrison and Brian

W. Aldiss. Collected for the first time . . . the best

SF stories of 1968... Asimov, Sheckley, MacDonald, Leiber...plus 10 other exciting stories... and

selected reviews explaining THE SF picture of the

245 pp. List Price...\$4.95 Discount Price...\$4.46

eyear, 2001: A Space Odyssey. This rich anthology of the year's most exciting stories from the best SF magazines in the world is a MUST for your SF bookshelf.

667 pp. List Price...\$6.95 Discount Price...\$6.26

8-6

THE SPACE MERCHANTS by Frederik Pohl and C. M. Kornbluth. Two major advertising agencies are fighting for the Venus account—nothing less than total control of the Venus economy and markets will do. It is completely unimportant that Venus is a harsh, barren, uninhabited planet. According to the mentality of Mitchell Courtenay of Fowler Schocken Associates, the trick is to persuade colonists to go to Venus, and once there, they will have to survive as best they can. One of the most savage and devastating attacks on modern consumer society and the advertising agents who are its high priests, The Space Merchants is uncomfortably prophetic.

158 pp. List Price...\$4.50 Discount Price...\$4.05

S-7

BRAIN WAVE by Poul Anderson. Imagine, some mysterious space force that inhibits the world's intelligence. But suddenly, it's gone and overnight the intellect of every living creature is trebled. What are the consequences of such instant genius? These are the problems confronting Archie Brock, former near moron; Peter Corinth, physicist; and his no-longer dumb wife. This provocative and absorbing book explores the ultimate problem of such a situation—in a world free of the difficulties that has plagued mankind throughout history, what is man to do with his time?

164 pp. List Price...\$4.50 Discount Price...\$4.05

S-10

THORNS by Robert Silverberg. Duncan Chalk, master pain peddler, skillful and sophisticated, lives in a time when reading tragic headlines no longer provides the necessary sensations. Into Chalk's sinister hands falls Lona Kelvin, orphaned, mother of 100 children, yet without a soul; and Minner Burris, starman, whose butchered body was put together by aliens, a walking horror. What fun to mate these two and watch them wallow in their mutual torment. But somewhere, something went wrong. Discover what happens when the puppets begin to pull their own strings in this imaginative, chilling book.

222 pp. List Price...\$4.95 Discount Price...\$4.46

THE GALAXY BOOK SERVICE

P.O. Box 3977, Grand Central Post Office, New York, N.Y. 10017

Please send me the books

Please print full name & address

I have circled.

S-1 S-2 S-3 S-4 S-5

Name

S-6 S-7 S-8 S-9 S-10

Address

City

State

Zip Code

Sorry, No C.O.D.'s. (Please add 25¢ for postage and handling, N.Y.C. residents please add 6% sales tax. N.Y. State residents please add 5% sales tax.)

10-day satisfaction...or your money back. FREE copy of AWARD SCIENCE FICTION READER with all orders for 2 or more books.

4 SPACE-AGE THRILLERS

THE PSEUDO PEOPLE

Edited by William F. Nolan

An exciting collection of stories about androids—mechanical men and women so realistic and life-like that they defy detection. Includes thrilling stories by Ray Bradbury, Richard Matheson, Charles Beaumont and other sci-fi greats. \$4.95

ENCOUNTERS WITH ALIENS

Compiled and Edited by George W. Earley with an Introduction by Ivan T. Sanderson

Now available, the first hardcover book ever to contain the best of UFO fiction—stories about UFO's, the alien minds who invented them, the alien beings who ride in them, and what happens when they confront Earthlings! Sample Contents include: FEAR IS A BUSINESS, Theodore Sturgeon; MINISTER WITHOUT PORTFOLIO, Mildred Clingerman; THE VENUS PAPERS, Richard Wilson; SOMETHING IN THE SKY, Lee Correy, and 8 others by top-notch sci-fi writers.

256 pages—\$4.95

THE FORTEC CONSPIRACY

A Space-Age Thriller by Richard M. Garvin & Edmond G. Addeo

FORTEC! It stands for FOREIGN TECHNOLOGY, and in the heavily-armed building where its secret is hidden lies a UFO revelation that could rip the world apart! In this tense suspense-thriller, you'll meet the man who guards this secret with his life, his brother who dares to probe the grisly trail of conspiracy that shrouds FORTEC, the air force general who has orders to kill anyone who discovers what is going on in FORTEC—including his own commanding officer!

\$4.95

THE TALBOTT AGREEMENT

A Science-Fiction Suspense Thriller by Richard Garvin & Edmond E. Addeo

When Communist China develops a weapon capable of destroying objects in the air—operated entirely by parapsychology, the existence of the world hangs in the balance! Immediately the US rushes into action in a desperate attempt to stave off the holocaust. Involved are secret operations performed on operatives of both sides; new developments in ESP techniques; spy schools and death-defying action. An action adventure story you won't be able to leave until the last page!

SAVE! ORDER ALL 4 BOOKS FOR ONLY \$17!

Send Cash, Check, M.O. to: SHERBOURNE PRESS, Dept. 337 2 Park Ave., Manhasset, N.Y. 11030

(Sorry, no COD's)
Calif. Res. Add 5% Sales Tax • Include Your Zip Code Number

The first human born on Mars was a "grok" specialist!

THAT was the greatest weapon in Valentine Michael Smith's arsenal . . . a secret that made him irresistible to women but a bitterly hated enemy to the establishment. And all he wanted to do was reform an immoral, troubled world by bringing it peace and tranquility. Some reform! Some revolution! But that's

why Robert Heinlein's bestselling classic STRANGER IN A STRANGE LAND is fast becoming the number one underground novel on virtually every college campus in the country. Now take it, if you wish, as one of your 3 intro-ductory books for only \$1 with trial membership. Send no money-mail coupon today!

The Science Fiction Book Club invites you to take

Any 3 SCIENCE FICTION BOOKS

for only \$

when you join and agree to accept only four books during the coming year.

Out of This World Entertainment

ou are invited to explore the reath-taking world of Scince Fiction now, under this rial offer. Take any 3 volmes on this page worth up \$23.40 in original pubshers' editions for only 1.00 with trial membership. Each month new club selecons of fiction and fact are escribed to you in advance.

Though these volumes sell for \$3.95, \$4.95 or more inoriginal publishers' editions, club members pay only \$1.49 plus shipping and handling. (You may choose an extra value selection at a slightly higher price.) Your sole obligation is to accept four books during the coming year. Cancel anytime thereafter.

CIENCE FICTION BOOK CLUB ppt. 9D-FHX, Garden City, N.Y. 11530

lease accept my application for membership in the Science iction Book Club and rush the 3 books whose numbers I ave printed below. Bill me only \$1.00, plus shipping and andling, for all 3. Then every month, send me the Club's ee bulletin, "Things to Come", which describes coming lections. For each book I accept, I will pay only \$1.49, us shipping and handling. Occasional extra-value selecons are priced slightly higher. I need take only four books the coming year and may resign any time thereafter.

O-RISK GUARANTEE: If not delighted with my introactory package, I may return it in 10 days, pay nothing, we nothing, and my membership will be canceled.

int ame				
ldress		1		
ty	State		Zip	14.5

under 18, parent must sign here. (Offer good in U.S.A. only)

22-\$80|



Robert A. Heinlein

622. The Founda-tion Trilogy, by Isaac Asimov. The ends of the galaxy

Odyssey by Arthur Clarke. 5 men and computer trigger cosmic "booby trap". Pub. ed. \$4.95

623. 2001: A Space

639. Omnivore. Piers Anthony. By what trick did the 3 scientists escape Nacre when 18 others failed?

624. 7 Conquests. Poul Anderson. 7 wars in the future wars in the future ... nuclear ... in-terplanetary. Can Earth survive? Pub. ed. \$4.95

626. The Lion of Comarre & Against the Fall of Night. Long out of print! works by author of 2001. Pub. 605. Nova, by Sam-uel R. Delaney. Battle between alien worlds - and a desperate race to the sun. Pub. ed. \$4.95

644. October the First is Too Late, by Fred Hoyle. Solar beams play

havoc with time on earth. Pub. ed. \$3.95

629. The Illustrated Man.Ray Bradbury. 19 stories. "Intensely real." N. Y. Times. Now a hit movie! Pub. ed. \$4.50

Isaac Asimov.
Long out of print.
"An enticing thriller."-N. Y. Times.
Pub. ed. \$3.50

600. A Treasury of Great Science Fic-tion. 2-volume set. 1,000 pages. Counts as one book. Pub. ed. \$5.95

618. Dangerous Visions. Anthology of 33 original stories never before in print by Sturgeon, Anderson, others. Pub. ed. \$6.95

630. Ublk. Philip K. Dick. Joe Chip was a man from was a man from 1992 – so why was he in 1939? And how could his dead friend talk? Pub. ed. \$4.50









