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WORLDS of SCIENCE FICTION
JANUARY 1955
35 CENTS

EARTH QUARTER

by Damon Knight

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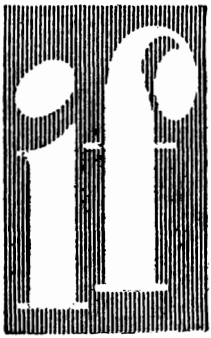

WORLDS of SCIENCE FICTION

JANUARY 1955

All Stories New and Complete

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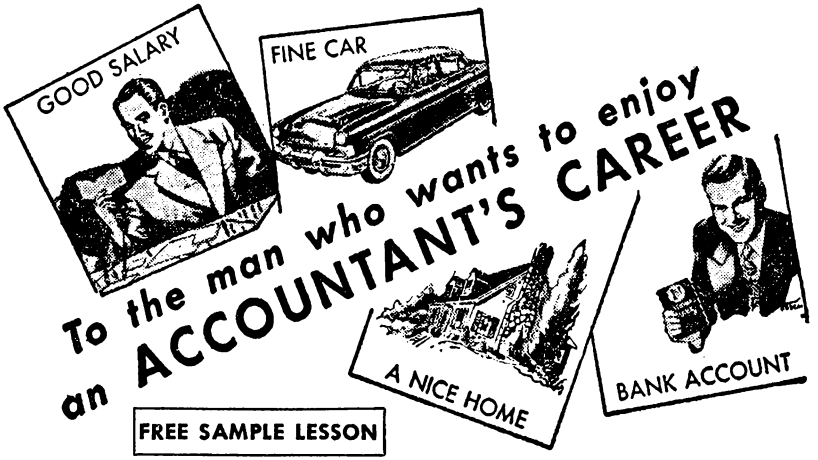

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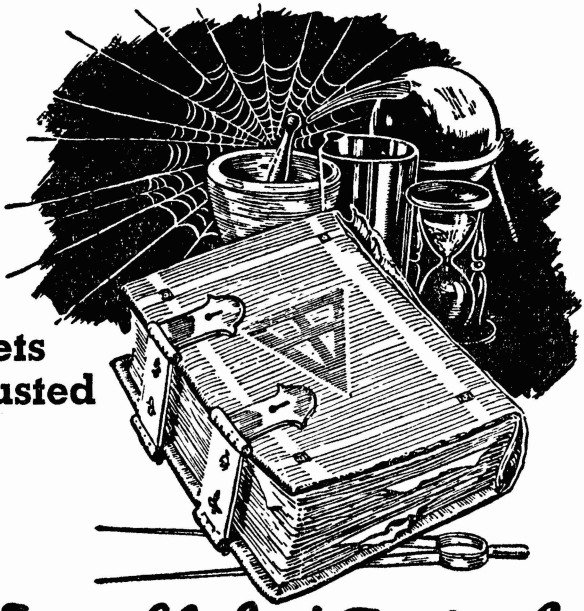

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A CHAT WITH THE EDITOR

NOBODY SEEMS to know what constitutes the ultimate in government or in a civilization. If it is Utopia—which is a dream or it wouldn't be called Utopia—in which direction is the logical approach? Better, let's say in which direction does the best "experimental approach" lie? For there is no logical approach to a dream, as logic goes.

One of the "experimental" avenues is suggested by some of the science fiction stories which come into this office . . . and that is selective breeding. Some of these are rather convincing: If selective breeding with cattle or chickens or race horses or pigs or vegetables or something is so successful, why can't it be so with human beings?

Right off the bat, selective breeding of human beings, as a predication for producing *mentally* superior people, is impossible. And even if it wasn't impossible, it wouldn't make a nation or a civilization. Biologically speaking, when you select a special male and a special female for breeding purposes, there isn't one chance in a billion that you are going to get offspring *exactly* like either one, or a combination of the two. Physical characteristics might well be similar, but getting one hundred per cent duplication of talent, aptitude or personality is as remote as that of planets in different galaxies colliding. There are 48 chromosomes which determine the characteristics of the offspring, 24 contributed by the male, 24 by the female, and each chromosome contains 100 genes. These 4800 genes are mixed up like balls in a huge lottery drum. Now take your pick, as you would a hand of bridge—and see how many different combinations there are! Only a few trillion.

Come to think of it, race horses are selectively bred and they have the brains of a mouse . . . and the champion does not always sire champions.

Anyway, genius and brains are not hereditary. Some of the best brains have been known to produce morons. Besides, fine minds and genius are rather delicate mechanisms; they break faster and more easily, unable to stand the stress and strain. Nor does the mating of low mentality necessarily produce low mentality. Some of the finest minds in history have sprung from mediocre parentage. Mating mathematicians or engineers or doctors doesn't mean you're going to get a doctor or an engineer or a mathematician anymore than if you mated a deep sea diver and a female lion tamer.

When selectivity has been tried

on social lines—and the practise of royalty is a prime example—inbreeding is the most outstanding result, with some rather startling and undesirable traits becoming dominant. Consider for a moment the deranged monarchs who have at one time or another ruled almost every nation in Europe or Asia. It was the new blood of the lusty "lower class" women who bore illegitimate heirs to the various thrones which was often responsible for rejuvenating the royal lineage when it tottered on the brink of idiocy.

But for argument's sake, assume that selective breeding would work and you could produce that particular talent which the state of the nation seemed to require. Would that pump the right kind of blood into the national veins? Hardly. It takes more than selective breeding alone. There is a matter of environmental control, and of education of the selectivity bred, which would have to be a rigidly controlled routine to breed out individual enterprise, in order that such control could be maintained. Yet, the prime characteristic of the talented individual or the genius is individuality. Becomes rather a vicious circle, doesn't it?

The United States, which is just about the only first rate power left in the world today, grew to such stature in the shortest time that a nation has ever attained world supremacy—because it was anything but selectively bred. It was built by scholars, dreamers, business men, crusaders, soldiers of fortune, gamblers, whores, murderers and thieves. It was built by men with some of the best brains in the world and men with some of the worst brains in the world. And there wasn't an American in the bunch, not at first; they were Greeks, Germans, Irish, French, English, Italians, Dutch, Japanese, Chinese, Spaniards and every other nationality in the world.

The real reason this crazy pattern of humanity molded itself into a nation was that it had an incentive, and the chance to be rugged individualists if they so desired. Admittedly each man or woman had his own incentive. Personal gain, power, freedom from religious or economic restrictions, freedom from national domination, . . . and the golden opportunity to search for, and find it in a fresh new world. They built and lived according to their lights. And gave others the right and opportunity to do the same. They murdered the Indians and were murdered in return; they killed and robbed each other; fortunes and great industries changed hands in a card game or exploded from the muzzle of a gun.

Human nature may not always be good, but it's tough as rawhide, and death and hardship were no obstacle to this conglomeration of humanity when there was an incentive.

So if history is to be a precedent, selective breeding isn't too promising an approach to a Utopian government or state of civilization. Maybe there is one, however. Maybe it's the right incentive. Maybe that incentive is the free right of every human being to search for his or her own idea of Utopia—the pursuit of a dream that could some day result in the realization of at least a near-ideal. —jlq


EMSH

Illustrated by Ed Emsh

THE EARTH QUARTER

BY DAMON KNIGHT

The Niroi permitted refugees from Earth to live in their cramped little ghetto conditionally: that they do so peacefully. But there will always be patriotic fanatics, like Harkway and Rack, who must disturb the peace...

THE SUN had set half an hour before. Now, from the window of Laszlo Cudyk's garret, he could see how the alien city shone frost-blue against the black sky; the tall hive-shapes that no man would have built, glowing with their own light.

Nearer, the slender drunken shafts of lamp posts marched toward him down the street, each with its prosaic yellow globe. Between them and all around, the darkness had gathered; darkness in angular shapes, the geometry of squalor.

Cudyk liked this view, for at night the blackness of the Earth Quarter seemed to merge with the black sky, as if one were a minor extension of the other—a fist of space held down to the surface of the planet. He could feel, then, that he was not alone, not isolated and forgotten; that some connection still existed across all the light-years of the galaxy between him and what he had lost.

And, again, the view depressed him; for at night the City seemed to press in upon the Quarter like the walls of a prison. The Quarter:

sixteen square blocks, about the size of those of an Earth city, two thousand three hundred human beings of three races, four religions, eighteen nationalities; the only remnant of the human race nearer than Capella.

Cudyk felt the night breeze freshening. He glanced upward once at the frosty blaze of stars, then pulled his head back inside the window. He closed the shutters, turning to the lamp-lit table with its hopeless clutter of books, pipes and dusty miscellany.

Cudyk was a man of middle height, heavy in the shoulders and chest, blunt-featured, with a shock of greying black hair. He was fifty-five years old; he remembered Earth.

A drunk stumbled by in the street below, cursing monotonously to himself, paused to spit explosively into the gutter, and faded into the night.

Cudyk heard him without attention. He stood with his back to the window, looking at nothing, his square fingers fumbling automatically for pipe and tobacco. Why do I torture myself with that look out the window every night? he asked himself. It's a juvenile sentimentalism.

But he knew he would go on doing it.

Other noises drifted up to his window, faint with distance. They grew louder. Cudyk cocked his head suddenly, turned and threw open the shutters again. That had been a scream.

He could see nothing down the street; the trouble must be farther over, he thought, on Kwang-Chow-fu or Washington. The noise swelled as he listened: the unintelligible wailing of a mob.

Footsteps clicked hurriedly up the stairs. Cudyk went to the door, made sure it was latched, and waited. There was a light tapping on the door.

"Who is it?" he said.

"Lee Far."

He unlatched the door and opened it. The little Chinese blinked at him, his upper lip drawn up over incisors like a rodent's. "Mr. Seu say please, you come." Without waiting for an answer, he turned and rapped his way down into darkness.

Cudyk picked up a jacket from a wall hook, and paused for a moment to glance at the locked drawer in which he kept an ancient .32 automatic and two full clips. He shook his head impatiently and went out.

Lee was waiting for him downstairs. When he saw Cudyk open the outer door, he set off down the street at a dog-trot.

Cudyk caught up with him at the corner of Athenai and Brasil. They turned right for two blocks to Washington, then left again. A block away, at Rossiya and Washington, there was a small crowd of men struggling in the middle of the street. They didn't seem to be very active; as Cudyk and Lee approached, they saw that only a few were still fighting, and those without a great deal of spirit. The rest were moving aimlessly, some wiping their eyes, others bent almost double in paroxysms of sneezing. A few were motionless on the pavement.

Three slender Chinese were moving through the crowd. Each had a

white surgeon's mask tied over his nose and mouth, and carried a plastic bag full of some dark substance, from which he took handfuls and flung them with a motion like a sower's. Cudyk could see now that the air around them was heavy with floating particles. As he watched, the last two fighters in the crowd each took a halfhearted swing at the other and then, coughing and sneezing, moved away in separate directions.

Lee took his sleeve for a moment. "Here, Mr. Cudyk."

Seu was standing in the doorway of Town Hall, his round-bellied bulk almost filling it. He saluted Cudyk with a lazy, humorous gesture of one fat hand.

"Hello, Min," Cudyk said. "You're efficient, as always. Pepper again?"

"Yes," said Mayor Seu Min. "I hate to waste it, but I don't think the water buckets would have been enough this time. This could have been a bad one."

"How did it start?"

"A couple of Russkies caught Jim Loong sneaking into Madame May's," the fat man said laconically. His shrewd eyes twinkled. "I'm glad you came down, Laszlo. I want you to meet an important visitor who arrived on the Kt-I'ith ship this afternoon." He turned slightly, and Cudyk saw that there was a man behind him in the doorway. "Mr. Harkway, may I present Mr. Laszlo Cudyk, one of our leading citizens? Mr. Cudyk, James Harkway, who is here on a mission from the Minority People's League."

Cudyk shook hands with the man, who had a pale, scholarly face, not bad-looking, with dark intense eyes. He was young, about thirty. Cudyk automatically classified him as second generation.

"Perhaps," said Seu, as if the notion had just occurred to him, "you would not mind taking over my duties as host for a short time, Laszlo? If Mr. Harkway would not object? This regrettable occurrence—"

"Of course," Cudyk said. Harkway nodded and smiled.

"Excellent." Seu edged past Cudyk, then turned and put a hand on his friend's arm, drawing him closer. "Take care of this fool," he said under his breath, "and for God's sake keep him away from the saloons. Rack is in town, too. I've got to make sure they don't meet." He smiled cheerfully at both of them and walked away. Lee Far, appearing from somewhere, trailed after him.

A young Chinese, with blood streaming brightly from a gash in his cheek, was stumbling past. Cudyk stepped away from the doorway, turned him around and pointed him down the street, to where Seu's young men were laying out the victims on the sidewalk and administering first aid.

Cudyk went back to Harkway. "I suppose Seu has found you a place to stay," he said.

"Yes," said Harkway. "He's putting me up in his home. Perhaps I'd better go there now—I don't want to be in the way."

"You won't be in the way," Cudyk told him. "What would you like to do?"

"Well, I'd like to meet a few people, if it isn't too late. Perhaps we could have a drink somewhere,

where people meet—?" He glanced interrogatively down the street to an illuminated sign that announced in English and Russian: "THE LITTLE BEAR. Wines and Liquors."

"Not there," said Cudyk. "That's Russky headquarters, and I'm afraid they may be a little short-tempered right now. The best place would be Chong Yin's tea room, I think. That's just two blocks up, near Washington and Československo."

"All right," said Harkway. He was still looking down the street. "Who is that girl?" he asked abruptly.

Cudyk glanced that way. The two M. D.'s, Moskowitz and Estrada, were on the scene, sorting out the most serious cases to be carted off to hospital, and so was a slender, dark-haired girl in nurse's uniform.

"That's Kathy Burgess," he said. "I'd introduce you, but now isn't the time. You'll probably meet her tomorrow."

"She's very pretty," said Harkway, and suffered himself to be led off up the street. "Married?"

"No. She was engaged to one of our young men, but her father broke it off."

"Oh?" said Harkway. After a moment: "Political differences?"

"Yes. The young man joined the activists. The father is a conservative."

"That's very interesting," said Harkway. After a moment he asked, "Do you have many of those here?"

"Activists or conservatives? Or pretty girls?"

"I meant conservatives," said Harkway, coloring slightly. "I know the activist movement is strong here —that's why I was sent. We consider them dangerous in the extreme."

"So do I," said Cudyk. "No, there aren't many conservatives. Burgess is the only real fanatic. If you meet him, by the way, you must make certain allowances."

Harkway nodded thoughtfully. "Cracked on the subject?"

"You could put it that way," Cudyk told him. "He has convinced himself, in his conscious mind at least, that we are the dominant species on this planet; that the Niori are our social and economic inferiors. He won't tolerate any suggestion that it isn't so."

Harkway nodded again, looking very solemn. "A tragedy," he said. "But understandable, of course. Some of the older people simply can't adjust to the reality of our position in the galaxy."

"Not many people actually like it," said Cudyk.

Harkway looked at him thoughtfully. He said, "Mr. Cudyk, I don't want you to take this as a complaint, but I've gathered the impression that you're not in sympathy with the Minority People's League."

"No," said Cudyk.

"May I ask what your political viewpoint is?"

"I'm neutral," said Cudyk. "Apolitical."

Harkway said politely, "I hope you won't take offense if I ask why? It's evident, even to me, that you're a man of intelligence and ability."

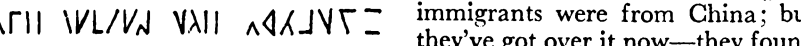
Everything is evident to you, Cudyk thought wearily, except what you don't want to see. He said, "I don't believe our particular Humpty Dumpty can be put back to-

gether again, Mr. Harkway."

Harkway looked at him intently, but said nothing. He glanced at the signboard over the lighted windows they were approaching. "Is this the place?"

"Yes."

Harkway continued to look at the sign. Above the English "CHONG YIN'S TEA ROOM", and the Chinese characters, was a legend that read:



"That's a curious alphabet," he said.

"It's a very efficient one," Cudyk told him. "It's based on the design of an X in a rectangle—like this." He traced it with his finger on the wall. "Counting each arm of the cross as one stroke, there are eight strokes in the figure. Using only two strokes to a letter, there are twenty-eight possible combinations. They use the sixteen most graceful ones, and add twenty-seven three-stroke letters to bring it up to forty-three, one for each sound in their language. The written language is completely phonetic, therefore. But there are only eight keys on a Niori typewriter."

He looked at Harkway. "It's also perfectly legible: no letter looks too much like any other letter. And it has a certain beauty, don't you think?" He paused. "Hasn't it struck you, Mr. Harkway, that anything our hosts do is likely to be a little more sensible and more sensitive than the human equivalent?"

"I come from Reg Otay," said Harkway. "They don't have any visual arts or any written language there. But I see what you mean. What does the sign say—the same thing as the English?"

"No. It says, 'Yungiwo Ren Trakru Rith.' 'Trakru rith' is Niori for 'hospitality house'—it's what they call anything that we would call tea room, or restaurant, or beer garden."

"And 'Yungiwo Ren'?"

"That's their version of 'Chung kuo jen'*—the Chinese for 'Chinese.' At first they called us all that, because most of the original immigrants were from China; but they've got over it now—they found out some of us didn't like it."

Cudyk opened the door.

A few aliens were sitting at the round tables in the big outer room. Cudyk watched Harkway's face, and saw his eyes widen with shock. the Niori were something to see, the first time.

They were tall and erect, and their anatomy was not even remotely like man's. They had six limbs each, two for walking, four for manipulation. Their bodies were covered by a pale, horny integument which grew in irregular sections, so that you could tell the age of a Niori by the width of the growth-areas between the plates of his armor. But you saw none of those things at first. You saw the two glowing violet eyes, set wide apart in a helmet-shaped head, and the startlingly beautiful markings on the smooth shell of the face—blue on pale cream, like an ancient porcelain tile. And you saw the crest—a curved, lucent shape that even in a lighted room glowed with its own frost-blue. No Niori ever walked in darkness.

**Pronounced "jung guo ren".*

Cudyk guided Harkway toward the door at the far end of the room. "We'll see who's in the back room," he said. "There is usually a small gathering at this hour."

The inner room was more brightly lit than the other. Down the center, in front of a row of empty booths, was a long table. Three men sat at one end of it, with teacups and a bowl of lichee nuts between them. They looked up as Cudyk and Harkway came in.

"Gentlemen," said Cudyk, "may I present Mr. Harkway, who is here on a mission from the Minority People's League? Mr. Burgess, Father Exarkos, Mr. Ferguson."

The three shook hands with Harkway, Father Exarkos smiling pleasantly, the other two with more guarded expressions. The priest was in his fifties, grey-haired, hollow-templed, with high orbital ridges and a square, mobile mouth. He said, in English oddly accented by a mixture of French and Greek, "Please sit down, both of you. . . I understand that your first evening here has been not too pleasant, Mr. Harkway. I hope the rest of your stay will be more so."

Burgess snorted, not quite loudly enough to be deliberately rude. His face had a pleasant, even a handsome cast except for the expression of petulance he was now wearing. He was a few years younger than the priest: a big-boned, big-featured man whose slightly curved back and hollowed cheeks showed that he had lost bulk since his prime.

Ferguson's pale face was expressive but completely controlled. The gambler's eyes were narrow and unreadable, the lips and the long muscles of the jaw showing nothing more than surface emotion. He asked politely, "Planning to stay long, Mr. Harkway?"

"That all depends, Mr. Ferguson, on—to be blunt, on what sort of a reception I get. I won't try to conceal from you the fact that my role here is that of a political propagandist. I want to convince as many people as I can that the Minority People's movement is the best hope of the human race. If I can find that there's some chance of succeeding, I'll stay as long as necessary. If not—"

"I'm afraid we won't be seeing much of you, in that case, Mr. Harkway," said Burgess. His tone was scrupulously correct, but his nostrils were quivering with repressed indignation.

"What makes you say that, Mr. Burgess?" Harkway asked, turning his intent, serious gaze on the older man.

"Your program, as I understand it," said Burgess, "aims at putting humanity on an equal basis with various assorted races of lizards, beetles and other vermin. I don't think you will find much sympathy for that program here, sir."

"I'm glad to say that, through no fault of your own, you're mistaken," said Harkway, smiling slightly. "I think you're referring to the program of the right wing of the League, which was dominant for the last several years. It's true that for that period, the M.P.L.'s line was to work for the gradual integration of human beings—and other repressed races—into the society of the planets on which they live. But that's all done with now. The left wing, to which I belong,

has won a decisive victory at the League elections.

"Our program," Harkway continued earnestly, "rejects the doctrine of assimilation as a biological and cultural absurdity. What we propose to do, and with sufficient help will do, is to return humanity to its homeland—to reconstitute Earth as an autonomous, civilized member of the galactic entity. We realize, of course, that this is a gigantic undertaking, and that much aid will be required from the other races of the galaxy. . . Were you about to say something, Mr. Burgess?"

Burgess said bitterly, "What you mean, in plain words, Mr. Harkway, is that you think we all ought to go home—dissolve Earth's galactic empire—give it all back to the natives. I don't think you'll find much support for *that,* either."

Harkway bit his lip, and cast a glance at Cudyk that seemed to say, You warned me, but I forgot. He turned to Ferguson, who was smiling around his cigar as blandly as if nothing out of the way had been said. "What is your view, Mr. Ferguson?"

Ferguson waved his cigar amiably. "You'll have to count me out, Mr. Harkway. I'm doing okay as things are—I have no reason to want any changes."

Harkway turned to the little priest. "And you, Father Exarkos?"

The Greek shrugged and smiled. "I wish you all the luck in the universe, sincerely," he said. "But I am afraid I believe that no material methods can rescue man from his dilemma."

"If I've given any offense," said Burgess suddenly, "I can leave."

Harkway stared at him for a moment, gears almost visibly slipping in his head. Then he said, "Of course not, Mr. Burgess, please don't think that for a moment. I respect your views—"

Burgess looked around him with a wounded expression. "I know," he said with difficulty, "that I am in a minority—here—"

Father Exarkos put a hand on his arm and murmured something. Harkway leaned forward impulsively across the table and said, "Mr. Burgess, I've traveled a long way in the hope of discussing these problems with men of intelligence and standing in their community, like yourself. I hope you'll stay and give me the benefit of your experience. I shall be very much the loser if you don't."

Burgess was visibly struggling with his emotions. He stood up and said, "No—no—not tonight. I'm upset. Please excuse me." Head bowed, he walked out of the room.

There was a short silence. "Did I do the wrong thing?" asked Harkway.

"No, no," said Father Exarkos. "It was not your fault—there was nothing you could do. You must excuse him. He is a good man, but he has suffered too much. Since his wife died—of a disease contracted during one of the Famines, you understand—he has not been himself."

Harkway nodded, looking both older and more human than he had a moment before. "If we can only turn back the clock," he said. "Put Humpty Dumpty together again, as you expressed it, Mr. Cudyk." He smiled apologetically at them. "I won't harangue you any more to-

night—I'll save that for the meeting tomorrow. But I hope that some of you will come to see it my way."

Father Exarkos' eyebrows lifted. "You are planning to hold a public meeting tomorrow?"

"Yes. There's some difficulty about space—Mayor Seu tells me that the town hall is already booked for the next three days—but I'm confident that I can find some suitable place. If necessary, I'll make it an open-air meeting."

Rack, thought Cudyk. Rack usually stays in town for only two or three days at a time. Seu is trying to keep Harkway under cover until he leaves. It won't work.

Out of the corner of his eye he saw a dark shape in the doorway, and his first thought was that Burgess had come back. But it was not Burgess. It was a squat, bandy-legged man with huge shoulders and arms, wearing a leather jacket and a limp military cap. Cudyk sat perfectly still, warning Exarkos with his eyes.

The squat man walked casually up the table, nodding almost imperceptibly to Ferguson. He ignored the others, except the M.P.L. man. "Your name Harkway?" he asked. He pronounced it with the flat Boston "a": "Haakway".

"That's right," said Harkway.

"Got a message for you," said the squat man. "From Captain Lawrence Rack, United Uth Space Navy."

"The Earth Space Navy was dissolved twenty years ago," said Harkway.

The squat man sighed. "You wanna heah the message or don't you?" he asked.

"Go ahead," said Harkway. His nostrils were pale, and a muscle stood out at the side of his jaw.

"Heah it is. You're plannin' to hold a meetin' of the vehmin lovehs society, right?"

As Harkway began to reply, the squat man leaned across the table and backhanded him across the mouth, knocking him sideways out of his chair.

"Don't," said the squat man. He turned and strolled out.

Cudyk and Ferguson helped Harkway up. The man's eyes were staring wildly out of his pale face, and a thin trickle of blood was running from a pulped lip. "Who was that man?" he asked in a whisper.

"His name is Monk," said Cudyk. "At least that is the only name he has been known to answer to. He is one of Rack's lieutenants—Rack, as you probably know, is the leader of the activists in this sector. Mr. Harkway, I'm sorry this happened. But I advise you to wait for a week or so before you hold your meeting. There is no question of courage involved. It would be suicide."

Harkway looked at him blindly. "The meeting will be held as planned," he said, and walked out, stiff-legged.

Ferguson shook his head, laughed, and shook his head again. Cudyk exchanged a hopeless glance with Father Exarkos, and then followed Harkway out of the room.

THE SHOP was empty except for young Nick Pappageorge, dozing behind the long counter, and the pale morning sunlight that streamed through the plastic window. Most of the counter was in

shadow, but stray fingers of light picked out gem trays here and there, turning them into minuscule galaxies of frosty brilliance.

Two Niori, walking arm in arm, paused in front of the window display, then went on. Two human youngsters raced by, shouting. Cudyk caught only a glimpse of them through the pierced screen that closed off the back of his shop, but he recognized them by their voices: Red Gorciak and Stan Eleftheris.

There were few children now, and they were growing up wild. Cudyk wondered briefly what it must be like to be a child born into this microcosm, knowing no other. He dismissed the thought; it was simply one more thing about which there was no use to worry.

Cudyk had not spoken to anyone that morning, but he knew approximately what was happening. Seu would have been busy most of the night, covering up the traces of last evening's riot. Now, probably, he was explaining it away to Zydh Oran, the Niori Outgroup Commissioner. Harkway was making preparations for his meeting—another thing for Seu to worry about when he got through cleaning up the last mess.

Barring miracles, today was going to be very bad.

Seu came in, moving quickly. He walked directly to the rear of the shop. His normally bland face looked worried, and there were beads of sweat on his wide forehead, although the morning was cool.

"Sit down," said Cudyk. "You've seen Zydh Oran?"

Seu made a dismissing gesture. "Nothing. Not pleasant, but nothing. The same as usual—he tells me what happened, I deny it. He knows, but under their laws he can't do anything."

"Someday it will be bad," said Cudyk.

"Yes. Someday. Laszlo—you've got to do something about Harkway. Otherwise he's going to be killed tonight, and there will be a stink from here to Sirius. I had to tell him he could use Town Hall—he was all ready to hold a torchlight meeting in the streets."

"I tried," said Cudyk.

"Try again. Please. Your ethnic background is closer to his than mine. He respects you, I think. Perhaps he's even read some of your books. If anyone can persuade him, you can."

"What did he say when you talked to him?"

"An ox. A brain made of soap and granite. He says it is a matter of principle. I knew then that I could do nothing. When an Anglo-Saxon talks about his principles, you may as well go home. He won't accept a weapon, he won't postpone the meeting. I think he wants to be a martyr."

Cudyk frowned. "Maybe he does. Have you seen Rack?"

"No. Ferguson pretends not to know where he is."

"That's rather odd. What is his motive, do you think?"

Seu said, "Basically, he is afraid of Rack. He cooperates with him—they use each other—but you know that it's not a marriage of minds. He knows that Rack is stronger than he is, because he is only an amoral egotist, and Rack is a fanatic. I think he believes this business

may be Rack's downfall, and he would like that."

He stood up. "I have to go. Will you do it?"

"Yes."

"Good. Let me know." Seu walked out, as hastily as he had entered.

Nick Pappageorge had roused himself and was polishing a tall, fluted silver vase. Cudyk said, "Nick, go and find out where Mr. Harkway is. If he isn't busy, ask him if he'll do me the favor of dropping around to see me. Otherwise, just come back and tell me where he is; I'll go to him."

Nick said, "Sure, Mr. Cudyk," and went out.

Cudyk stared at the tray of unsorted gems on the desk before him. He stirred them with his forefinger, separating out an emerald, two aquamarines, a large turquoise and a star sapphire. That was all he had had to begin with—his dead wife's jewels, carried half across Europe when a loaf of bread was worth more than all the gem stones in the world. The sapphire had bought his passage on the alien ship; the others had been his original stock-in-trade, first at the refugee center on Alfhal, then here on Palumbar. Now he was a prosperous importer, with a business that netted him the equivalent of ten thousand pounds a year.

But the wealth was ashes; he would have traded all of it for one loaf of bread, eaten in peace, on an Earth that had not sunk back to barbarism.

Momentum, he told himself. Momentum, and a remnant of curiosity. Those are the only reasons I can think of why I do not blow out my brains. I wonder what keeps the others from it? Seu? Chong Yin? I don't know. Burgess has his fantasy, though it cracks now and then. Ferguson has the sensibility of a jackal. Rack, as Seu said, is a fanatic. But why do the rest of them keep on? For what?

The doorway darkened again as Harkway came in, followed by Nick. Nick gestured toward the rear of the shop, and Harkway advanced, smiling. His lower lip was stained by a purple substance with a glossy surface.

Cudyk greeted him and offered him a chair. "It was good of you to come over," he said. "I hope I didn't interrupt your work."

Harkway grinned stiffly. "No. I was just finishing lunch when your boy found me. I have nothing more to do until this evening."

Cudyk looked at him. "You got to the hospital after all, I see."

"Yes. Dr. Moskowitz fixed me up nicely."

Cudyk had been asking himself why the M.P.L. man looked so cheerful. Now he thought he understood.

"And Miss Burgess?" he asked.

"Yes," said Harkway, looking embarrassed. He paused. "She's—an exquisite person, Mr. Cudyk."

Cudyk clasped his square hands together, elbows on the arms of his chair. He said, "Forgive me, I'm going to be personal. Am I right in saying that you now feel more than casually interested in Miss Burgess?"

He added, "Please. I have a reason for asking."

Harkway's expression was guarded. "Yes; that's true."

"Do you think she may feel similarly towards you?"

Harkway paused. "I think so. I hope so. Why, Mr. Cudyk?"

"Mr. Harkway, I will be very blunt. Miss Burgess has already lost one lover through no fault of her own, and the experience has not been good for her. She is, as you say, exquisite—she has a beautiful, but not a strong personality. Do you think it is fair for you to give her another such experience, even if the attachment is not fully formed, by allowing yourself to be killed this evening?"

Harkway leaned back in his chair. "Oh," he said, "that's it." He grinned. "I thought you were going to point out that her father broke off the last affair because of the man's politics. If you had, I was going to tell you that Mr. Burgess looked me up this morning and apologized for his attitude yesterday, and breaking down and so on. He's very decent, you know. We're getting along very well."

He paused. "About this other matter," he said seriously, "I'm grateful for your interest, but—I'm afraid I can't concede the validity of your argument." He made an impatient gesture. "I'm not trying to sound noble, but this business is more important than my personal life. That's all, I'm afraid. I'm sorry."

Another fanatic, Cudyk thought. A liberal fanatic. I have seen all kinds, now. He said, "I have one more argument to try. Has Seu explained to you how precarious our position is here on Palumbar?"

"He spoke of it."

"The Niori accepted this one small colony with grave misgivings. Every act of violence that occurs here weakens our position, because it furnishes ammunition for a group which already wants to expel us. Do you understand?"

There was pain in Harkway's eyes. "Mr. Cudyk, it's the same all over the galaxy, wherever these pitifully tiny outgroups exist. My group is trying to attack that problem on a galaxy-wide scale. I don't say we'll succeed, and I grant you the right to doubt that our program is the right one. But we've got to try. Among other things, we've got to clean out the activists, for just the reason you mention. And—pardon me for stressing the obvious—but it's Captain Rack who will be responsible for this particular act of violence if it occurs, not myself."

"And you think that your death at his hands would be a stronger argument than a peaceful meeting, is that it?"

Harkway shook his head ruefully. "I don't know that I have that much courage, Mr. Cudyk. I'm hoping that nothing will happen to me. But I know that the League's prestige here would be enormously hurt if I let Rack bluff me down." He stood up. "You'll be at the meeting?"

"I'm afraid so." Cudyk stood and offered his hand. "The best of luck."

He watched the young man go, feeling very old and tired. He had known it would be this way; he had only tried for Seu's sake. Now he was involved; he had allowed himself to feel the tug of love and pity toward still another lost soul. Such bonds were destructive — they turned the heart brittle and

weathered it away, bit by bit.

The assembly hall was well filled, although Harkway had made no special effort to advertise the meeting. He had known, Cudyk thought, that Rack's threat would be more than sufficient. The youngster was not stupid.

There were no women or children. Ferguson was there, and a large contingent of his employees—gamblers, pimps, waiters and strong-arm men—as well as most of the Russian population. All but a few of the Chinese had stayed away, as had Burgess. But a number of men whom Cudyk knew to have M.P.L. leanings, and an even larger number of neutrals, were there. The audience was about evenly divided, for and against Harkway. If he somehow came through this alive, it was just possible that he could swing the Quarter his way. A futile victory; but of course Harkway did not believe that.

There was a murmur and a shuffle of feet as Rack entered with three other men—Monk, the one called Spider, and young Tom De Grasse, who had once been engaged to Kathy Burgess. The sound dropped almost to stillness for a few moments after the four men took seats at the side of the hall, then rose again to a steady rumble. Harkway and Seu had not yet appeared.

Cudyk saw the man to his right getting up, moving away; he turned in time to see Seu wedge himself through a gap in the line of chairs and sit down in the vacated place.

The fat man's face was blandly expressionless, but Cudyk knew that something had happened. "What is it?" he asked.

Seu's lips barely moved. He looked past Cudyk, inspecting the crowd with polite interest. "I had him kidnapped," he said happily. "He's tied up, in a safe place. There won't be any meeting today."

Seu had been seen. Someone a few rows ahead called, "Where's Harkway, Mayor?"

"I don't know," Seu said blandly. "He told me he would meet me here—said he had an errand to do. Probably he's on his way now."

Under cover of the ensuing murmur, he turned to Cudyk again. "I didn't want to do it," he said. "It will mean trouble, sooner or later; maybe almost as much trouble as if Harkway had been killed. But I had to make a choice. Do you think I did the right thing, Laszlo?"

"Yes," said Cudyk, "except that I wish you had told me earlier."

Seu smiled, his heavy face becoming for that instant open and confiding. "If I had, you wouldn't have been so sincere when you talked to Harkway."

Cudyk smiled in spite of himself. He relaxed in his chair, savoring the relief that had come when he'd learned that Harkway was not going to die. The tension built up, day by day, almost imperceptibly, and it was a rare, fleeting pleasure when something happened to lower it.

He saw the mayor looking at his watch. The crowd was growing restless: in a few more minutes Seu would get up and announce that the meeting was cancelled. Then it would be all over.

Seu was rising when a new wave of sound traveled over the audience. Out of the corner of his eye Cudyk saw men turning, standing up to

see over the heads of their neighbors. Seu spoke a single, sharp word, and his hand tightened on the back of his chair.

Cudyk stood. Someone was coming down the center aisle of the room, but he couldn't see who it was.

Those who had stood earlier were sitting down now. Down the aisle, looking straight ahead, with a bruised jaw and a bloody scratch running from cheekbone to chin, came James Harkway.

He mounted the platform, rested both hands on the low speaker's stand, and turned his glance across the audience, once, from side to side. There was a collective scraping of chairs and clearing of throats, then complete stillness. Harkway said:

"My friends—and enemies."

Subdued laughter rippled across the room.

"A few of my enemies didn't want me to hold this meeting," said Harkway. "Some of my friends felt the same way. In fact, it seemed that *nobody* wanted this meeting to take place. But here you all are, just the same. And here I am."

He straightened. "Why is that, I wonder? Perhaps because regardless of our differences, we're all in the same boat—in a lifeboat." He nodded gravely. "Yes, we're all in a lifeboat—all of us together, to live or die, and we don't know which way to turn for the nearest land that will give us harbor.

"Which way shall we turn to find a safe landing? To find peace and honor for ourselves and our children? To find safety, to find happiness?"

He spread his arms. "There are a million directions we could follow. There are all the planets in the galaxy! But everywhere we turn, we find alien soil, alien cultures, alien people. Everywhere except in one direction only.

"Our ship—our own planet, Earth—is foundering, is sinking, that's true. But *it hasn't—yet—sunk*. There's still a chance that we can turn back, make Earth what it was, and then, from there—go on! Go on, until we've made a greater Earth, a stronger, happier, more peaceful Earth—till we can take our place with pride in the galaxy, and hold up our heads with any other race that lives."

He had captured only half their attention, and he knew it. They were watching him, listening to what he said, but the heads of the audience were turned slightly, like the heads of plants under a solar tropism, toward the side of the chamber where Rack and his men sat.

Harkway said, "We all know that the Earth's technical civilization is smashed—broken like an eggshell. By ourselves, we could never put it back together. And if we do nothing, no one else is going to put it back together for us. But suppose we went to the other races in the galaxy, and said—"

A baritone voice broke in quietly, *"'We'll sell our souls to you, if you'll kindly give us a few machines!'"*

Rack stood up—tall, muscular, lean, with deep hollows under his cheekbones, red-grey hair falling over his forehead under the visor of his cap. His short leather jacket was thrown over his shoulders like

a cloak. His narrow features were grey and cold, the mouth a straight, hard line. He said, "That's what you want us to tell the vermin, isn't it, Mr. Harkway?"

Harkway seemed to settle himself like a boxer. He said clearly, "The intelligent races of the galaxy are not devils and do not want our souls, Mr. Rack."

Rack ignored the "Mr." He said, "But they'd want certain assurances from us, in return for their help, wouldn't they, Mr. Harkway?"

"Certainly," said Harkway. "Assurances that no sane man would refuse them. Assurances, for example, that there would be no repetition of the Altair Incident—when a handful of maniacs in two ships murdered thousands of peaceful galactic citizens without the slightest provocation. Perhaps you remember that, Mr. Rack; perhaps you were there."

"I was there," said Rack casually. "About five hundred thousand vermin were squashed. We would have done a better job, but we ran out of supplies. Some day we'll exterminate them all, and then there'll be a universe fit for men to live in. Meanwhile—" he glanced at the audience—"we're going to build. We're building now. Not with the vermin's permission, under the vermin's eye. In secret. On a planet they'll never find until our ships spurt out from it like milt from a fish. And when that day comes, we'll squash them down to the last tentacle and the last claw."

"Are you finished?" asked Harkway. He was quivering with controlled rage.

"Yes, I'm finished," said Rack wearily. "So are you. You're a traitor, Harkway, the most miserable kind of a crawling, dirt-eating traitor the human race ever produced. Get down off the platform."

Harkway said to the audience, "I came here to try to persuade you to my way of thinking—to ask you to consider the arguments and decide for yourselves. This man wants to settle the question by prejudice and force. Which of us is best entitled to the name 'human?' If you listen to him, can you blame the Niori if they decide to end even this tiny foothold they've given you on their planet? Would you live in a universe drenched with blood?"

Rack said quietly, "Monk."

The squat man stood up, smiling. He took a clasp knife out of his pocket, opened it, and started up the side of the room.

In the dead stillness, another voice said, "No!"

It was, Cudyk saw with shock, Tom De Grasse. The youngster was up, moving past Rack—who made no move to stop him, did not even change expression—past the squat man, turning a yard beyond, almost at the front of the room. His square, almost childish face was tight with strain. There was a pistol in one big hand.

Cudyk felt something awaken in him which blossomed only at moments like this, when one of his fellow men did something particularly puzzling: the root, slain but still quasi-living, of the thing that had once been his central drive and his trademark in the world—his insatiable, probing, warmly intelligent curiosity about the motives of men.

On the surface, this action of De Grasse's was baldly impossible. He

was committed to Rack's cause twice over, by conviction and by the shearing away of every other tie; and still more important, he worshipped Rack himself with the devotion that only fanatics can inspire. It was as if Peter had defied Christ.

The three men stood motionless for what seemed a long time. Monk, halted with his weight on one foot, faced De Grasse with his knife hand slightly extended, thumb on the blade. He was visibly tense, waiting for a word from Rack. But Rack stood as if he had forgotten time and space, staring bemused over Monk's shoulder at De Grasse. The fourth man, Spider—bones and gristle, with a corpse-growth of grey-white hair—stood up slowly. Rack put a hand on his shoulder and pressed him down again.

Cudyk thought: Kathy Burgess.

It was the only answer. De Grasse knew, of course, everything that had passed between Harkway and the girl. There was no privacy worth mentioning in the Quarter. Pressed in this narrow ghetto, every man swam in the effluvium of every other man's emotions. And De Grasse was willing, apparently, to give up everything that mattered to him, to save Kathy Burgess pain.

It said something for the breed, Cudyk thought—not enough, never enough, for you saw it only in pinpoint flashes, the noble individual who was a part of the bestial mob—but a light in the darkness, nevertheless.

Finally Rack spoke. "You, Tom?"

The youngster's eyes showed sudden pain. But he said, "I mean it, Captain."

There was a slow movement out from that side of the room, men inching away, crowding against their neighbors.

Rack was still looking past Monk's shoulder, into De Grasse's face. He said:

"All right."

He turned, still wearing the same frozen expression, and walked down the side of the room, toward the exit. Monk threw a glance of pure incredulity over his shoulder, glanced back at De Grasse, and then followed. Spider scrambled after.

De Grasse relaxed slowly, as if by conscious effort. He put away his gun, hesitated a moment, and walked slowly out after the others. His wide shoulders were slumped.

Then there was the scraping of chairs and boot-soles and a rising bee-hive hum as the audience stood up and began to move out. Harkway made no effort to call them back.

Cudyk, moving toward the exit with the rest, had much to think about. He had seen not only De Grasse's will, but Rack's, part against the knife of human sympathy. And that was a thing he had never expected to see.

"Times like this," said Ferguson, narrowing his grey snake's eyes in a smile, "I almost believe in God."

Father Exarkos smiled courteously and said nothing. He and Cudyk had been sitting in the back room of Chong Yin's since a half-hour after the meeting. Seu had been with them earlier, but had left. A little after twelve, Ferguson had strolled in and joined them.

"I mean it," said Ferguson,

laughing a little. "There was Harkway, sticking his neck out, and there was little De Grasse standing in the way. And Rack backed down." He shook his head, still smiling. "Rack backed down. Now how would you explain that, gentlemen?"

It was necessary to put up with the gambler, who wielded more power in the Quarter than anyone else, even Seu; but sometimes Cudyk found himself dropping his usual attitude of detached interest in favor of speculations about the specific variety of horrible fate which Ferguson would most probably meet.

He was particularly irritating tonight, because Cudyk was forced to agree with him. Cudyk had still not solved the riddle of Rack's failure to finish what he had started.

It was conceivable that De Grasse should have acted as he did for reasons of sentiment; but to apply the same motive to Rack was simply not possible. The man had emotions, certainly, but they were all channeled into one direction: the destiny of the human race and of Lawrence Rack. De Grasse was at an age when the strongest emotions were volatile, when conversions were made, when a man could plan an assassination one day and enter a monastery the next. But Rack was fixed and aimed, like a cannon.

Ferguson was saying, "He must be going soft. Going soft—old Rack. Unless it's the hand of God. What's your opinion, Father?"

The priest said blandly, "Mr. Ferguson, since I have come to live

upon this planet, my opinions have changed about many things. I no longer believe that either God, or man, is quite so simple as I once thought. We were too small in our thoughts, before—our understanding of temporal things was bounded by the frontiers of Earth, and of eternal things by the little sky we could see from our windows.

"Before, I think I would have tried to answer your question. I would have said that I think Captain Rack was moved by—a sudden access of human feeling—or I would have said that I think Captain Rack was touched by the finger of God. Perhaps I would have hesitated to say that, because even then I did not believe that God interferes with the small sins of men like Captain Rack. Or the small sins of anybody, for that matter."

Ferguson grinned. "Well, Father, that's the best excuse for an answer I ever heard, anyway." He dragged on his cigar, narrowing his eyes and pursing his lips, as if the cigar were a tube through which his brains were being sucked. "In other words," he said, "you don't think the big blowup back home was a judgment on us for our sins. You think it was a good thing, only more people should have got out the way we did. That right?"

"Oh, no," said Father Exarkos. "I believe that the Famines and the Collapse were a judgment of God. I have heard many theories about the causes of the Collapse, but I have not heard one which does not come back, in the end, to a condemnation of man's folly, cruelty, and blindness."

"Well," said Ferguson, "excuse me, Father, but if you believe that way, what are you doing here? Back there—" he jerked his head, as if Earth were some little distance behind his right shoulder—"people are living like animals. Chicago, where I come from, is just a stone jungle, with a few beast-like scavengers prowling around in it. If the dirt and disease don't get you, some bandit will split your head open, or you'll run into a wolf or some other hungry animal. If none of those things happen, you can expect to live to the ripe old age of forty, and then you'll be glad to die."

He had stopped smiling. Ferguson, Cudyk realized, was describing his own personal hell. He went on, "Now, if you want to call that a judgment, I won't argue with you. But if that's what you believe, why aren't you back there taking it with the rest of them?"

He really wanted to know, Cudyk thought. He had begun by trying to bait the priest, but now he was serious. It was odd to think of Ferguson having trouble with his conscience, but Cudyk was not really surprised. The most moralistic men he had ever known had been gangsters of Ferguson's type; whereas the few really good men he had known, Father Exarkos among them, had seemed as blithely unaware of their consciences as of their healthy livers.

The priest said, soberly, "Mr. Ferguson, I believe that we also are being punished. Perhaps we more than others. The Mexican peon, the Indian fellah, the peasant of China or Greece, lives very much as his father did before him; he scarcely has reason to know that judgment has fallen upon Earth. But I think that no inhabitant of the Quarter

can forget it for so much as an hour."

Ferguson stared at him, then grunted and squashed out his cigar. He stood up. "I'll be getting along home," he said. "Good night." He walked out.

Cudyk and Exarkos sat for a while longer, talking quietly, and then left together. The streets were empty. Behind them and to their left as they walked to the corner, the ghostly blue of the Niori beehives shone above the dark human buildings.

The priest lived in a small second-floor apartment near the corner of Brasil and Athenai, alone since his wife had died ten years before. Cudyk had only to go straight across Ćeskoslovensko, but he walked down toward Brasil with his friend.

Near the corner, Cudyk saw a dark form sprawled in a doorway. "One of your congregation, Astereos?" he asked.

"It is probable," said the priest resignedly. "Steve Chrisudis has been drinking heavily again this past week; also the two Moulios brothers."

He stepped over and turned the man's face up to the light.

The face was bloody and broken, the eyes sightless. It was Harkway. He had been dead long enough to grow cold.

ONE QUESTION of Harkway's kept coming back to Cudyk. "Would you live in a universe drenched with blood?"

Rack would, of course; for others there was a tragic dilemma. For them, the race had come to the end of a road that had its beginning in prehistory. Every step of progress on that way had been accomplished by bloodshed, and yet the goal had always been a world at peace. It had been possible to live with the paradox when the road still seemed endless: before the first Earth starships discovered that humanity was not alone in the universe.

Human beings were like a fragile crystalline structure, enduring until the first touch of air; or like a cyst that withers when it is cut open. The winds of the universe blew around them now, and there was no way to escape from their own nature.

The way forward was the way back; the way back was the way forward.

There was no peace except the peace of surrender and death. There was no victory except the victory of chaos.

As the priest had remarked, there were many theories about the Collapse. It was said that the economy of Earth had been wrecked by interstellar imports; it was said that the rusts and blights that had devastated Earth's fields were of alien origin; it was said that the disbanding of the Space Navy, after the Altair Incident, had broken Earth's spirit. It was said that the emigrations, both before and after the Famines, had bled away too much of the trained manpower that was Earth's life-blood.

The clear fact was that the human race was finished: dying like Neanderthal faced by Cro-Magnon; dying like the hairy Ainu among the Japanese. It was true that hundreds of millions of people lived on Earth much as they had done before, tilling their fields, digging

stones from the ground, laboring over the handicrafts which sustained the men of the Quarter in their exile.

Humanity had passed through such dark ages before.

But now there was no way to go except downward.

If the exiles in their ghettoes, on a hundred planets of the galaxy, were the lopped-off head of the race, then the ferment of theories, plans, and policies that swirled through them stood for the last fitful fantasies in the brain of a guillotined man.

And on Earth, the prelates, the robber barons, the petty princes were ganglia: performing their mechanical functions in a counterfeit of intelligence, slowing, degenerating imperceptibly until the last spark should go out.

Cudyk fingered the manuscript which lay on the desk before him. It was the last thing he had written, and it would never be finished. He had hunted it up, this morning, out of nostalgia, or perhaps through some obscure working of that impulse that made him look out at the stars each night.

There were twenty pages, the first chapter of a book that was to have been his major work. It ended with the words:

"The only avenue of escape for humanity is . . ."

He had stopped there, because he had realized suddenly that he had been deliberately deceiving himself; that there was no avenue. The scheme he had meant to propose and develop in the rest of the book had one thing in common with those he had demolished in the first pages. It would not work.

Cudyk thought of those phantom chapters now, and was grateful that he had not written them. He had meant to propose that the exiles should band together on some unpeopled planet, and rear a new generation which would be given all the knowledge of the old, save for two categories: military science and astronomy. They would never be told, never guess that the bright lights of their sky were suns, that the suns had planets and the planets people. They would grow up free of that numbing pressure; they would have a fresh start.

It had been the grossest self-deception. You cannot put the human mind in chains. Every culture had tried it, and every culture had failed . . .

He pulled open a drawer of his desk and put the manuscript into it. A folded note dropped to the floor as he did so. Cudyk picked it up and read again:

You are requested to attend a meeting which will be held at 8 Washington Avenue at 10 hours today. Matters of public policy will be discussed.

It was not signed; no signature was needed, nor any threatened alternative to complying with the "request". Cudyk glanced at his wristwatch, made on Oladi by spidery, many-limbed creatures to whom an ordinary watch movement was a gross mechanism. The dial showed the Galactic Standard numerals which corresponded to ten o'clock.

Cudyk stood up wearily and walked out past the carved screen. He said to Nick, "I'll be back in an hour or so."

Eight Washington Avenue was

The Little Bear, half a block from the corner where he had first met Harkway, a block and a half from the spot where Harkway's corpse had been left in a doorway. Two more associations, Cudyk thought. After twenty-five years, there were so many that he could not move a foot in the Quarter, glance at a window or a wall, without encountering one of them. And this was another thing to remember about a ghetto: you were crowded not only in space but in time. The living were the most transient inhabitants of the Quarter.

Cudyk stepped through the open door of The Little Bear, saw the tables empty and the floor bare. The bartender, Piljurovich, jerked his thumb toward the stairs. "You're late," he said in Russian. "Better hurry."

Cudyk climbed the stairs to the huge second-floor dining hall, where the Russians and Poles held their periodic revels. The room was packed tight with a silent mass of men. At the far end, Rack sat on a chair placed on a table. He stopped in mid-sentence, stared coldly at Cudyk, and then went on.

"—or against me. From now on, there won't be any more neutrals. I want you to understand this clearly. For one thing, your lives may depend on it."

He paused, glancing around the room. "By now you all know that James Harkway was executed last night. His crime was treason against the human race. There are some of you here who have been, or will be, guilty of the same crime. To them I have nothing more to say. To the others, those who have considered themselves neutral, I say this: First, New Earth needs all of you and has earned your allegiance. Second, those of you who remain on an enemy planet in spite of this warning will not live to regret it if that planet is selected for attack.

"You have two months to make up your minds and to close your affairs. At the end of that time, a New Earth transport will call here to take off those who decide to go. It will be the last New Earth ship, and I warn you that you had better not count on Galactic transportation after that date."

He stood up. "That's all."

The audience was over. Rack waited, standing on the table, thumbs hooked into his belt, jacket over his shoulders, like a statue of himself, while the crowd moved slowly out of the room. It was ludicrous, but you could not laugh.

Two months. For almost twenty years Rack had been a minor disturbance in the Quarter, no more important or dangerous or mad than a dozen others; appearing suddenly, at night, staying for a few days, disappearing again for a month, or two, or six. He brought stolen goods to Ferguson—furs from Drux Uta, perhaps, or jewels from Thon—and Ferguson paid him in Galactic currency, reselling the merchandise later, some on Palumbar, some on a dozen other worlds, for twenty times the price he paid. Rack had a following among the younger men of the Quarter; two or three a year joined him. Occasionally there were rumors in the Quarter of Rack's close calls with the Galactic Guard. It had never been a secret that he was building military installations

on some far-off planet. But now, for the first time, Cudyk realized that Rack was actually going to make war on the universe.

Whatever the result, the least it meant was the end of the Quarter.

The stairs were choked. Cudyk worked his way down, to find the barroom filled with little knots of men, talking in low voices. Only a few were drinking.

Someone called his name, and then a hand grasped his sleeve. It was Speros Moulios, the grey little tobacco dealer, whose two sons drank too much. "Mr. Cudyk, please, what do you think? Should we go, like he says?"

The others of the group followed him; in a moment Cudyk was surrounded. He felt helpless. "I can't advise you, Mr. Moulios," he said. "To be truthful, I don't know what I am going to do myself."

Nobilio Villaneuva, the druggist, said, "I have worked fifteen years, saved all my money. What am I going to do with it if I go to this New Earth? And what about my daughter?"

Someone came elbowing his way through the crowd. He signaled to Cudyk. "Laszlo!" It was bald, cheerful Mike Moskowitz, one of the Quarter's two doctors. He said, "Some of the fellows want to form a delegation, to go back and ask Rack some questions. They asked me to serve, but I've got to get back to the hospital. Same thing with Seu, he's got six things on his hands already. Father Exarkos isn't here. Will you take over? Good. I'll see you later."

Cudyk sighed. The men around him were watching him expectantly. He stepped over to the bar, picked up an empty glass and rapped with it on the counter until the room quieted.

"It's been suggested," he said, "that a delegation be formed to ask Captain Rack for more information. Do you all want that?"

There was an affirmative murmur.

"All right," said Cudyk. "Nominations?"

They ended up with a committee of five: Cudyk as spokesman, Moulios, Chong Yin, the painter Prokop Vekshin, and the town clerk, Martin Paz. Cudyk had slips of paper passed out, and collected a hundred-odd questions, most of them duplicates and some of them incoherent. Paz made a neat list of those that remained, and the delegation moved toward the stairs.

AT THE FOOT of the stairway Cudyk saw Burgess standing, blinking uncertainly around him. He dropped back and put his hand on the man's arm. "Hello, Louis. I'm glad to see you. How is Kathy?"

Burgess straightened a trifle. "Oh —Laszlo. She's all right, thank you. Feeling a little low, just now, of course . . ." His voice trailed off.

"Of course," said Cudyk sympathetically. "I wish there were something I could do."

"No—no, there's nothing. Time will cure her, I suppose. Where are you going now?"

Cudyk explained. "Were you at the meeting, earlier?" he asked.

"No. I was not invited. I only heard—ten minutes ago. Perhaps it would be all right if I came upstairs with you? In that way— But if I would be a nuisance—" His fea-

tures worked.

Cudyk felt obscurely uneasy. He recalled suddenly that it was a long time since he had seen Burgess looking perfectly normal. He said reluctantly, "I think it will be all right. Why not? Come along."

Rack was sitting at the end of the long table on the far side of the room, talking to Ferguson. Ferguson's hatchet-man, Vic Smalley, was leaning watchfully against the far wall. Monk and Spider sat at Rack's left. De Grasse, pale and red-eyed, sat halfway down the table, away from the others. He stared at the table in front of him, paying no attention to the rest.

Cudyk had heard that De Grasse was still with Rack, and had wondered what he had done to expiate his sin. The obvious answer was one that he had not wanted to believe: that De Grasse had been given the task of murdering Harkway.

He had done it, probably, with a tormented soul and under Rack's eye, but he had done it. So much, Cudyk thought wearily, for the selfless nobility of man.

Rack looked up expressionlessly as the five men approached. "Yes?"

Cudyk said, "We have been chosen to ask you some questions about your previous statement."

"Ask away," said Rack, leaning back in his chair. Before him was a glass of the dark, smoky liquor Ferguson imported for his special use. He was smoking a tremendously long, black Russian cigarette.

Cudyk took the list from Paz and read the first question. "What is the status of New Earth as to housing, utilities and so on?"

"Housing and utilities are adequate for the present population," said Rack indifferently. "More units will be built as needed."

Paz scribbled in his notebook. Cudyk read, "Will every new colonist be expected to serve as a member of New Earth's fighting forces?"

Rack said, "Every man will work where he's needed. Common sense ought to tell you that middle-aged men with pot bellies and no military training won't be asked to man battleships."

"What is the size of New Earth's navy?"

"Next question."

"Will new colonists be allowed to retain their personal fortunes?"

Rack stared at him coldly. "The man who asked that," he said, "had better stay in the Quarter. If by his personal fortune he means Galactic currency, he can use it to stuff ratholes. Any personal property of value to the community, and in excess of the owner's minimum needs, will be commandeered and dispensed for the good of the community."

"Will new colonists be under military dis—"

"Look out!" said De Grasse suddenly. He lurched to his feet, upsetting his chair.

Someone stumbled against Paz, who fell heavily across Cudyk's legs, bringing him down. Someone else shouted. From the floor, Cudyk saw Burgess standing quietly with a tiny nickeled revolver in his hand.

"Please don't move, Mr. Ferguson," said Burgess. "I don't trust you. All of you, stand still, please."

Cudyk carefully got his legs under him and slowly stood up. The men on the other side of the table were still sitting or standing where they had been a moment before.

De Grasse stood in an attitude of frozen protest, one big hand flat against his trousers pocket. He looked comically like a man who has left the house without his keys.

They must have taken his gun away, Cudyk thought, after that affair yesterday.

Monk and the aged Spider were sitting tensely, trying to watch Rack and Burgess at the same time. Rack, as always, was inhumanly calm. Ferguson looked frightened. The gunman, Vic Smalley, had straightened away from the wall; he looked alert and unworried.

"Captain Rack," said Burgess, "you killed that man Harkway."

Rack said nothing.

"I did it," De Grasse said hoarsely. "If you have to shoot somebody, shoot me."

Burgess turned slightly. Rack, without seeming to hurry, picked up the glass in front of him and half rose to fling the black liquor at Burgess' face.

The gun went off. Burgess stumbled back a step and then toppled over, with a knife-handle sprouting magically between neck and shoulder. De Grasse came hurtling across the table top, dived onto Burgess' prostrate body and came up with the gun. Not more than two seconds had gone by since Rack lifted the glass.

The delegates were moving away, leaving a clear space around De Grasse and Burgess. Cudyk heard some of them clattering down the stairs.

Rack was leaning over the table, supporting himself with one hand, while the other rested at his waist. His attitude, together with his frozen expression, suggested that he was merely bending over to examine Burgess' body. But in the next moment he turned slightly, lifted the hand that was pressed to his side, and looked at the dark stain that was spreading over his shirt.

De Grasse stood up. Cudyk went to Burgess and knelt beside him. The man was conscious and moving feebly. "Lie still," said Cudyk. Someone pushed his shoulder roughly, and he looked up to see De Grasse transferring the revolver from his left hand to his right. The youngster's lips were compressed. "Get out of the way," he said harshly.

"No," said Rack. "Leave him alone." He sat down carefully. After a moment De Grasse went around the table and joined him.

Cudyk lifted Burgess' jacket carefully. There was not much bleeding, and he did not think the wound was dangerous. Burgess said weakly, "Did I kill him, Laszlo?"

"No," said Cudyk. "No one was killed."

Burgess turned his head away.

There were footsteps on the stairs, and Moskowitz came into the room, followed by Lee Far and two men with a stretcher. Moskowitz glanced at Burgess and at Rack, then knelt beside Burgess without a word. He pulled out the knife expertly, pressing a wad of bandage around the wound.

"I'll take that," said Spider, bending over with his grey hand outstretched.

Moskowitz dropped the knife on the floor and went on bandaging Burgess. Spider picked it up, glared at the doctor and went back around the table.

Cudyk waited until Moskowitz

had finished with Burgess and started probing for the bullet in Rack's side. Following the stretcher bearers down the stairs, he went out into the clear morning sunlight.

There was never any end to it. The Quarter was like a tight gravitational system, with many small bodies swinging around each other in eccentric orbits, and the whole shrinking in upon itself as time went on, so that it grew more and more certain that one collision would engender half a dozen more.

And in the mind, too, each event went on forever. Cudyk remembered Burgess, in the stretcher as he was being carried home, weeping silently because he had failed to kill the man who had murdered his daughter's lover. And he remembered Rack, sitting silent and weary as he waited for Moskowitz to attend to him: sitting without anger for the man who had shot him, sitting with patience, filled with his own inner strength.

And De Grasse, tortured soul, who had once more shown himself willing to sacrifice himself to any loyalty he felt.

Even Monk, even Spider, lived not for himself but for Rack.

There were all the traditional virtues, dripping their traditional gore: nobility, self-sacrifice, patience, even generosity. By any test except the test of results, Rack was a great man and Burgess another.

And the test of results was a two-edged razor: for by that test, Cudyk himself was a total failure, a nonentity.

He thought, *We are the hollow men, we are the stuffed men. . .*

When every action led to disaster, those who did nothing were damned equally with those who acted.

SOMEONE touched Cudyk's arm as he left Chong Yin's. He turned and saw that it was Ferguson.

"I've got something to say to you, Cudyk. I saw you were busy talking to Father Exarkos in there, so I didn't bother you. Besides, it's private. Come on down to my place."

The man was doing him an honor, Cudyk realized, in approaching him personally instead of sending an underling. And now, as Ferguson stood waiting for him to reply, Cudyk saw that there was something curiously like appeal in his eyes.

"All right, if you wish," he said. "But I will have to go back to the shop within an hour—Nick has not had his lunch."

"I won't keep you that long," Ferguson said.

They turned at the corner and walked down Washington, past Town Hall to The Little Bear. Beyond this point, everything was Ferguson's: the dance hall, the casino, the bawdy house, the two cafes and three bars, and the two huge warehouses at the end of the avenue. But it was the casino that Ferguson meant when he said "my place".

A white-aproned boy got up hurriedly and opened the heavy doors when they approached. Ferguson strode past without looking at him, and Cudyk followed across the long, empty room. Dust covers shrouded the roulette table, the chuck-a-luck layout, faro, chemin-de-fer, dice and poker tables. The

bar was deserted, bottles and glasses neatly stacked.

Ferguson led the way up a short flight of stairs to the overhanging balcony at the end of the room. He opened the door with a key—a rarity in the Quarter, since cylinder locks were available only by scavenging on Earth, and had to be imported, whereas a mechanism used by the Niori as a mathematical toy could be readily adapted into an efficient combination lock.

The low-ceilinged room was furnished with a blond-wood desk and swivel chair, a long, pale green couch and two chairs upholstered in the same fabric: all Earth imports, scavenged from stocks manufactured before the Collapse. The carpet was a deeper green. There were three framed pictures on the walls: a blue-period Picasso, a muted oyster-white and grey Utrillo and a small Roualt clown.

Ferguson was watching him. "Just like my place in Chicago," he said. "You never saw it before, did you?"

"No," Cudyk said. "I have never been in the Casino until now."

"Sit down," said Ferguson, pointing to one of the upholstered chairs. He pulled out the swivel chair and leaned back in it. He nodded toward the glass which formed the entire front wall of the room. "Sittin' up here, I can see everything that goes on downstairs. I got a phone—" he laid his hand on it—"that communicates with the cashier's booth in every room. I can handle the whole place from here, and I don't have to be bothered by the goofs if I don't want to. Also, that glass is bullet proof. It's Niori stuff, ten times better than anything we had back home. They tell me you couldn't get through it with a bazooka."

Cudyk said nothing.

"What I wanted to talk to you about—" said Ferguson, leaning forward with his elbows on his knees. "You understand, Cudyk, this is confidential. Strictly between us."

"I don't want any confidence that will be difficult to keep," said Cudyk.

"What do you mean?"

"If it is something that touches the safety of the Quarter—"

Ferguson waved his hand impatiently. "No, it's nothing like that. I just don't want it to get around too early. All right, use your own judgment. Here it is."

"Rack's coming back in about three weeks with his transport, to pick up anybody that wants to go to New Earth. I'm not going, and neither are any of my boys. On the other hand, I'm not going to stay here either. It isn't healthy any more."

"I don't know what Rack's got, but I've got a pretty good idea he's got enough to raise a lot of hell. Now you can figure the angles for yourself: maybe he won't bomb this planet because he thinks he can still make some use of the Quarter—but that's a big maybe. Even if he doesn't, it's a dead cinch there's going to be trouble. The Niori know he comes here, even if they can't prove it, and when the war starts they're going to be sore."

"Tell me something," said Cudyk after a moment. "If you knew all this long ago—and you must have, since you have been so closely associated with Rack—why did you

help Rack, and so force yourself to leave Palumbar?"

Ferguson grinned and shrugged. "I'm not complaining," he said. "Rack never fooled me. I got mine, and he got his—it was a business arrangement. When you figure everything in, I can clear out now and I'm still ahead. See, you got to figure that nothing lasts forever. If I hadn't played along with Rack, he would have taken his business somewhere else. Maybe I could have stayed here a little longer, but then again, maybe I would have stayed too long. This way, I got my information in advance, and I got my profit from dealing with Rack.

"As a matter of fact, he thinks I and all my outfit are going to be on that transport when it goes back to his base. He knows I wouldn't take a chance on staying here when the shooting starts. What he doesn't know is that I got someplace else to go, and a way to get there."

He sat back in his chair again. "I got a Niori-built freighter hidden back in the hills. Had it for eight years now. It'll carry five hundred people, and fuel and provisions for a year, on top of the cargo. And I got a planet picked out where nobody will bother me—not Rack, and not the Galactics."

He took a cigar box from the desk and offered it to Cudyk. Cudyk shook his head, showing his pipe.

Ferguson took a cigar, twirled it in his lips slowly, and lit it. "You know," he said, bending forward, "there's plenty of planets in the galaxy that aren't inhabited. Some have never even been explored. They're off the shipping routes, no

intelligent race on them, nothing special in the way of organic products, so nobody wants them. Rack's got one—I've got another."

He gestured with the cigar. "But I'm not using mine to build up any war base. What for?" His long face contorted with violent disgust. "That Rack is crazy. You know it and I know it. If it wasn't for him, I could have stayed here, who knows how long? Or I could have moved to one of the other colonies if I saw a good chance. I like it here. This is civilization—all that's left of it.

"But—" he leaned back again—"you got to take what you can get. If the odds are too heavy, cash in and walk out. That's what I'm doing: I'm retiring. On this planet I told you about, there's a big island. A tropical island. Fruit—all you can eat. Little animals something like wild pigs. Fish in the ocean.

Gravity just a little under Earth normal, atmosphere perfect. And I'm taking along everything else we'll need. Generators, all kinds of electrical equipment, stoves, everything. It'll last your lifetime and mine."

He looked at Cudyk. "What more would you want?"

Cudyk said slowly, "You're asking me to go with you?"

Ferguson nodded. "Sure. I'll treat you right, Cudyk. My boys will go on working for me, you understand, and so will most of the others I'm going to take. I'll be the boss. But you, and three or four others, you won't have to do any work. Just lie in that sand, or go fishing, or whatever you feel like. How does it sound?"

"I don't think I quite understand," said Cudyk. "Why do you choose me?"

Ferguson put down his cigar. He looked uncomfortable. He said irritably, "Because I've got to have somebody to talk to." He stared at Cudyk. "Look at me. Here I am, I'm fifty years old, and I been fighting the world ever since I was a kid. You think I can just cut loose from everything now, and lie under a tree? I'd go nuts in a month. I'm not kidding myself, I know what I am. It takes practice to learn how to relax and enjoy yourself. I never learned, never had the time.

"When I get on that island, and I get all the houses built and the wires strung up, and everything's organized and I've got nothing else to do, I can see myself lying there thinking about this place, and all the other places I ever owned, and thinking to myself, 'What for?' And there's no answer, I know that. But just the same, I'm going to be wanting to start in again, making a deal, opening a joint, figuring the angles, handling people.

"So there I'll be, with all these mugs around me. What do they know to talk about? The same things I do. Things that happened to them in the rackets, here or back on Earth. You got to talk to somebody, or you go crazy. But if I've got nobody but them to talk to, how'm I ever going to get my mind off that kind of stuff?"

He gestured toward the Roualt, on the wall to Cudyk's left. "Look at that," he said. "I bought that thing in 1991. I've been looking at it for, let's see, twenty-three years. For the first five or so I couldn't figure out whether the guy was kidding or not. Then, gradually, I got to like it. But I still don't know *why* the hell I like it. It's the same thing with everything. I have a Corot that I'm nuts about—I look at it every night before I go to sleep. It's just a landscape, like you used to see on calendars in the old days, except the calendars were junk and this is art. I know that, I can feel it. But what's the difference between the two? Don't ask me.

"See what I mean? That's the kind of stuff I got to learn about. Art. Literature. Music. Philosophy. I always wanted to, before, but I never had the patience for it. Now I've *got* to do it. My kind of life is finished, I've got to learn a new kind."

He frowned at his cigar. "It isn't going to be easy. Maybe there'll be times when you'll wish you had anybody else in the world around but me. But I won't take it out on you, Cudyk."

He meant it, Cudyk knew. For a moment he wondered, Why don't I accept? He could see Ferguson's island paradise clearly enough: the tropical trees, the log huts—with electric light, induction stoves for cooking, and hot and cold water—the sand, the sunshine, the long, lazy afternoons spent in talking quietly on the beach. There would be no strain and no tension, if everything went as Ferguson planned—only a long, slow twilight, with nothing left to fear or to hope for: forgetfulness, lethargy; lotos and Lethe; a pleasant exile, a scented prison.

"You won't have to worry about the others, the guys that work for me," Ferguson said. "After they get through building the settlement, they can do what they want as long as they don't make any trouble. There'll be enough women to go around—they can settle down and raise kids. There won't be any liquor, and I'm going to keep the weapons locked up. About the ship—I'll wreck that as soon as we land. Once we're there, we're there."

If it were not for Ferguson himself, Cudyk thought, I believe I might do it. But Ferguson, inside a year, is going to be a pitiable and terrible object. This is his own punishment, his lesser evil—he chooses it himself. But he is not going to like it.

"I think I understand," he said. "Believe me, Mr. Ferguson, I'm deeply grateful for this offer, and I am tempted to accept. But—I think I will stay and take my chances with the Quarter."

Ferguson stared at him, then shrugged. "Don't make up your mind in too much of a hurry," he said. "Think it over—I'm not leaving for a couple of weeks. And listen, Cudyk, do me a favor. Don't spread this around."

"Very well," said Cudyk.

Ferguson did not get up to see him to the door.

THERE WAS a curious feeling of suspension in the Quarter. Trade was slow; only a few Niori and still fewer members of other Galactic races strolled down the narrow streets, and for more than a week Cudyk sold nothing.

Human faces were missing, too. Almost two hundred of the ghetto's inhabitants had left quietly, during the night, when word had gone around that the "New Earth" transport was waiting. Villanueva had gone, with his family; so had Martin Paz; and Ferguson had gone earlier with all his crew. Today, two weeks later, Cudyk had spent the morning wandering the City. It was a thing he had done often in his first years on the planet, before the restless drive of his youth had seeped away, leaving nothing but momentum, and memory, and a few vestiges that reminded him of the man he had been.

He had spent whole days in the City, then, looking into this building and that, talking to the natives, asking questions, observing. He had seen the City as part of a colossal jigsaw puzzle from which, if you were patient and perceptive, you might extract the nexus, the inner pattern that made the essential difference between Niori and men.

For the Niori, like nearly all the intelligent races of the galaxy, had one survival factor that men had

always lacked. There was no word for it in any human language; you could only talk around it in negatives. The Niori did not kill; they did not lie; they did not steal, intrigue, exploit each other, hate, make war.

For men, "the fittest" had always been the man, or nation, or race, that survived by exterminating its rivals. Somehow, the Niori had found another way. There was no word for it. But perhaps you could find it, if you looked long enough.

He had studied their architecture, and pondered long on the arrangement of the City's great hive-buildings: a peculiar, staggered arrangement which was neither concentric nor radial; which created no endless vistas, only islands of buildings or lakes of parkland. He had tried to see into that arrangement and through it to the soul of the race, as other scholars had peered into the city-plans of Athens and New York, reading inwardness into one and outwardness into the other.

The method was sterile. The Niori had no "world-view" in the Spenglerian sense. Their cities expressed only function and a sense of beauty and order.

In those early days, he had said to himself: These people have no cinemas, theaters, churches, art galleries, concert halls, football fields. Let me see what they have instead, and perhaps I will begin to understand them.

He had seen the Niori, sitting in a circle of six or eight, solemnly capping one word with another, around and around. To him, the sequences of words were sense-free and followed no discernable pattern. To the Niori, evidently, they fulfilled some function analagous to those of poetry and group singing.

He had watched them debating in the governing council. There was no rhetoric and no heat, even when the issue was important and the opinions widely divergent. He had seen their shops, in which each article was labeled with its cost to the merchant, and the buyer gave as much more as he could afford. It was incredible; but it worked.

He had followed their culture through a thousand other avenues until he wearied of it, having learned nothing more than he knew at the beginning. Afterwards, for twenty years he had not left the Quarter except to transact business, or to oversee the unloading of merchandise at the spaceport.

Today he had gone once more, feeling an obscure compulsion: perhaps because he knew the day was coming when he would see the City for the last time; perhaps hoping, in that small spark of himself that still allowed itself to hope for anything, that one more visit would show him the miraculous key to all that he had misunderstood.

He had learned nothing new, but the morning had not been altogether wasted. It was a clear autumn day, good for walking in so green a city. And paradoxically enough, being the only Earthman on the streets had made him feel less alien than before. He attracted no attention, in a spaceport city: he walked side by side with squat Dritik and spidery Oladsa, beings of a hundred different races from as many stars. When he returned to the Quarter, he felt oddly refreshed and calmed.

We have very little left, he thought, except one or two minor virtues that have no bloodstains on them. Kindliness, humor, a sense of brotherhood . . . perhaps if we had stuck to those, and never learned the martial virtues, never aspired to be noble or glorious, we would have come out all right. Was there ever a turning point? When Carthage was sown with salt, or when Paul founded the Church—or when the first caveman sharpened the end of a stick and used it for murder? If so, it was a long way back, dead and buried, dust and ashes.

We took all that was best in thousands of years of yearning and striving for the right, he thought, and we made it into the Inquisition and the Star Chamber and the NKVD. We fattened our own children for each generation's slaughter. And yet we are not all evil. Astereos is right: if the other races had been like ourselves, it would have been bearable; or if we ourselves had been creatures of pure darkness, conscienceless, glorying in cruelty—then we could have made war on the Galaxy joyfully, and if we failed at least there would have been an element of grandeur in our failure.

Olaf Stapledon had said this once, he remembered—that there was an artistry in pure, uncontaminated evil, that it was in its own way as real an expression of worship as pure good.

The tragedy of human beings, then, was that they were not wholly tragic. Jumbled, piebald parcels of contradictions, angels with asses' ears. . . What was that quotation from Bierce? *The best thing is not to be born. . .*

Someone brushed by him, and Cudyk looked up. He was at the intersection of Československo and Washington; he had come three blocks past his apartment without noticing where he was going.

Chong Yin's was only a few doors to his left; perhaps he had been heading there automatically. But the doors were closed, he saw; seven or eight Chinese were standing in the street outside, and as Cudyk watched, Seu Min came down the stairs from the living quarters over the tea room. The other Chinese clustered around him for a moment, and then Seu appeared again. The others slowly began to disperse.

Cudyk went to meet him. The mayor's face looked strained; there were new, deep folds of skin around his eyes. "What is it, Min?" said Cudyk.

Seu fell in beside him and they walked back up the street. "Chong killed himself about an hour ago," said the Chinese.

How many does that make? Cudyk thought, frozen. Six, I think, in the last two months.

He had not known Chong well—the old man had been a north-country Chinese, not Westernized in the least, who spoke only his own language. Now that he thought of it, Cudyk realized that he did not know who Chong's close friends had been, if he had had any. He had always been the same spare, stooped figure in skull-cap and robe, courteous, unobtrusive, self-contained. He had a family; a wife, rarely seen, and six children.

Somehow Cudyk felt that he would have been less surprised to hear that Moulios had committed

suicide, or Moskowitz, or even Seu himself. My mistake, he told himself. I allowed myself to think of Chong as an institution, not as a man.

"Have you some whisky?" asked Seu abruptly.

"Yes," said Cudyk, "of course."

"Let us go and drink it," Seu said. "I'm very tired."

It occurred to Cudyk that he had never heard Seu say that before. They turned the corner at Athenai and climbed the stairs to his apartment. Seu sighed, and dropped heavily into a chair while Cudyk went to get the bottle and glasses.

"Straight, or with water?" he asked.

"Straight, please." Seu tilted his glass, swallowed and shuddered. Cudyk watched him in silence.

Seu, alone in the Quarter, owned a Niori communicator—an elaborate mechanism which reproduced sound, vision in three dimensions, odors, modulated temperature changes and several other things perceptible only to Niori. There was no restriction on their sale, and they were cheap enough, but the Niori broadcasts were as dull or as incomprehensible to men as a Terrestial breakfast program would have been to Niori. Seu used his as a source of Galactic news. Today, Cudyk guessed, the news had been very bad.

"It's Rack, isn't it?" he said finally.

Seu glanced at him and nodded. "Yes, it's Rack. I haven't told anyone else about it yet. The Quarter's in a half-hysterical state as it is. But if you don't mind my talking it out to you—"

"Go ahead," said Cudyk.

"It's worse than anything we expected." Seu took another swallow of the whisky, and made a face. He said, "They've got a hydrogen-lithium bomb."

". . . I was afraid of that."

Seu went on as if he had not heard. "But they're not using it on planets. They're bombing suns, Laszlo.

For a moment, Cudyk did not understand, then he felt his abdominal muscles contract like a fist. "They couldn't," he said hoarsely. "It would explode before it got past the outer layers."

"Under faster-than-light drive?" Seu asked. "I did some figuring. At 1000 *C*, it would take the bomb about two point six thousandths of a second to travel from the surface to the center of an average G-class star. I think that is a short enough interval, but maybe it isn't. Maybe they have also found some way to increase the efficiency of the standard galactic drive for short periods. Anyway, does it matter?" He looked at Cudyk again. "I have seen the pictures. I *saw* it happen."

Cudyk's throat was dry. "Which stars?" he said.

"Törkas. Rud-Uri. That's the Oladi sun. And Gerzión. Those three, so far."

Cudyk's fingers were nervously caressing the smooth metal of his wristwatch. He looked down at it suddenly, remembering that the Oladsa had made it. And now they were gone, all but their colonies and travelers on other worlds, and those who had been in space at the time. All those spidery, meticulous people, with their million-year-old culture and their cities of carved

opal, wiped out as a man would swat a fly.

Seu took another drink. His face flushed, and drops of sweat stood out on his forehead and cheeks.

He said, "They'll have to learn to kill, now. There isn't any alternative. They intercepted one of the New Earth ships and sprayed it with the stasis field. It didn't work; the ship got away. They'll have to learn to kill. Do you know what that means?"

"Yes."

Seu drank again. His face was fiery red, now, and he was gasping for breath. "I can't get drunk," he said bitterly. "Toxic reaction. I thought I'd try once more, but it's no good. Laszlo, look out, I'm going to be sick."

Cudyk led him to the lavatory. When he came out, the Chinese was weak and waxen-pale. Cudyk tried to persuade him to rest on the bed, but he refused. "I've got to get back to my office," he said. "Been gone too long already. Help me down the stairs, will you, Laszlo?"

Cudyk walked him as far as Brasil and Washington, where two of Seu's young men took over with voluble expressions of gratitude. Cudyk watched the group until it disappeared into the town hall.

He could feel nothing but an arid depression. Even the horror at Rack's mass-murders, even his pity for Seu was blunted, sealed off at the back of his mind. The lives of saints, Cudyk remembered, spoke of "boundless compassion", "infinite pity"; but an ordinary man had a limited supply. When it was used up, you were empty and impotent, a canceled sign in the human equation.

Half instinctively, half by choice, Cudyk had chosen his friends among the strongest and most patient, the wise and cynical: the survivors. But he had leaned too much on their strength, he realized now. He had seen Seu crumble; and he felt as if a crutch had broken under his weight.

That evening he opened his shutters and looked out at the sky. The familiar constellations were there, unchanged. The light of the nearest star took more than three years to reach Palumbar. But in his mind's eye one glittering pinpoint exploded suddenly into a dreadful blossom of radiance; then another; then a third. And he saw the blackened corpses of planets swinging around each, murdered by that single flash of incredible heat.

During the night he dreamed of a black wasteland, and of Rack standing motionless in the center of it, brooding, with his cold grey face turned to the stars.

IT WAS Cudyk's birthday. He had never told anyone in the Quarter the date, and had all but forgotten it himself. This morning, feeling an idle desire to know what the season was on Earth, he had hunted up a calendar he had last used twenty years ago; it translated the Niori system into Gregorian years, months and days. The result, when he had worked it out with some little trouble, was February 18th. He was fifty-six.

Now he was constrained to wonder whether the action had been as random as it seemed. Was it possible that subconsciously he had no need of the calendar—that he had

kept track, all these years, and had known when his birthday came? If so, why had he felt it necessary to remind himself in this oblique way?

A return to the womb? A hunger for the comforts of the family circle, the birthday cake, candles, the solace of yearly repetition?

Cudyk was fifty-six. When he had been fifty-five, he had thought of himself as a man in his middle years, still strong, still able. Now he was old. The same thing had happened to Seu: he had recovered from his first shock when the news had come about Rack, and for more than three weeks now he had moved about the Quarter, as quiet and as competent as before; but there was a difference. His swift, furtive humor was gone except for rare flashes; his voice and his step were heavy.

It was the same with all of them, all the old settlers. Cudyk had met Burgess on the street the day before, for the first time in several weeks, and had been genuinely shocked. The man's hair was white, his skin papery, his gait stumbling.

Even Exarkos showed the change. More and more of his grey, woolly hair was vanishing. The umber crescents under his eyes were a deeper shade, almost black.

The Quarter's graveyard was five acres of ground, surrounded by trees, on the outskirts of the City; there the dead reclined in a more ample space than the living enjoyed. The Niori had allotted the ground, though the outline of the City was thereby disfigured, and had contributed slabs of a synthetic stone which carved easily when it was fresh, later hardening until it would resist any edged tool. The plot was ill tended, but the standing stones, translucent pearl or rose, had a certain beauty. To the Niori, the purpose of the graveyard was only that; they were not equipped to understand mankind's morbid clinging to its own carrion.

Cudyk had gone to Chong's funeral, presided over by Lee Yuk, the asthmatic little Buddhist priest; and the image of those ranked headstones, neatly separated into the Orthodox, the Protestants, the Buddhists, the Taoists and the unbelievers, had returned to him many times since. It was another sign of the change that was taking place in him: the images which formerly had dominated his mind had been pictographs of abstractions—the great globe of infinity, the tiny spark that was creative intellect. Now they were the pale headstone and the dark curtain of death.

He had felt nothing, standing over Chong's grave and watching the sod fall. What is there to say about a man when he is dead? The priest's words were false, as all such words are false; they had no relevance; the man was dead. Nothing was left of him now but the dissolving molecules of his flesh, and the fragmentary, ego-distorted memories he had planted in the minds of others. He was a name written in water.

It was not Chong who obsessed Cudyk, nor the many other half-remembered men and women whose names were clumsily carved on those stones. It was the cemetery as a symbol: the fascination of the yawning void.

Cudyk had one other preoccupation: he thought often of Earth, a dark globe turning, black continents

dim against the grey ocean, pricked by a few faint gleams that were cities. Or, if he thought of the cities, he saw them too drowned in shadow: the shapes of tower and arch melting into night-patterns; moonlight falling faintly, dissolving what it touched, so that shadows became as solid stone, stone as insubstantial mist.

For Earth, also, was a symbol of death.

There had been no more suicides since Chong had died, and no riots. It seemed to Cudyk that the whole Quarter moved, like himself, through a fluid heavier than air. All motion had slowed, and sounds came muted and without resonance. People spoke to him, and he answered, but without attention, as if they were not really there.

Even the recent news about Rack's defeat had stirred him only momentarily, and he had seen in Seu's face that the Chinese felt himself somehow inadequate to the tale even as he told it. The Galactic fleet, vastly expanded, had met Rack's activist forces with a new weapon—one, indeed, which did not kill, but which was shameful enough to a citizen of the Galaxy. The weapon projected a field which scrambled the synapse patterns in the brain, leaving its victim incapable of any of the processes of coherent thought: incapable of adding two figures, of lighting a cigarette, or of aiming a torpedo. Eleven New Earth ships had been captured, and it was thought that these were all the activists' armed vessels; there had been no further attacks since then.

He did not believe that anything which could now possibly happen could rouse him from his apathy. But he had forgotten one possibility. Seu came to him in Chong Yin's, where Yin's eldest son Fu now moved in his father's place, and said, "Rack wasn't taken. He's here."

Cudyk sat with his teacup raised halfway between the table and his lips. After a long moment, he saw that his hand was trembling violently. He set the cup down. He said, "Where?"

"The Little Bear. Half the town has gone there already. Do you want to go?"

Cudyk stood up slowly. "Yes," he said, "I suppose so." But he felt the tension that pulled his body together, he tautened muscles in back and shoulders and arms.

As they reached the corner of Československo and Washington, they saw scattered groups of men moving ahead of them, all hurrying, some frankly running. The crowd was thick around the doorway of The Little Bear when they reached it, and they had difficulty forcing a passage. Men moved aside for Seu willingly enough, but there was little space to move.

Inside, it was worse. The stairway was solidly packed; it was obviously impossible to get through.

"There is a back stair," Seu said. He worked his way toward the rear of the room, Cudyk following, until he caught sight of the bartender. The press was not so thick here, and he was able to reach the man and lead him into a corner away from the others. "Can you get us up the back way?"

The Russian nodded, scowled, and put his finger to his lips. Fol-

lowing him, they went through the swinging doors at the back of the room, through the dark kitchen and up the narrow service stairs at the rear. The bartender unlocked the door and helped them force it open against the pressure of the packed bodies inside.

The long room was heavy with the odors of sweat, tobacco smoke and stale air. Faces shone greasily under the glare of the ceiling lights. The only clear space was the tabletop against the wall to Cudyk's right, where Rack stood.

Cudyk could see him clearly over the heads of those in front of him. He stood with legs planted firmly, hands at his sides. As always, the leather jacket was draped over his shoulders like a cloak.

He was alone. Spider was not there, nor Monk, nor Tom De Grasse.

Rack was talking in a low, clear voice. Cudyk listened to the end of a sentence which conveyed nothing to him, and then heard: "After that, we got it. They gave it to us." Rack's hands clenched once, and then opened again.

"They intercepted us three minutes after we came out of overdrive in the orbit of New Earth. Twelve fighting ships, the whole fleet. We were in a line, just closing in after we broke C on the way down—the *Thermopolae,* the *Tours,* the *Waterloo,* the *Chateau Thierry,* the *Dunkirk,* the *Leningrad,* the *Acre,* the *Valley Forge,* the *Hiroshima,* the *San Francisco,* the *Seoul,* and the flagship last, the *Armageddon.*

"We didn't know they were there—they were out of our detector range. They had us like sitting ducks. The first thing we knew about it was when a teletype report from the leading ship, the *Thermopolae,* broke off in the middle of a word. Five seconds later the same thing happened to a report coming in from the next ship. Three seconds more, and the *Waterloo* was gone.

"I gave the order to reverse acceleration and scatter. But the field—whatever it was—came after us. It would have taken us at least two minutes to build up the overdrive potential again, and we all knew we wouldn't make it. They were getting us one ship every six or eight seconds.

"The men were looking to me for orders. I didn't have any to give them. Suddenly De Grasse turned around and looked at Monk and Spider, and they all nodded. They jumped me. I don't know what happened. I struck my head against the deck when I went down, or one of them hit me with a gun-butt."

His fists clenched and opened once more. "When I came to, I was strapped into a one-man lifeboat, on overdrive, doing ten C's. They must have emptied the ship's accumulators into that lifeboat, charged it up to C potential and got me off just before the field hit them.

"I took my bearings, reversed, and went back. Eventually I found the fleet again. The Galactics had matched course and velocity with them and they were just beginning to tow them off, one ship to one with plenty of theirs left over, in the general direction of Altair.

"They hadn't got into overdrive yet. I slipped in—there were a hundred of their little scouts nosing around, about the same mass as my

lifeboat—and berthed in the same port I'd come out of. I got out and walked into the control room.

"The crew was still there, still alive. But not men. They were lying on the deck, looking at nothing. Their mouths were open, and they were drooling."

Rack's head moved stiffly, and his sharp profile turned from one side of the crowd to the other. "Mindless idiots," he said. "They couldn't feed themselves, or stand up, or sit. But they had saved me.

"I built up the charge and took my time about it. When the Galactics went into overdrive, I took off in another direction. I was a good seventy light years away before they knew I was gone.

"I had a ship, an undamaged ship. But I had no crew to man her. I can astrogate, and when I have to, I can man the engines on top of that. But I can't fight her as well.

"I came here, put the *Armageddon* into a one-day orbit and came down in a lifeboat. I want to go back and find out what those slime-eaters did to us, and give them a taste of the same. *I want twenty men.*"

There was a silence.

Rack said, in the same even, low voice, "Will you fight for the human race?"

Someone called, "What did you do with your other crew?"

Rack said, "I gave them military burial, in space."

For the first time, the crowd as a whole broke its silence. A low murmur rose. Rack said sharply, "I would have given my life for those men, as they did for me, gladly. But they were already dead. If there's a way to restore a man's mind after that has been done to it, only the vermin know how. I would rather be buried in space, and so would they."

A deep voice called, "Are you God, Rack?"

"I'm not God," he said promptly. "Are you a man?"

There was another murmur, dying as a pulsing movement began near the back of the room: someone was forcing his way toward Rack. In the stillness, another voice said thinly, "My Demetrios . . . my Alexander . . ." It was Moulios, wailing for his two lost sons.

Red-faced, with a lock of black hair hanging over his forehead, the painter Vekshin squeezed through to the edge of the table on which Rack stood. He shouted, "I'm a man, all right. What do you call yourself, you assassin? You come here with blood dripping from your jaws like a weasel fresh from a poultry yard, and we're supposed to feel sorry for you because they wouldn't let you go on killing! The great god Rack! *Ptui!*"

Rack did not move. He said quietly, "I killed your enemies, while you sat at home and drank tea."

"Enemies!" Vekshin roared. "You're the enemy, Rack." He put his big hands on the table-top and heaved himself up.

Rack let him come. He waited until the Russian was standing on the table; then he stepped forward with a motion so smooth it seemed casual. There was a flurry of blows, none of which landed except two: one in Vekshin's midriff, the other on the point of his jaw. Five men went down as Vekshin's body

hurtled into them.

Rack stepped back. "I have very little patience left," he said, "but if there is anyone else here with a personal grudge, let him step up."

Two men at the table's edge moved as if to climb up. Rack put his hand to the gun at his belt. The two men stayed where they were.

Rack stared out over the crowd. He looked suddenly very weary. It occurred to Cudyk that he must have gone without sleep for a long time.

Rack said: "This is the last call. I am not trying to deceive you. I promise you nothing, not glory, not your lives, not even that you will be able to spend your lives usefully. But if there is any man here who will serve aboard the *Armageddon,* in the last fight for mankind—raise your hand!"

There was a long moment's silence. Rack turned abruptly, with his hand still on his gun, and said to the men in front of Cudyk: "Stand back!"

The silence held for an instant, while the men at the table's end moved uncertainly away; then sound broke like an avalanche. As Rack jumped down, the crowd surged toward him, no longer an audience but a mob. Cudyk felt the pressure at his back, caught a glimpse of Rack's face, then heard the deafening report of the gun as he went hurtling forward into the melee.

The gun did not fire again. Cudyk was squeezed tightly in the center of the struggling mass. He saw Seu, a few feet away. The mayor's mouth was open; he was shouting something, but the words were lost.

Suddenly Rack came into view again, charging straight toward Cudyk, hurling bodies to either side. The lower half of his face was a smear of blood; his cap and jacket were gone, his shirt torn half away.

Cudyk was half-aware of the constriction in his throat, the pounding of blood at his temples. He wrenched one arm free and, as Rack came near, struck him full in the face.

He had one more glimpse of Rack's white features, the pale eyes staring at him with a curiously detached expression: the eyes of a Caesar or a Christ, reproachful and sad. Then the crowd surged once more, the door to the back stairway slammed open, and Rack was gone.

Cudyk found himself running through the doorway with half a dozen others. He caught sight of Rack leaping down the stairs, just short of the landing where the narrow stairway doubled back on itself.

With a regretful sigh, feeling no surprise at what he was about to do, Cudyk put both hands on the railing and swung himself over into vacancy. Then there was an instant of wild, soaring flight, Rack's foreshortened body drifting beneath him, and the shock.

Dazed and numb, Cudyk felt the universe moving under him like a gigantic pendulum. He saw faces appear and vanish, felt someone push him aside, heard voices faintly.

After a long time his head cleared, and there was silence. He was lying at the foot of the stairs, one arm flung over the first step. Rack was not there; no one was

there but himself.

He moved cautiously and was rewarded by an astonishing number and variety of pains. But apparently he had broken no bones. He felt weak and hollow; he was afraid he might vomit. He hoisted his torso up slowly, sat on the lowest step and then put his head between his trembling knees.

He heard a foot scuff on the concrete floor, and looked up. It was Seu.

The Chinese looked at him anxiously. "You're all right?"

"Yes. I think so. I have felt better in my life."

"Do you want to get up? Did you jump or fall?"

Cudyk leaned forward, trying the strength of his thighs to raise him, and Seu put a hand under his arm to help. "I jumped," Cudyk said. "What happened, afterward?"

"The mob came down, me in the middle, and I couldn't stop to see if you were all right. They took Rack with them. He was unconscious then; he may have been dead."

"And?"

"They tore him apart," said Seu.

They moved toward the exit from the kitchen, Seu holding Cudyk's arm firmly.

"I don't know if you felt this," the mayor said stiffly, "but the way it seemed to me was that Rack suddenly represented all of it—not only the bombings, but the Quarter, the Galaxy, Earth—everything we hated. It was a feeling of release, a kind of ecstasy. Watch out for the sill."

"Scapegoat," Cudyk said, indistinctly.

"Yes . . . Zydh Oran saw it, you know. He was there when the mob came out. He saw it all. This finishes the Quarter, Laszlo. After this there won't be any more reprieves."

Cudyk glanced down at Seu's plump fingers. There was a thin film of blood on the skin, and a dark line of it around each fingernail.

CUDYK stood at the top of the gentle rise opposite the Washington Avenue bridge, and looked down at the Quarter. It was just after sunset, and the ranked street lights cast a lonesome gleam. The streets were empty. There was no one left in the Quarter except one man in the powerhouse. When the time was up, he would pull the switches on the master board and come out; then the Quarter would be dead.

The Niori edict had come on the Wednesday morning after Rack's death. They had been given four days to pack their belongings, arrange for assignment of cargo space, and wind up their several affairs. Cudyk's stock was small and his personal belongings few; he had been ready two days ago.

The evening breeze, freshening, pressed Cudyk's trousers against his calves and stirred the hair at the back of his head. Looking into the east, he saw a few pallid stars in the sky.

Several hundred people had already been collected by the aircars which served the spaceport. Cudyk, Seu, Exarkos and a few others, by unspoken assent, had taken places at the rear of the crowd, to be the last to go.

He glanced at Seu. The little

man was standing with his hands in his pockets, shoulders slumped, staring dully at the Quarter. He looked up after a moment, smiled unhappily, and shrugged.

"It's absurd to feel homesick for it, isn't it?" he said. "It was a ghetto; we had no roots there. It was cramped, and it stank, and we fought among ourselves more viciously than we ever fought on Earth. But twenty years . . ."

"We could pretend that we had roots, at least," Cudyk answered. "We don't belong anywhere. Perhaps we'll be happier, in the long run, once we face that and accept it."

"I doubt it."

"So do I."

To Cudyk's right, Father Exarkos was sitting on his suitcase, hands relaxed on his thighs. Cudyk said, "If I were a believer, Astereos, I think it would do me a great deal of good to confess to you and be absolved."

The priest's dry, friendly voice said, "Why, have you sinned so terribly, Laszlo?"

"I killed a man," said Cudyk, "but that's not what I mean. I jumped over a stairway railing and stopped Rack. If it hadn't been for me, he might have got away. There would have been nothing wrong with that. He couldn't have done any more harm, one man by himself. The Guards would have captured him sooner or later, anyhow. And if he had gotten away, we wouldn't have given the Niori the one more straw they needed. In that sense, it is my fault that we were expelled."

"No, Laszlo," said Seu.

Exarkos said, "You have nothing for which to reproach yourself, on that score. You were only the instrument of history, my friend, and a minor instrument at that. And, speaking for myself, not for the Church, Rack deserved to die."

Cudyk thought, at least it was quite suitably ironic. Cudyk, the man of inaction, hurls himself through the air to kill a murderer. And the citizens of the Quarter are deported, not because one of their race murdered a billion billion Galactics, but because that same killer was killed by them.

That was one thin mark on the credit side. There was one more: the tension was gone, for some of them at least. Now the worst thing that could happen had happened; the Damocletian thread had snapped. The problems which had caused the tension no longer existed.

Earth was two months away. Cudyk expected nothing and hoped for nothing. But the Niori had agreed to set each passenger down wherever on the globe he chose to go; each man, at least, could choose his own hell. The crews of the captured battleships, and the captured staff of the base on New Earth, were also being sent back. The weapon that had been used on them had done no permanent damage; they would simply have to be retrained, to learn all over again, as if they were reborn.

Seu was going to North America, where he hoped survival for a fat cosmopolite would be a little less difficult than in Europe or Asia. Moskowitz had been born in New York, and was going back there. Exarkos was going to Istanbul first,

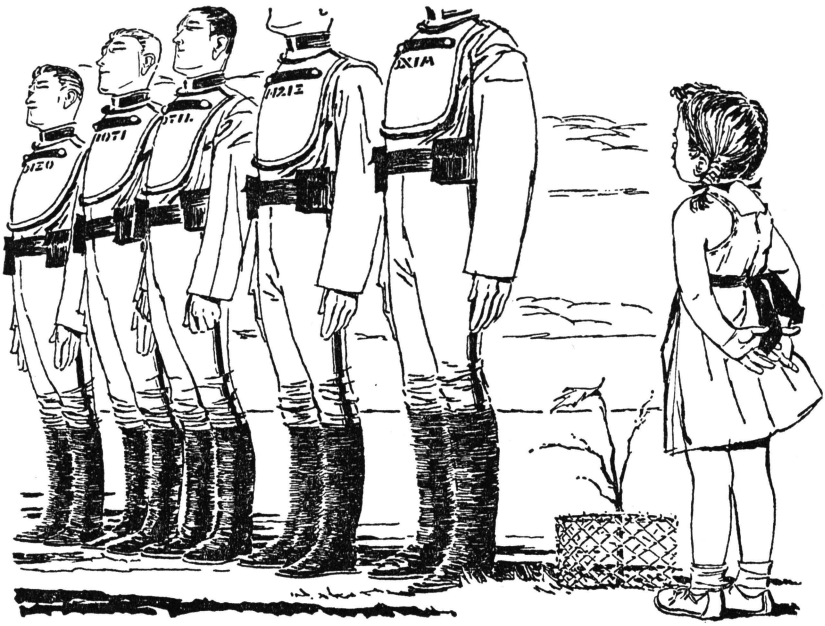
(Continued on page 114)

Illustrated by Ernie Barth

SAINT JULIE AND THE VISGI

BY ROBERT F. YOUNG

The woodsman couldn't spare Julie's beloved old tree. Down it had to come. But the religious tenets of an alien race, such as the Visgi, didn't bother little Julie . . . So she planted another tree——in Visgi soil!



THE VISGI were conquerors, but they possessed none of the characteristics usually associated with conquerors. They were not cruel; they were not vindictive; they were not avaricious. They did not plunder; they did not pillage; they did not exploit. The word "rape" was not even in their vocabulary. They were conquerors because conquest was their religious *raison d'etre.*

The Visgi conquered Earth during the last years of the twentieth century, and the occupational administrators moved into office immediately. The first thing they did was to issue the traditional Visgi proclamation—a proclamation which stated in effect, that the moment a planet came under Visgi dominion the inhabitants of said planet must institute a re-landscaping project for the purpose of altering all surface features intrinsically different from the surface features of the planet Visge. For according to the Visgi credo, Visge was the Model, the First-To-Be-Created, and it was the Prime Motivator's wish that all other planets in the cosmos be patterned after the Model. That was why He had created the Visgi, and that was why Visgi technology went hand in hand with Visgi religion.

Fortunately, Visge was not radically different from Earth. It had seas and continents. It had rivers and plains and lakes and mountains and hills. It had a north and south polar cap and an International Date Line. On one of its northern continents there was a peninsula that could have passed for Florida. Actually there was only one intrinsic difference between Visge and Earth.

On Visge there were no trees.

JULIE woke to the metallic song of saws and the shouts of men. Looking out of her bedroom window she saw the movement of denim clad bodies in the green foliage of the big maple, and sawdust drifting down like yellow snow. She dressed quickly and ran downstairs. Mother was standing on the back porch, her eyes very strange.

In the village below the hill on which Julie and her mother lived, maples and oaks and elms were dying like fine brave soldiers, their limbs dropping one by one in the summer morning sunlight. But Julie had eyes for her soldier only.

Her swing still hung from one of the lower branches. High above her head was the special bough whose foliaged fingertips brushed her window reassuringly on windy nights when she could not sleep, and just below it was the branch reserved for robins when they came north each spring.

"Mother," she asked, "what are they doing to my tree?"

Mother took her hand. "You must be a brave girl, Julie."

"But Mother, they hurt my tree!"

"Hush, dear. They're only doing what they have to do."

The first limb fell with a swishing sound. Sawdust flurried in the morning wind. Julie cried out and wrenched her hand from Mother's. There was a big man in breeches and high-top shoes standing in the yard, looking up at the men and shouting at them to hurry. Julie ran toward him, screaming. "You leave my tree alone!" she cried. "You leave it alone!" She pounded his belt with her small clenched hands.

He grasped her wrists and pushed her away. His face was gray and there were dark smudges beneath his bleak blue eyes. "Damn it!" he shouted over Julie's head, "isn't this job tough enough as it is? Get her out of here. Get her out of here!"

Julie felt Mother's soft hands on her shoulders. "I'm sorry," Mother said. "But she doesn't mean any harm. You see, she doesn't understand."

"Why doesn't she?" the big man shouted. "She had it in school, didn't she? The Visgi held deforestation classes in every school in the world. Kids are supposed to *hate* trees now."

"But she doesn't go to school. You see, she's— She's not quite—"

Mother paused. The big man looked at Julie closely. Something very odd happened to his eyes. They had been like winter, and now, suddenly, they were like summer—soft and deep and misted. He looked back at Mother. "I'm sorry," he said. "I didn't know."

"Of course you didn't," Mother said. "It's all right."

"I hate to take the tree down.

You know that, don't you?"

"I know," Mother said. Her hand tightened on Julie's. "Come, Julie, we'll go back to the house."

The big man fumbled in the pockets of his breeches. He handed Julie a quarter. "Here," he said. "You be a brave girl now, won't you?"

Julie ignored the quarter. She looked up into the man's eyes. "Please don't hurt my tree," she said.

The big man stood there helplessly. "Come, Julie," Mother said again. "We have to get out of the way so the men can work."

Julie accompanied her reluctantly. "We'll go in and have breakfast," Mother said. "We'll have scrambled eggs, just the way you like them."

"No!"

"Yes, Julie."

Julie cried, but Mother made her go in the house and sit at the kitchen table. The swishing sounds and the thuds of falling limbs kept coming through the open window, and the singing of saws. Mother scrambled eggs and made toast. She poured Julie a glass of milk. Julie listened to the saws. There was another saw now, a saw that sang in a loud rasping voice. Suddenly someone shouted "Timber!" and right after that there was a heavy sickening thud. Julie tried to run to the window, but Mother caught her in her arms and held her very close. "It's all right, darling," she said over and over. "It's all right. Don't cry, baby, don't cry."

But Julie cried and cried.

That night she dreamed of the tree. She dreamed of it the way it had been in winter, dark and forlorn, its branches charcoal tracings on somber metallic skies. She dreamed of it the way it had been in spring, with new buds filming its branches with pale green mist. But most of all she dreamed of it the way it had been in summer, a green cloud above her head as she sat in her swing, a lovely cloud with the wind sighing through it, with the sky a robin's egg blue all around it.

A little girl and a cloud of a tree adrift on the top of a hill.

The next day the landscape men came. Julie woke to the huffing and puffing of a giant crane. Looking out her window she saw the big claw of the crane sinking into the stump of the tree and the steel cables tightening. There was a thick ripping sound when the stump pulled loose, and a shower of dark earth. The stump came out of the ground like a grisly tooth, its roots trailing wildly below it. The crane swung the stump around and dropped it into a waiting dump truck and the truck thundered down the hill into the valley. Another dump truck backed up to the dark deep wound where the stump had been and disgorged its load of reddish Visge soil; then a bulldozer began to chug-chug, creeping back and forth across the yard like a mechanized triceratops.

Julie dressed slowly. Mother was in the kitchen, sitting at the white table looking at her hands. She looked up when Julie came in. "Good morning, darling," she said. "Did you have a nice sleep?"

"Will they plant a new tree?" Julie asked.

"No, Julie. They'll plant grass. The kind of grass that grows on Visge."

"But why, Mother?"

Mother looked down at her hands again. "Because they must, dear. Because that's the way they are. . . Shall I scramble you some eggs?"

"I'm not hungry," Julie said.

The bulldozer labored all morning. By noon the ground where the tree had stood was level, and after they ate their lunch the landscape men got long rakes from their pick-up truck and began raking the Visge soil. (Visge soil was restricted to hilltops where the danger of erosion was greatest.) They raked the soil till it was broken up into fine particles, then they planted Visge grass. They planted it the way the Visgi had instructed them, thickly so that the long roots would become entangled and lock the soil against the onslaughts of the rain and the wind. It was late afternoon when they finished, and they got into their truck and drove down the hill to the village.

That evening Julie sat on the porch steps, staring at the naked yard. She concentrated on the spot where the tree had stood, memorizing it with her eyes. She sat there long after the sun had set, watching the shadows creep up the hill. Mother sat behind her on the rocker. Around them in the coalescing darkness crickets began their chant, and from the marshes at the end of the valley came the dissonant singing of frogs. Fireflies began to flicker in the dark blurs of bushes on the borders of the yard.

Finally Mother said: "It's time for bed, Julie."

"All right, Mother."

"Would you like a glass of milk?"

"No, Mother."

"You must be very hungry. You hardly touched your supper."

"No, Mother. I'm not hungry at all. . . ."

The house was very still, and damp with night. Julie lay very quietly in her bed, pretending sleep. She lay there for a long while, till Mother's breathing became even and deep, then she got up and tiptoed down the stairs. She opened the door carefully and walked softly across the porch and down the steps. The moon was full and the naked yard was silver now.

Julie didn't think they could have noticed the little tree. She was sure that she was the only one in the world who knew about it. She got her diminutive shovel out of her sand pail and went around to the side of the house. The tree was still there, growing very close to the foundation, hugging the concrete blocks as though it was afraid. It was as big around as Julie's little finger, it was a foot high, and it had one leaf.

She dug it up tenderly, then she carried it around the house to the place where the big tree had been. She planted it carefully, patting the soil around its tendril of a trunk till it stood up straight in the moonlight. "There," she said when she had finished, "the yard looks much better now."

She tiptoed back to bed.

THE LOCAL administrator trudged up the hill early the next morning. Julie was already up

and she was watering the new tree with her red sprinkling can. Mother was still in bed.

The Visgi didn't trust Terrans. They didn't trust anybody. It was each Visgi administrator's responsibility to see to it that the inhabitants of the zone which he governed lived up to the letter of the Visgi edict, and the zones were small enough so that each administrator could personally check the work of his Terran landscape crew.

The local administrator was typical of his race, both mentally and physically. His face was flat and he had flat gray eyes. His ears grew flatly against the sides of his head. He was wearing a flat-topped kepi. When he saw the little tree he stopped dead on his flat feet.

He hated trees. He hated any plant that did not grow on Visge. It was a religious conditioned reflex. In the beginning the Prime Motivator had created Visge; then He had created the rest of the cosmos. He had intended that all of the planets should be like Visge, but during the hectic days of the Creation He had become careless and made them any old way. So as soon as the cosmos was completed He had created the Visgi and given them the Word to go forth in ships and set the other planets right.

Certainly if He had intended planets to have trees He would have put some on Visge too.

The local administrator strode indignantly across the newly seeded soil and towered ominously over the little tree. He reached down with one large self-righteous hand. His fingertips had almost touched the thin trunk before the Thought —as it was later designated in Visgi scripture—struck him. Then something else struck him. Julie's sprinkling can bounced off his shoulder, showering his face with water. "You leave my tree alone!" she said.

The local administrator hardly noticed the can or the water. He was down on his hands and knees, his face close to the ground, his eyes scrutinizing the soil. But his eyes only confirmed what his mind had known in the first place: a quantity of Visge soil was always distributed whenever sizeable trees were removed from hilltops.

He got slowly to his feet. His flat gray eyes had acquired a third dimension. He looked down at the little girl. "You planted this?" he asked, pointing to the tree.

"Yes," Julie said, "and don't you dare cut it down!"

The local administrator stared at her, the Thought sinking its fingers deeper and deeper into his Visgi brain. Abruptly he turned and began to run down the hill to the village. Julie had never seen a Visgi run before and she watched, enthralled. She was still watching when Mother called from the upstairs window and asked what was the matter. The local administrator had reached the bottom of the hill by then and was hurrying up the village street toward his headquarters.

It was not a matter for a mere local administrator to handle, so the first thing he did when he reached his headquarters was to call the Visgi resident governor and explain the nature of his insight. The governor regarded him skeptically at first, his precipitate cliff of

a face dark and foreboding on the telescreen; but finally he agreed to investigate the matter immediately and directed the local administrator to have everything in readiness for his official appearance.

The local administrator notified the officer of the guard without delay, and the officer of the guard assembled a ceremonial detail in dress scarlet. Shortly before noon the detail marched militarily up the hill, the local administrator in the lead. He was beginning to have misgivings by then, and the governor's awesome face haunted him. Perhaps he had acted too hastily. Perhaps he had divined a religious motif where none existed at all. Certainly the Prime Motivator's ways were complex, but did not their very complexity make them all the more difficult of interpretation? And did local administrators have any business trying to interpret them at all?

By the time they reached the top of the hill the local administrator was perspiring, but not from the exertion of the climb. However, he surveyed the scene with outward calm while the officer of the guard aligned the detail in two parallel scarlet rows along the edge of the seeded area.

Julie and her mother were standing together on the porch steps. The little tree was standing all alone in the middle of the yard, its single leaf fluttering valiantly in the summer wind. Suddenly a shadow drifted across the hill, and the local administrator looked up. The swallow-shape of the governor's ship showed brightly in the blue sky and even as he watched it began to descend. "Quickly!" he shouted to the officer of the guard. "Obtain the Terran child and stand her by the tree so that the governor can see them both together!"

At first Julie was frightened, and Mother seemed frightened too. But after the officer of the guard had explained what was about to take place, Mother said it would be all right for Julie to go with him. Mother's eyes were very bright, Julie thought; they had not been that bright for a long time—not since Father had gone away in the silver ship and never returned. Julie liked to see Mother's eyes that way and she skipped happily along beside the big officer of the guard.

She stood by the little tree while the big swallow-ship came down, and she watched while the Visgi with the awesome cliff of a face descended the spiral landing stairs. His entourage followed. There were so many of them that Julie thought they would never stop emerging from the ship, but finally they did. They formed in a group behind the governor, talking and waving their arms. They seemed terribly excited over something.

The governor talked for awhile with the local administrator. Then he bent down and scooped up a handful of reddish soil and examined it minutely. He looked over at Julie and the tree, his face still like a cliff, but a cliff with the first rays of the morning sun just beginning to illuminate it. He walked across the yard to the tree. The local administrator walked beside him and the governor's entourage followed.

"See how sturdy it is," the local administrator said. "How green its foliage."

"As green as the hills of Visge," the governor said.

"Only on Visge soil could a tree grow like that."

"Truly the ways of the Prime Motivator are inscrutable!"

For Visge soil was Visge soil, no matter where it happened to be, and whatever grew on Visge soil automatically became native to Visge. The Prime Motivator's ways were devious, but they were beyond questioning by mortals, even Visgi mortals. If He had chosen such an indirect method of bringing trees to the Model, there was undoubtedly a sound motivation behind his reasoning. Henceforth, trees would be planted on Visge and be permitted to grow throughout the remainder of the cosmos.

The governor's entourage could contain themselves no longer. They edged around the governor and the local administrator, jostling each other in their eagerness to see the first Visge maple. But the governor did not reprimand them. The governor was staring at Julie. His face was no longer awesome—it was filled with awe instead. For it had occurred to him that he was standing face to face with the first Visge saint. • • •

WORTH CITING

SHOULD the world go to war again, no matter how terrible the conflict may be, man's cultural and scientific heritage will be protected from destruction by a universally recognized symbol— a blue and white shield painted on buildings and objects as a sort of "hands off" sign to enemy bombers.

All the great nations of the world, fifty of them, including Soviet Russia and her satellite countries, recently signed a solemn pledge to respect this symbol. There are to be no exceptions made on the grounds of military necessity or any other practical reason. And the Russian spokesman stands on record that no possible consideration would, under any circumstances, allow their armed forces to damage the cultural property of any other power that has signed the treaty.

It is a great step for so many of the world's leading powers to come to an agreement about what should be done to protect man's heritage, thereby achieving a step forward in relieving *some* of the barbarity of war.

Our citation this month goes to France and Italy, and particularly UNESCO for their initiative, and for the results gained at the recent meeting at the Hague.


ORBAN

Illustrated by Paul Orban

THE MEN OF BORU

BY JACK A. NELSON

There is always a breed immune to mass hypnosis, and to them falls the duty of rebellion . . . The story, by a Brigham Young University senior, that won the second award of $500 in IF's College Science Fiction Contest

A SWIRL of dust licked at the grass sandals of the men standing on the hill. There were eight men, and they stood looking west over the burned, gutted land that lay barren before them—barren except for a series of huge mounds that lay in a depression far out from the hills on the rocky plains.

"Do you still think we can make it?" asked a stocky man with a livid scar that ran from his upper lip to his forehead. "I for one would rather live alone and meagerly than not live at all."

The speaker received a stern glance from a tall hawk-nosed man wearing a finely-worked leather belt, apparently a symbol of leadership.

"We have already agreed, remember, Franz? We have to succeed or disappear off the face of the Earth. You may turn back if you wish. We are going on."

Franz scowled, rubbed his scar and contemplated the mounds in the distance. "You forget I have lived there. You have not. Well, maybe to be a slave is not so bad after all. Or to die."

"If we die we will not go alone," said Sten, the leader. He turned to the others. "Let's go. It will be dark soon."

The men moved single-file down through the hills without speaking.

As it grew dark they could feel the heat radiate from the sand. They felt the heat press against them and silently praised Sten's wisdom in waiting for the cold time of year before making the attempt. They wore a tunic of coarse-woven cloth that hung loose from their shoulders, and even that single garment was too warm here. They moved in silence, Sten in the lead, followed by his brother, Johnathon, a smaller man with wide shoulders and a quick smile.

A gibbous moon was showing over the mountains when they stopped. Solemnly they gathered in a circle.

"We will separate now," Sten spoke softly. "Franz and Johnathon and Karl and I will enter from the south. Bradley, you and the others will find the way in from the north. You can find the place. If we're not back at our last camp by morning of the third day, go on without us. You have the map where the valley lies?"

The leader of the other group nodded.

"Then hurry. Until three days, then. Remember, the only hope lies in us. Some of us have to make it!" The men separated with only a wave of farewell and the two groups moved in opposite directions across the hot sands.

Clouds covered the moon and it grew darker as the four men approached the edge of the mounds. An ominous sense of foreboding fell over them. It seemed they could feel the vibration of the city that lay beneath them. Beneath them lay life—stilted, twisted, enslaved life, but life nevertheless.

"Are you sure they don't post a guard?" Johnathon asked.

"Against what, the Root-Diggers?" Franz spat contemptuously. "No, they are secure. They need fear nothing."

It was another hour before they found the tunnel and entered in single file. Groping their way through the darkness, they finally felt a solid wall rise in front of them. Franz made his way to the left, feeling his way along the wall until he found a large box in a niche in the rock.

"It's here! It's still here after all."

"Good," Sten said. "All right, everybody up against the wall and push."

Karl, the biggest of the men, laughed as he eased his bulk against the obstruction. "It would be real sport," he said, "to move this wall and find one of their Steel-heads waiting for us."

Franz snickered. "It wouldn't be sport long, my friend. They're trained from birth to be trigger-happy and there's nothing anyone in Panamia fears more than the outside, or anything connected with it. And we're outsiders."

The wall suddenly gave before them and they moved into a half-darkened room. Carefully, in a sort of frozen silence, they moved the wall back into place. The box had contained city clothes; and now the men worked swiftly in the semi-darkness. When they were ready Franz walked up and down making final adjustments in each of their uniforms. As he finished, Sten laid his hand on his shoulder. "Franz, you'll take over now. You know what everything is like here. We're placing ourselves in your hands."

Franz shrugged his shoulders almost as if he were disinterested in the drama in which they were taking part. His eyes searched the faces of the men.

"So you want women, eh? You want to preserve our race—the glorious animal, Man. Ha! I ask you to ponder for a moment, before it is too late, whether this race is worth preserving. Men have been furthering the race for milleniums and what has it come to? Consider if the earth wouldn't prosper better without Man."

The men shifted uneasily. "Forget all that, Franz," Sten snapped. "You know there must be an answer somewhere. This is our only chance. Everything can't be dead."

Franz looked away. "As you wish. If you're determined to go through with it, then let's start. But first, remember that you're Steel-heads, bred and raised with no other thought than to carry out the will of Him—The Leader. His will is your will. You do not think, you only act according to orders. Don't look intelligent, that is suspect. Just stare straight ahead and do what I tell you—or what any other officer might tell you, for that matter. Remember, don't question anything! Just follow orders."

He laid his hand on the door that led to the city, hesitated for a brief instant, then swung it open. As the men entered, walking stiffly with eyes coldly searching for the unknown, they were hit by a high-pitched whine that filled the corridor and seemed to pierce deep within them. The three men covered their ears with their hands and cringed. But Franz stood straight and moved his head around to catch the noise from all angles. His mouth opened and closed slowly as if he were trying to pull the shrill noise deep within him. Finally he shook his head, as a dog shakes off water, and gathered command of himself.

"It is The Leader," he said in a loud voice to overcome the whine. "Soon you will not notice it. It is everywhere."

Sten removed his hands from his ears and felt the noise creep over him. He shuddered, and felt beads of sweat form on his forehead as the sound seemed to gnaw at his consciousness. Soon the others were able to bear the noise with their ears uncovered, but they felt restless and uneasy.

"We're lucky not to have been seen," said Franz. "Come on."

They moved down the corridor in military formation, Franz leading and the others following dumbly. The corridor was small and well-lighted. Doors opened into cubicles every few feet, and the wall was lined with wide view-screens that stared out, like probing and sullen eyes. The men kept their eyes straight ahead, but occasionally they flicked a glance sideways at the people that were passing them in both directions. They halted as they reached the main corridor.

A loud buzzer rose above the whine, and people emerged from the doors along the walls and passed them in silence. Eyes fixed on the ground. A few talked as they went by, but none noticed the soldiers standing at the edge of the corridor.

Three girls, walking in silence, paused before the men for a brief instant, then passed on. Sten felt his

eyes following the girls hungrily. Catching himself, he pulled back to attention and nudged his brother at his side. "Steel-head, Johnathon, remember?" Johnathon again looked straight ahead and stifled the beginnings of a grin that tugged at the corners of his mouth. Franz also stared after the girls, but his eyes wore an amused expression, rather than the longing look of the other men.

Franz spat out a curt order and they began to march down the corridor again, the crowd making room for them automatically. Everywhere posters glared at them from the walls. Some pictured a huge eye that stared out with the words, "The Leader is watching." Others showed the smiling faces of a throng of people. Underneath, in scarlet lettering was emblazoned: "Panamia and The Leader March On—PROGRESS."

For an hour they marched through the city, ignored by the people and apparently unaware of all that was happening around them. They passed thousands of men and women, a milling mass, each immersed in a grim stupor. Where the main corridors intersected they entered great assembly places where huge view-screens were set up. They were always turned on.

A shrill emotional voice blared out a constant stream of propaganda. "People of Panamia, unite, work! The Root-Diggers must be repulsed! For the glory of The Leader, for the glory of Panamia, we must accomplish our utmost. We must give our all!"

"For The Leader! For Panamia!" the people shouted, rising momentarily from their dull world, their eyes glazed with emotion. Banners beneath the screens announced in large crimson letters: Service to The Leader is glory to yourself and Panamia.

The soldiers stood watching tight-lipped. Franz's nostrils quivered as the tumult of the demonstration thundered about them. His face took on an eager look as he watched the people shouting in exaltation, a curt movement of Sten's hand brought him back to the task at hand. He gave a short barked order and the group moved on.

They had just reached an intersection and were standing awaiting directions from Franz when a shout rang out. "Stop, Provost. You! What are you doing here?" A short, ruddy-faced officer in thick-lensed glasses strode up the corridor toward them, scowling. Sten cautiously moved his head around to face the danger.

"Sten, attention! He'll know," Franz hissed from the side of his mouth.

Sten snapped back to attention, staring straight ahead.

The squat officer confronted Franz. "Who assigned you to this block?"

Franz saluted. "Security sent us to check on a disturbance near here."

The officer's eyes narrowed. "Disturbance? I have heard of no disturbance."

"That is of no matter. We were sent."

The squat officer stared hard at Franz. "Hmm, I see. And what is your rank number, Provost?"

Franz told him a number that he remembered.

The officer looked them over searchingly, his lower lip protruding in obvious contempt. "Very well, carry on. But Provost, I'll remember you!" He stood watching as they marched away, rubbing his chin thoughtfully with the palm of his hand.

Sten felt a sickening void in his stomach as they marched past the officer. Surely the man suspected. Would it all end right here, before they even had a chance to get started? He felt the reassuring pressure of the knife inside his belt, the one weapon that Franz had advised, and resolved that, if it should be necessary, their lives would be sold dearly.

After a while they turned into a series of side passage-ways and Franz stopped before the door to one of the cubicles. The corridor was empty, and they were out of range of the view-screens. Johnathon relaxed against the wall and sighed. "What a sight. I never expected it to be as bad as this. Did you notice the look in most of their eyes? It's a dull, glazed almost dead look. They're nothing more than beaten animals."

"Easy," Franz cautioned, "wait till we get inside."

He pressed the button on the door. A woman's voice came through the door panel. "What do you want?"

"Open. In the name of The Leader. It is a Provost."

Slowly the door swung open and the men saw a small brunette standing before them. "What do you want?" she repeated in the same monotone.

"Interrogation!" Franz pushed his way inside. The others followed.

The woman stood against the wall cowering from the soldiers. Franz searched around the apartment carefully, then confronted the woman.

"Do you not know me?"

The woman stared into his eyes. Finally she said, "No, no, I don't know you."

"Do you not remember Jeannine? The girl you worked with? Remember the plans? The plans to leave here and go outside to build a new life?"

Her chin quivered as she tried to speak. "Yes, now I remember. You are Franz, Jeannine's lover. That was before The Leader found out and . . . and sent Jeannine away. You disappeared, I thought you had been sent away, too. It is hard to remember. You know we are ordered to forget the past. What . . . what do you want of me?"

Franz motioned to the men with him, "We are from the outside."

The woman recoiled with a gasp and backed even closer to the wall. "Root-Diggers!"

Sten stepped forward. "No, we're not Root-Diggers. We're the men of Boru. We've come to lead you and others like you to freedom."

"Barbarians!" the woman snarled. "You're planning to overthrow Panamia!" She lunged wildly at the switch that would have turned on her view-screen. Sten caught her and pushed her back against the wall. The woman screamed once before Sten slapped her, then she sobbed into her hands.

"Shut up!" Sten commanded. "We mean no harm. We have come only to lead out to freedom those who wish to go."

"You are against The Leader."

Franz laughed. "Let's say we hope to outwit him."

The woman drew back. "That is impossible, he cannot be outwitted. The Leader is all."

Johnathon looked up from the corner where he was examining the view-screen. "That may be, but we intend to have a try at it."

Karl, who had been leaning against the door, suddenly sat down on a hard bench against the wall. "Damn," he complained, "this whining noise gives me a headache."

The woman allowed herself a moment of curiosity. "What whining noise? There is no noise."

"They are conditioned to it," Franz spoke to Sten. "It's a part of their lives. We never hear the pounding of our hearts."

The woman sat down on the bench and buried her face in her hands.

"Tell me," Sten said, "Has she no husband?"

"Husband? In Panamia there is no such thing. Everyone lives alone. When they reach maturity, they are summoned to a meeting with The Leader, and mated with him or one of his representatives. That is all. The child is raised by The Leader's nurses. It is all a very impersonal business. They never speak of it."

The lights in the apartment dimmed. Immediately the woman rose and walked mechanically to a bunk set in the wall, curled up, and was asleep almost before the men could notice her.

"What was that?"

"Just The Leader's signal that it is time for sleep," Franz said. "Did you see how she obeyed?"

"They live like clockwork," Sten muttered.

Several hours later the lights came on again. The woman rose without speaking to the men, who had slept on the floor, and sat down at the table to eat.

"Hey, don't we get invited to breakfast?" asked Karl, sitting up in the corner.

Johnathon sniffed the air. "From the smell of it I don't think I want any."

The woman looked up annoyed. "When are you going to leave? I have to go to my work. It's important to Panamia." This last was said with a fierce pride.

"Will she be missed?" Sten asked Franz.

"Yes, but they allow one day away for illness. The second day they check."

"Don't worry," Sten told the woman. "We will leave when we have what we came for."

"And what is that?"

"Freedom."

"But you say freedom is outside. Why didn't you stay?"

"Because there must be freedom for our children—and for their children."

"You have children?" she looked interested.

"We shall soon."

"Yes," she said scornfully, "freedom for the children of the Root-Diggers. But you come to Panamia for that freedom!"

"We told you we're not Root-Diggers," Johnathon said. "You can hardly compare us with that tribe of poor devils. But even their state is better than living like a slave in Panamia."

The woman laughed bitterly. "If you are not Root-Diggers, why do you come to hurt Panamia and The Leader? It is because of you people that we are warred upon and must always sacrifice."

Franz rose and faced the woman. "Kathryn, you're wrong," he said. "The Root-Diggers are not warring with Panamia. They are only men and women like ourselves who have been banned from Panamia. The Leader had them purged before they were forced outside so that they are sterile and have only half their wits. They have to live like animals, eating roots and berries and bugs and insects. Those are the Root-Diggers your Leader uses to frighten you."

The woman clenched her fists until the knuckles showed white.

"You lie!" she screamed. "The Leader tells the truth."

"No, it's not a lie. We have all seen them," Sten said quietly.

The men sat in silence while the woman wept.

Karl reached out and ate a bit of the woman's food. "What sort of gruel is this stuff, I wonder. It needs salt."

"Salt," commented Franz, "is the greatest luxury in the city. Because of the Root-Diggers, you know. There is a grave shortage. The people crave it more than anything else and will go to any lengths to get an extra ration of it."

Sten shook his head. "And they blame it on those poor beasts outside." He rose and began nervously pacing the floor. "Franz, we have to move quickly. The others will leave if we don't meet them on time. Do you think she will go with us? Will she help us get others?"

"Who knows about her?" Franz shrugged. "I know some others here who may want to go. We can see them now, but someone has to stay here with Kathryn."

Sten watched the hungry eyes of Karl and Johnathon as they looked at the now silent woman, sitting dejectedly at the table.

"I'll stay," he said.

The two men moved reluctantly as they followed Franz from the room. Sten sat in silence after they were gone, watching the woman, who was staring sullenly at the table top. He felt the pressure of the room close in on him, and wished he were back in the openness of the mountains. With a start he realized that he no longer noticed the whine unless he listened for it, and that the sound somehow created a feeling of warmth within him. He rose, slammed his fist into his open palm, and shook the woman vigorously.

"Kathryn, how would you like to leave here? Go to a new land, a valley that is still green and fertile? There you could look up at the sky and live and feel free—and raise your children free."

Kathryn looked up dumbfounded. "I couldn't leave here. What would I do? Don't you know that this is real freedom? Here where we have The Leader to take care of everything for us."

"No! This is bondage. Being told when to sleep and when to eat and what to eat, and slaving for a grain of salt."

"Do you have salt?" she seemed incredulous.

"Out there, Kathryn, you can have as much as you want. Believe me, this is no good. Where is the purpose of your life? Man wasn't born to be a slave to anyone or anything, but to build his own life. You're a woman, meant to have children, to mother them, and teach them, and love them, doesn't that mean anything to you?"

"I . . . I don't know. I've never thought about it before."

"You must think about it! Would you have it all end here? Living always at the command of an unknown voice?"

The woman's eyes searched the room, as if seeking some sign of reassurance. "But . . . I've never thought of any other kind of life. I'm happy here!"

"Happy? Being a living robot? You've never touched real happiness. Think, Kathryn. Think hard about this. It's the most important thing in the world."

She turned from the man and looked at the wall.

IT WAS several hours before Franz and the others returned. Kathryn was in her bunk, her eyes shut, an instrument clamped to her temples.

Franz breathed a sigh of relief as the door closed behind them. "Whew, that's not good for the nerves! Every time we turned a corner we ran into that officer we met yesterday. I think he's watching us."

"Sten," Johnathon said excitedly, "you should have gone with us. Most of the people wouldn't even listen, but there was a girl who was interested. I've never seen anything like her, Sten. She's so soft and small and . . ."

Karl interrupted enthusiastically. "And she has a friend that's coming with her! Her name's Stella—I touched her and she's smoother than anything I ever felt. I . . . I think she may go with us."

Sten and Franz stood soberly watching the child-like joy of the two men, a new joy, something unquenchable that burned deep within them.

"These people are mindless fools," Franz snorted. "Most of them didn't even remember me. The Leader's forgetting treatments are pretty strong stuff, I guess. 'The Past is Forgotten, the Future is the Glory of The Leader', that's the motto."

"No wonder the poor souls seem mindless," said Sten soberly. "But what about the girls they're so happy about?" he motioned to the table where Karl and Johnathon were glibly comparing notes on the girls they had met.

"They didn't remember me either, but they seemed to be able to think independently. They also thought of some others who might be interested. What will we do if we get too many?"

"We'll take anyone who wants to go. At least, as many as we can. The important thing is that we get enough to start again outside." He pointed to the nook where Kathryn was still curled in the foetal position.

"What's Kathryn doing, Franz? She's been like that for an hour."

Franz's eyes held a look of pity. "It is the one recreation that The Leader allows them. It's hard to explain exactly what it is, but you are carried away by it. It's something like a drug, yet it's mechanical. Something like music or sweet voices washes over you and you dream. For a time, you actually live."

Sten shuddered. "The only reality is dreams then, eh? Tell me, are these people actually capable of love?"

"It's completely foreign to them, but they *are* human beings, and I suppose love is innate in us all. I found it here once, you know." Sten looked away as Franz stared hard at the floor.

The tension was broken by a knock at the door, and three women followed by a single man entered. When they had exchanged greetings and been seated, Sten stood up in the middle of the room. Kathryn, who had wakened from her dreaming, sat watching wide-eyed.

"Franz has told you why we are

here. We believe the human race is doomed to slavery and annihilation unless some of us break away. My father left us a treasure of books that his father before him had salvaged from the holocaust. They tell of a way of life before the land was ravaged. It was a better way, believe me. We men have lived in Boru, a small valley back in the hills. But now we're leaving there. Long ago our father told us of a green valley to the east, high in the mountains where things grow as they did in the time before all this. We have a map; and we're going there to find freedom. We need you to keep this freedom."

A hush of silence held the room for a moment, and was broken finally by the man who had come with the three girls. "Will The Leader be there?"

Sten stared hard at the man. "You will be your own leader. Can't you see that? Your Leader is only an illusion! There is no leader but yourself, and perhaps the God in my father's books."

The man sat a moment, then shook his head. "Not without The Leader—I couldn't face it."

"You have your choice," Franz said coldly.

The man rose and grasped the arm of the tall woman that had come in with him. "Then we have no business with you," he said as he led the woman to the door. The woman looked back hopelessly as she followed the man out.

"And you?" Sten asked the remaining women.

The blonde girl smiled and took hold of Johnathon's arm. "I will go."

They all turned to the shy-looking girl who sat next to Karl. She looked hard at the man next to her before speaking. "Yes, me too," she almost whispered.

"Good. That's two. Kathryn, what about you?"

She looked Sten squarely in the eye. "I've decided to stay. Why should I leave this good life to be devoured by beasts or Root-Diggers on the outside?"

Sten sighed. "Then we need more. And quickly. We must leave by tomorrow night at the latest."

After the women had been escorted to their cubicles, Franz led the men through the corridors toward the center of the city. In each great square they passed squads of soldiers dressed like themselves, staring straight ahead in the same unconscious way.

When they paused in the middle of a hall to plan their strategy, Karl turned to Franz. "Something's bothering me, Franz. Just where do they put their dead? We haven't passed anything like a graveyard."

Franz laughed. "Death is rare in Panamia, my friend. When a person grows old or very ill, he is summoned by The Leader. He never comes back. I never knew anyone to come back. As far as any one knows they're still at the headquarters of The Leader."

A huge cavern-like room loomed ahead where all the main passageways intersected. In the middle of the square sat a great round building, forbidding, yet beautiful. Doors opened on all sides leading into the great domed structure.

"And this is where The Leader dwells. Nice, eh?" Franz said.

The men stood looking at the huge dome until it seemed to them

that they were being noticed, then they passed on through the square. At the far edge, Franz suddenly stiffened. "Walk fast. Hurry," he muttered. Sten quickened his pace to keep up with the others, then felt a chill run over him as he saw the officer with the thick glasses watching them from a window in the dome.

"I wonder what would happen," Karl muttered, "if a guy could get into that dome for a few minutes to play with the machinery?"

"Perhaps it could be done," Franz replied. "But it would be your last act on earth. Nevertheless, it would be interesting to see what would happen to the people if the machinery stopped."

Sten noted the thoughtful expression on Franz's face. The man's eyes searched the corridor, where, by listening carefully, he could hear the high whine of The Leader.

Kathryn was home from her job when they returned.

"Well, how is your enlistment program coming?" she asked when they entered.

Sten looked at her and felt his stomach pull tight within him.

"Not so well," Franz replied. "Those I knew when I was here have forgotten what they believed then or are gone. It's too dangerous to speak to many new ones."

"There aren't many fools in Panamia," she retorted.

Johnathon grasped Sten's arm entreatingly. "Sten, come with us, we'll see the girls. They have friends who may be interested. We only have a few more hours, let's not waste them."

"No, you go on. I'll stay here for a while."

"As for me," Franz said, rising, "I'll go with Karl and Johnathon. I have to check on something."

Kathryn sat at the table watching Sten as the others left. He looked away from her eyes. "You'll be alone again soon. Tell me, don't you ever get lonesome all by yourself all the time?"

"I have The Leader. He is always near."

"You have nothing then. Don't you realize it is nothing?" He rose and walked to the nook where her recreation machine sat on a shelf. Grasping it with both hands, he wrenched it from the wall and let it fall to the floor, smashed. She stared at it dumbly.

"See! There is your Leader—a smashed machine!" Sten shouted. He moved to her side and leaned close to her. "Kathryn, you're a woman. You're not stone! Don't you feel anything at all?" Her neck turned slowly red as he pulled her toward him.

"No, I feel nothing," she said woodenly. "Is this supposed to be something special, the touch of a man?"

"It can be." He put his face into her hair. Slowly he pulled her head back and looked into her eyes, then he kissed her, hard.

She fought free of him and began pacing back and forth. "I don't know. I don't know. Perhaps you are right, but I don't know if I can do it."

"Here, what's this?" Johnathon entered smiling. "Has there been a change of heart? Good. Then we can leave. Franz here tells me he found the lady he went looking for too."

Kathryn looked again at the

dream machine lying on the floor, then at Sten. She seemed to gather up strength for a brief moment. "I'll go," she whispered.

"I'm glad," Sten said. "We can leave right away then. What about your girl, Franz?"

"She is waiting for me," Franz smiled. "I made sure of that. But it is a long way. Give me an hour. Better yet, I'll meet you at the tunnel in an hour and a half."

Franz laid his hand on Sten's shoulder and spoke in a low voice. "If I'm not there in an hour and a half, go on. I'll catch you outside." He squeezed Sten's shoulder. "Be careful, my friend. And good luck."

Sten looked at the door for an instant after Franz had gone. "We must be careful. We don't want to be noticed."

"Soon there will be nobody to notice us," Johnathon said exuberantly. "We can yell and run and laugh, and there will be nobody to care, not even The Leader."

A silence fell over the room as he mentioned the name. Sten broke it to issue an order for everyone to gather his things. Kathryn gazed longingly round the room as the others moved out. She bit her lip with the effort it took to keep from pulling back as Sten led her from the room.

They passed through the corridors without incident, stopping when they reached the intersection that led to the tunnel. They stood there at the edge of the intersection, anxiously awaiting Franz.

Sten stiffened as he saw the officer that had stopped them before approaching down the corridor, followed by a soldier. The men snapped to attention and stood as if guarding the women.

The officer swaggered up to Sten. "Here, what are you doing with these women?" He studied Sten's face. "Don't I know you? Ah yes, you were with that scar-faced provost that's been snooping around lately. Your actions are most out of the ordinary. I think we had better go along to The Leader's headquarters and check on this."

"We have other orders," Sten stated flatly.

"What! You dare disobey!"

"We have orders. But look, here comes our officer now. Ask him."

As the officer turned, Sten lunged forward and struck him a blow on the neck, knocking him to the floor. Instantly he fell on top of him. There was a fierce struggle as the officer tried to reach inside his tunic for his weapon. Suddenly the officer gasped. When his body was still, Sten slowly withdrew his knife from the man's chest. The soldier stood staring stupidly at his fallen officer until Karl clubbed him from behind.

"We've got to get out of here," panted Sten.

"Franz! What about Franz?"

"I don't know. He should be here by now. But he said he'd catch us."

As they fled down the corridor, the view-screens along the way were blaring the usual message of the glory of The Leader. Abruptly the voice died away, the whine faded to a diminishing hum, and there was an increasing stillness. The whine stopped and the corridors were silent. The women, terror stricken by the stillness, screamed and fell writhing on the floor. Shouts filled the corridors as panicked throngs left without the sym-

bols of The Leader ran from their cubicles in terror.

"What is it?" Karl shouted above the din, shaking his head to clear it.

"The whining noise. It stopped." Sten gasped. "Franz! It's Franz! He must have gotten in and wrecked the dynamos." He pulled Kathryn to her feet and shook her to stop her sobbing.

Then, as suddenly as it had stopped, the whine began again, slowly gaining momentum until it reached its former pitch. With this, the sobs of the women subsided and calmness slowly crept back through the corridors.

"It's started again," Karl began running toward the tunnel. "They must have spare dynamos. Poor Franz, all for nothing."

Again the view-speakers were blaring, this time warning the people that a saboteur had made an attempt to destroy The Leader.

The women were gasping for breath when they reached the door to the tunnel. Sten plunged through the door, hurrying the others in after him, and then threw his weight against the wall. With three men pushing against it, the wall gave way and they entered the tunnel.

It was night outside. They walked slowly, consoling the women, who were sobbing again at the loss of the shrill god they had known for so long. The heat that radiated from the sand was suffocating.

"We have to hurry on," Sten told the women. "We can't be caught in this sand tomorrow. There are foothills ahead where we can rest."

It was morning when the men, carrying the women, entered a rocky canyon and wearily slumped down in the shade of a cliff. The women barely moved, sleeping the sleep of the exhausted.

"Lord, I'm tired," Karl groaned.

Sten laughed. "At least we accomplished our mission. Except . . . for Franz."

The men sat silent.

"Maybe Franz fulfilled his purpose, too," Karl said. "That dynamo was the woman he had waiting for him. He probably got a lot of satisfaction out of knowing that for one minute, at least, Panamia was without The Leader."

The other men didn't answer. They were asleep.

They woke as the sun was going down. Sten climbed the cliffs to look out over the desert in search of the other party. He returned dejected.

"They're half a day overdue now," he said. "Our food's low so we'll have to go on and hope they catch up later. Bradley has another map."

He noticed the women sitting against the base of the cliff, terrified.

"What's wrong?"

Kathryn looked around them at the barren ground and at the clear sky stretching away to the horizon. "What's wrong? Look at this. I feel like I'm floating in air. There's nothing over us!"

The men laughed.

"Don't laugh," Marta wailed. "It's a horrible feeling. This emptiness is killing me. Sing, shout, do something! But let's not have such silence!"

Stella, the shy girl with the mouse-colored hair, began crying again. Karl gently pulled her head over on his shoulder.

THEY LEFT at dark, winding up through the canyon and back into the hills where the scrub trees began. All night they traveled, tearing their flesh on the jagged limbs and rocks in the darkness. Only, the occasional muffled sob of the women broke the stillness.

In the morning they rested in a small valley where a trickle of water coarsed through its head. They rested under a pinion tree, the women receiving some solace from the flimsy natural roof over their heads.

Sten slept three hours, then rose without waking the others and scouted ahead. He consulted his map and climbed a tall hill to search for the mountain range they were seeking.

When he returned, Johnathon and Marta were gone.

"He said he had to go," Karl explained. "Marta couldn't take this, and he wouldn't go on without her. He said he knew he couldn't make you understand. And asked you to take care of your father's books. He hoped that someday he could join us in the valley."

"Can he stand living there?" Sten asked glumly.

"Franz said once that it had been done before. I guess they don't bother you much if you obey."

Sten squatted on his heels and stared out over the desert where Johnathon and Marta had disappeared, sending them a silent God-speed.

When they started out that afternoon, Stella was still sobbing. Karl tried to console her, but at every new turn they took, there was fresh terror in her eyes. Kathryn walked along with her, helping her over the rough places and trying to cheer her, but she couldn't conceal her own terror as she stared ahead at the vast distances.

They rested at sundown. While the men were bringing water, Stella rose and started back down the hillside. Kathryn was thrown aside when she tried to stop her, and soon the girl was running madly down the hill, shrieking and sobbing wildly.

Karl dropped his pack and ran after her, begging her to stop. But she ran on, heedless of obstacles. There was a sudden sharp wail of terror as she ran blindly off the edge of a cliff.

Sten met Karl carrying her crushed body back up the hill. Karl hugged the dead girl close to him and did not look at the other man.

That night, for the first time, they built a fire. Karl sat grief-stricken through most of the night staring into the flames. Kathryn sat leaning against Sten during the evening, fascinated by the flickering of the fire—the first she had ever seen.

At dawn Sten awoke and nudged Kathryn. A grey squirrel was scolding them from a limb above. He laughed at Kathryn's wide-eyed surprise at the antics of the little animal.

They rose without waking Karl, who was sleeping heavily in front of the burned-out fire, and walked down to the edge of the creek. A chipmunk scampered away in front of them and a blue-jay screeched from a near-by tree. A meadow-lark trilled its fine notes somewhere down the creek. They sat here at the edge of the creek-bank and leaned back on the grass.

Kathryn stared to the west where

a line of white clouds were playing along the horizon. "You know something, Sten? I don't notice the silence so much anymore, and the distance doesn't worry me now, either. I guess maybe there's something here after all."

Sten pulled her close and smelled the good smell of green grass beneath them.

The next afternoon they had nearly reached the top of the pass. They were just below timber-line. Finally, looking to the east, they saw a great empty space, with a tall mountain range rising jagged on the other side.

"That's it," Sten exulted. "Fifty miles wide, and in the top of the mountains."

"I'm glad," Karl said. "But you're on your own now, Sten. I'm going back."

"Back? To Panamia?"

"Yes. There's nothing for me here. Perhaps back there I can find something. Maybe I can take up where Franz left off. I don't know. There must be others who are not afraid of life."

Silently Sten offered his hand. Karl squeezed it hard and looked into his eyes. "Good luck to you in your valley. I know where it is now, maybe some day I can return. And perhaps Bradley and the others will make it yet. Until another day then . . ." he turned abruptly, and started back down the mountain.

Sten and Kathryn, hand in hand, watched him disappear through the trees. When they could no longer see him, they lifted their eyes to the hidden valley. They saw, even from this distance, the lakes that lay scattered through it, and the winding lines of cottonwoods that grew along the rivers, and the plains where the green and grey of the sagebrush blended. Sten breathed deeply of the crisp air and let his breath escape in a low whistle.

"It was worth it, wasn't it? It's ours. And we won't always be alone, Kathryn. Others will come. Man is not dead. It may take a while, but others will come."

The woman slipped her arm around the man's waist and they stood for a time looking out over the valley. Then they started the long descent. • • •

DOUBLE TAKE

The Chicago Time Capsule was indeed an elaborate production. The greatest of American acting, writing and electronics went into its story of Man, 1960, for future historians. And, centuries later, it was dutifully recovered. Only . . .

BY WILSON PARKS GRIFFITH

WHEN the Travelers from Outer Space dug into the pile of moldering rock, they found the metal capsule their senses had told them was there. Battered and corroded though it was, the shadow vibrations showed that it had once been smooth and shiny. As smooth, shiny and impervious to wear as Twentieth Century Earth technology could make it.

At the time the Mayor of Chicago had ceremoniously tossed a handful of lake sand into the hole, had his picture taken smiling against the skyline, and had moved away to let the workmen fill the hole with cement and place the marker, the Time Capsule had been bright with the hopes of civilization sending its proud present into the uncertain future.

Time passed . . .

The tiny radio transmitter in the capsule began throwing out its wide signal at the exact instant planned for it many centuries before. No one heard. Eventually, the tiny powerful batteries gave out. The signal died.

Time passed . . .

When the Travelers from Outer Space took the capsule back to their ship and opened it, they found the contents in perfect order. Even the reel of magnetic tape had not succumbed to the centuries.

In due course, the Travelers examined the tape, divined its purpose, and constructed a machine that would play back the recording.

Out of a million evolutionary possibilities in a Universe of planets, the chances of two intelligent races being even roughly similar are astronomically remote.

A being develops sense organs for no other reason than to make it aware of its environment. The simplest primitive being's awareness of its environment centers around food, its means of survival. It develops organs and appendages that will enable it to ferret out, obtain and ingest its food. As the food differs, so, then, does the eater.

The Travelers had no ears or eyes, as such. They had other organs for other purposes, but the net result was that they "saw" and "heard" quite as well—even better—than Earthmen.

Perhaps that explains why the Travelers gleaned so much more from the tape recording in the Twentieth Century capsule than its originators had planned or intended.

Not just any radio show could be placed in the Time Capsule. What picture of contemporary 1960 mankind would the men of the future derive from a soap opera? A news analysis? Or top comedy show? Certainly not a flattering one, and so, reasoned the brass in charge of the project, not a true one.

No, the only answer was to produce a special documentary program, painting on a broad canvas the glories that were the common man's birthright in an enlightened democracy. As July 4th was only a month away, the idea was a natural. The program would be carried simultaneously on four networks, then placed in the Time Capsule so that historians of the future would have something solid on which to base their conclusions.

A famous poet-radio writer was hired to write the script. Hollywood's greatest young male star donated his services (with much attendant publicity) as narrator. A self-acknowledge genius who directed radio shows for a living condescended to lend his talents to the production. Numerous other actors, musicians, technicians and assistants were hired . . . none well-known, but all quite competent.

July 4th, the big day, arrived. The cast went into rehearsal early in the morning. By the second complete run-through, just before the break for lunch, the show was hanging together nicely. After four hours of polishing in the afternoon, it was ready to go on the air. Everyone's nerves were raw, but the show sounded great.

Naturally, when a room full of creative people have been rubbing against one another for a full day, a lot of emotions are generated. The listening audience never knew about it, but it took the actors, directors, musicians and technicians several days to get the session out of their systems. During rehearsals,

the young Hollywood star developed a consuming lust for one of the minor actresses. One of the minor actors developed a consuming lust for the young Hollywood star. Everyone immediately hated the director, and he, lofty and all-wise, contemptuously hated them in return. By eight o'clock that night, show time, the splendid documentary on the splendid American people was not the only thing that was at peak pitch.

It was the only thing, however, that the radio audience heard. It was magnificent. Future students hearing the tape could not but conclude that here was the Golden Age. Man, at least American man, circa 1960, noble, humble and sincere, was carrying in his bosom the seeds of greatness. Difficulties still existed, of course, but they were not insurmountable. A few deluded people seemed to be working against the common good, but the program left no doubt that this would be cleaned up in short order. The millenium was at hand!

When the Travelers from Outer Space, who were a team of historians doing research on the history of life throughout the Universe, listened to the tape recording, their "ears" heard none of the program as it had been originally broadcast. They were no less fascinated, however, for what they heard was the thought patterns of the people who had been connected with the program. These thoughts, in the form of electrical impulses, were also recorded on the magnetic surface of the tape, and were the only sounds audible to the Travelers.

What a pity these future historians didn't get mankind's version of the life of mankind in 1960, after the producers had gone to so much trouble to tie it up in a package for them. Their conception of Earth culture was based on the thought impulses they "heard", and their History of Earth was written accordingly. The last paragraph is worth noting:

"In the main, it is quite fortunate for life in the Universe that these primitive people destroyed themselves before they learned how to leave their planet. Lustful, murderous and guilt-ridden, they are perhaps the worst examples of intelligent life that we have ever discovered. And yet, paradox supreme, they had one quality that we ourselves would do well to emulate. That quality we can only surmise, for nothing on the recording spoke of it, yet it is obvious, for if they hadn't had this quality, there would have been no recording left for us at all.

"How strange that these tortured people should practise an unparalleled example of Life's highest achievement . . . complete honesty with themselves and others." • • •

A tool is but an extension of a man's hand, and a machine is but a complex tool. And he that invents a machine augments the power of mankind. —*Henry Ward Beecher*

What Is Your Science I. Q.?

THIS MONTH'S QUIZ is both "down to earth" and way up in space. However, you've encountered the answers numerous times in IF and in other science fiction magazines. Count 10 for each correct answer and see if you can hit a score of 80. The correct answers are on page 119.

1. The farther from the sun a planet is, the _____ its speed as it goes around the sun.

2. Oxygen and what other element are the chief elementary constituents of the Earth's crust?

3. What is the name of the process which is based on the direct use of the sun's energy to produce life?

4. How far away can the world's largest telescope (Mt. Palomar) detect the light of a single candle?

5. How fast would a rocket have to travel to escape the gravitational pull of the Earth?

6. Radon is a heavy, _____, gaseous element.

7. Which planet ranks second to Venus in brightness?

8. How old do astronomers estimate the Moon to be?

9. The arbitrary, fundamental number of a number system is called a _____.

10. The density of the atmosphere on the planet Jupiter is estimated to be how many times that of Earth?

11. Which element is the fuel for the sun's radiant energy?

12. By what names did the ancients once call the planet Venus?

Illustrated by Paul Orban

RACE RIOT

McCullough was not a native lover, nor was he particularly bull-headed. He just felt there was a certain difference between right and wrong and nobody was going to change his mind. Take that Sunday afternoon . . .

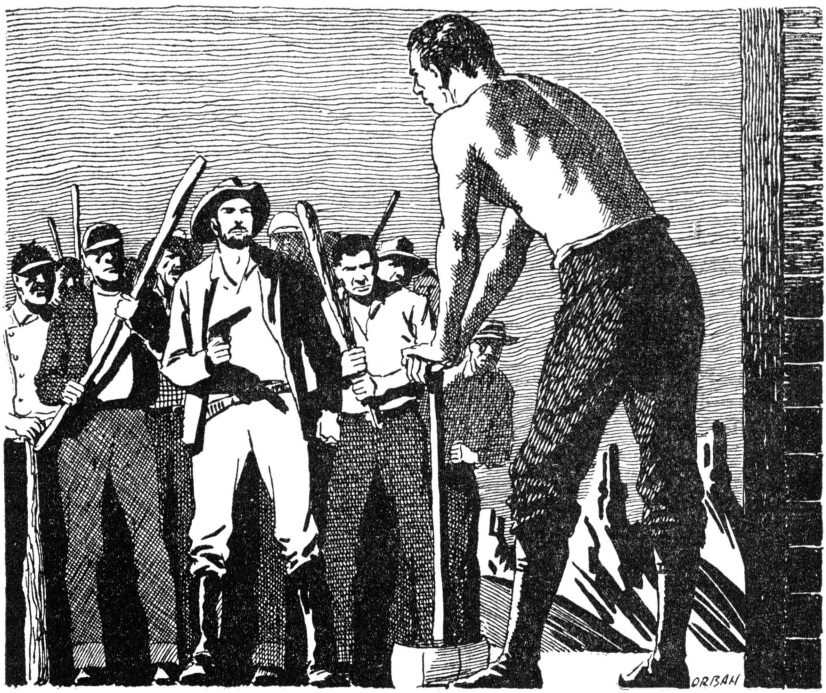
BY RALPH WILLIAMS

THE RIOT started late Sunday afternoon, in the alley back of John McCullough's house. McCullough was in at the start of it, and he was in at the end.

Sunday is thirty hours long on Centaurus II, as are all the other days of the week, of course; and in summer, at the latitude of Port Knakvik, the afternoons are very long indeed. John McCullough that Sunday had finished hanging the windows in the log house he was building, and now he was relaxing on the back stoop with a bottle of local whiskey. The whiskey was distilled from a native starchy root, and had a peculiar taste, but it was alcoholic, and one got used to it.

In the kitchen McCullough's wife was getting Sunday dinner on the new inductor stove, still marvelling at its convenience—back on the farm they had cooked with wood. The two children were playing in and out of the house. His neighbors, Henry Watts from across the street, and Pete Tallant from next door, had been helping him with the windows, and now they were helping him with the bottle. They were discussing the native question. In a way, this was the beginning of the riot.

"It's not that I got anything against them, in their place," Henry Watts said. "Their place just ain't in an Earthman's town, that's all.



They keep crowding in, first thing you know there'll be more natives than there is Earthmen, then you just watch out. They're snotty enough already in their sly way, you let them get the upper hand once, mark my word, it won't be safe for a woman to walk down the street."

"Yeah, I guess so," McCullough said. He was really not much interested. His people were from the flats upriver from Knakvik, a long-settled country where the first colonists had been brought two generations before to form the nucleus of an agricultural community. He had never seen more than half a dozen native Centaurans until he came down to Knakvik to work on the spaceport the new federal colonial government was building, and it was not his nature to worry about problems which did not directly concern him. Mostly, he liked to mind his own business, it was characteristic of McCullough that his friends came to visit him at his house, he did not go to visit them.

"What the government ought to do," Watts said, "it ought to take the whole bunch and round them up and put them away on a reservation somewhere. You can't civilize a grayskin, they ain't even human to start with, so why try?"

"Nuts," Pete Tallant said. Where Watts was a redneck miner and

construction worker; and McCullough a farmer picking up a little easy money on a temporary job; Tallant was an intellectual, a dark restive young Earthman working his way around to see how Earth's far colonies looked. Watts' yapping irritated him, but there was no point in arguing against that sort of brainless conviction, he knew. He stared gloomily off at the mountains across the river, rising clean and snow-capped above the shanties and garbage piles of the transient workers who had overflowed the city to camp on the flats along the river; thinking:

Just over a hundred years ago this planet was first discovered by men. Less than sixty years ago the first colonists were brought here. They came to a brand-new planet, almost as naked as the day they were born—two hundred pounds per colonist, including their own weight—with a free hand to build a new world as they pleased. And already the same old pattern, hate and distrust and envy, greed and oppression. How many men on Centaurus II? Perhaps a hundred thousand. How many native Centaurans? Perhaps five million, on a planet larger than Earth. But not enough room for both—

"You think I'm prejudiced," Watts said heavily, the need of the frontiersman to justify his opinions before the cosmopolite rankling in his voice. "Well, I ain't. I just know those buggers, that's all. You greenhorns come out here from Earth, you figure you got an answer to everything, just because we don't have the schooling you got, we're a bunch of fools. Ain't that right, John?"

"Yeah, I guess," McCullough said absently. The next thing to do, he thought, now that they had inductor power from the central station, was to get running water in the house. Plastic bubbles and tents and shanties and hauling water from the pump were well enough for bums and single men, but a family man might as well be building a decent home while he was about it. There would always be rental value in a good house here in town, especially with the new spaceport and the government moving here; and later, when the kids had to go to high school, it would be handy. Some day, too, he would be retiring, turning the farm over to Jimmy, he and Mary would need a place to live then.

"The old ones ain't so bad," Watts said. "They know their place, and they remember what happened at Artillery Bluff. But some of these young bucks, especially the smart-alecky kind the government has been sending to school—" He shook his head forebodingly.

"Nuts," Tallant said wearily. "Let's talk about something we can all be stupid about, huh? Women or baseball or something."

Watts flushed. "*I* know what I'm talking about now, and I didn't get it out of books, either, I've lived with the buggers. You greenhorns read all this sob stuff in the high-brow magazines back on Earth about the noble Centaurans, and you figure we're a bunch of jerks because we don't slobber all over them too. Noble Centaurans! Jesus! Dirty, sneaking non-humans, that's what." He lifted the bottle and drank deeply, tilting back his head and letting his eyes rove. "There,"

he said abruptly. "There's your noble Centaurans, look at 'em!"

A group of natives were coming up the alley—in Port Knakvik, natives did not walk in the street—shuffling along with downcast eyes. They were a small gray-skinned people, roughly humanoid, viviparous but not mammalian. There were five males followed half a dozen steps behind by a female carrying an infant on her hip.

"You see that *kish* there with her *fotin?*" Watts asked. "Lemme show you something, you probably wouldn't believe this if I told you, these grayskins are just like animals, they got no decency at all." He stood up and waved an arm in a beckoning gesture. "Hey, you *kish,* come over here," he called.

The female Centauran paused uncertainly, looking at him with frightened eyes out of a small triangular noseless face.

"Yes, you," Watts barked. "Come here!"

She glanced at the males ahead of her, who had also stopped and were looking at Watts from the corners of their eyes. One mumbled something to her. She began to shuffle slowly across the yard toward Watts, looking at her feet. Watts took a steel five-dollar piece from his pocket and held it out toward her.

"Here, you *kish,*" he said, "feed baby, *viptiv fotin,* get money."

The native took the coin and looked doubtfully at the three men. *"Viptiv?"* she asked in a light high voice.

"That's right," Watts said. *"Viptiv fotin."* He grinned at Tallant. "Watch this, kid, you want to see your noble Centauran do something'll really make you gag."

"Oh, for Pete's sake," Tallant said. "I *know* these people feed their young by regurgitation. So it's disgusting to mammals? So what?" He jumped down from the stoop and took the Centauran mother's arm and turned her gently around. "No *viptiv,*" he said. "Run along."

Watts' face was almost purple now. "What the hell you think you're doing?" he shouted. He grasped the female's other arm. *"Viptiv,"* he gritted in her face. "You took my money, now *viptiv!"*

"Let go that woman," Tallant said, "or I'll push your face in." He turned toward the group of males, who still stood stupidly staring. "Come on over here," he called. "Take your woman and get out." One of them started reluctantly across the yard. Tallant dropped the native woman's arm and stepped past her to face Watts. "I told you to let go," he said.

Watts thrust his face out. "Make me, wise guy."

Tallant hit Watts in the face with his fist.

Watts was a big man, and tough. He shook his head, wiped his nose, looked incredulously at the blood on his hand, and let out a roar of rage. It was not much of a fight. Watts' first blow dazed Tallant, the second knocked him down, and before he could get up Watts stepped in and kicked him in the head.

The Centauran woman still stood where the men had left her, wide-eyed with confusion. She ran awkwardly over to Watts, shoving in between him and Tallant's prostrate body, and pushed the five-dollar piece at him, chattering excitedly in her own tongue. Watts twisted

the money from her fingers and shoved her roughly down on top of Tallant. "There, you goddam native-lover," he roared, "get a real good whiff of one once, see how you like it."

She was still carrying the baby, she tried to shield it as she fell, but her body twisted and she came down heavily on it. The baby screamed, a high-pitched, nerve-tearing sound. The male who had started back to get her pulled a long sharp knife from somewhere beneath his rags and broke into a trot, his eyes beadily intent on Watts.

McCullough had started down off the porch when Watts put the boot to Tallant. He changed his intent and ran in behind the native, and hit him solidly with his fist in the back of the neck. The native went sprawling and his knife flew out of his hand.

People were turning to look and popping out of tents and shelters all around now.

"Why, that dirty native," Watts bellowed, "he tried to knife me!"

He stepped over to the Centauran and kicked him savagely several times. The other four males had been watching open-mouthed. They turned abruptly and started back down the alley the way they had come, but there was a small knot of men there, watching them. The natives paused uncertainly. One broke away and ran toward the street, between McCullough's house and Tallant's tent, and the others followed.

Most of the Earthmen had no idea what was happening. The closer ones could see a couple of natives and a man lying on the ground, another man with a bloody face shouting something about knifing, and four natives running.

"Head 'em off!" someone called. "They'll get away in the street!"

That was how the riot at Port Knakvik started.

WATTS RAN off after the mob chasing the natives, perhaps with some idea of explaining, more likely not—he was in a half mindless rage of excitement with the whiskey and the fighting. McCullough was left alone with Tallant and the two natives. The native woman seemed unhurt, she was picking herself up and examining the infant, which still whimpered. Tallant was unconscious. McCullough picked him up and carried him into the house.

His wife was standing white-faced at the door.

"Get some water," he said. He laid Tallant on a cot and began to wipe off his face. There was a scalp cut where Watts' boot had clipped him, most of the blood was coming from that; but it was high and it did not feel like a fracture. Presently Tallant groaned and shook his head and opened his eyes. The pupils did not look bad.

"How do you feel?" McCullough asked.

"Rough," Tallant mumbled. "Rough. Side . . . hurts . . ."

McCullough pulled up the shirt and looked. There was a swelling purplish bruise on the chest. He touched it gently and drew a gasp of pain.

"Looks like maybe you got a cracked rib," he said. "Get me some tape, will you, Mary?" He took the roll of tape and wound it tightly

about Tallant's chest.

"That'll hold till you get to a doctor," he said.

Tallant drew a light experimental breath. "Feels better," he said. "What the hell happened anyway?"

McCullough told him.

"That's bad," Tallant said. "That fool Watts could touch off a real riot, there's plenty more around here with no more brains than he has, and just spoiling for trouble. Somebody ought to get the marshal's office working on it before things get out of hand." He took the wet rag he had been holding to his head away and examined the cut with squeamish fingers. "Have to get this stitched up too, I guess, before it sets up hard. Look, could you back my truck out into the street? I don't feel up to driving, but if I get it in the street, it can take me in to the dispensary on auto, and I can call Administration from there."

There were very few private vehicles in Port Knakvik, or indeed anywhere on Centaurus II; but Tallant, who was an electrician, had a company panel which he drove to and from the job. Though it was chemically powered—the new inductor station was the first nuclear installation on the planet—it had the same cybernetic controls as any Earthside vehicle. They worked fine on paved roads. On Knakvik streets, however—

"I don't know," McCullough said dubiously, "You think you can make it on auto? Suppose you get stalled?"

Port Knakvik lay on a silty alluvial plain. In the downtown area, the streets were stabilized, but back along the river where the shanties of the construction workers sprawled, they were simply ruts punctuated at frequent intervals by chuckholes where churning wheels had ripped off the overburden, exposing the bottomless muck beneath.

"I'd go with you," McCullough said, "except I kind of hate to leave Mary and the kids right now—I tell you, maybe I could find somebody else. You lay down for a minute, take it easy, I'll look around."

Tallant seemed to have guessed right about the riot, there were people running by outside toward a commotion at the lower end of the street where the native shanties clustered. McCullough saw a man he knew from the job. "Hey, George," he called, "you got time to do a little favor?" He explained about Tallant.

The man had not yet been in any fighting, he was simply curious about what was going on, and this was part of it. "Sure, John," he said. "Be glad to."

They helped Tallant into the truck. George backed it out into the street on manual. "What's the dispensary coordinates?" he asked.

"Three-two-three, oh-one-five, local," Tallant told him.

George pushed the keys and they started off toward town.

McCullough turned to see what he could make out of the excitement at the other end of the street. There were two columns of smoke billowing up now, and scattered shots. Two men came back up the street helping another with his trouser leg split away and a bloody bandage about his thigh.

"What's it all about, John?" A

man called across the street to him.

"Don't know. Fighting with the natives, I guess. Henry Watts and some other fellows chased a couple of them down there. Looks like they mean to clean the whole bunch out."

"Dammit, that's not right," the man across the street said. "The natives got a right to live too, they had a village here before we came. Somebody ought to do something about it."

"Pete Tallant just went into town to tell the marshal."

"Yeah, well, I wouldn't holler copper on my neighbors myself, but I won't have anything to do with killing those poor natives either. They can get along without me." The man went back in his house and closed the door.

McCullough walked a few steps out into the street to get a better view. The riot was none of his business, and he had no intention of getting mixed up in it, but the idea of the fighting excited him and made him nervous. He could not see much, except that there was a lot of activity.

He shook his head helplessly. My God, he thought, all this from two men with nothing to do on a Sunday afternoon but get half-drunk and start arguing . . .

SOMEONE screamed—Mary's scream, suddenly choked off!

McCullough ran back across the yard and up the steps, raging at himself for having left Mary and the children alone in the house. There was no one in the front room, but through the kitchen door he could see a native with his back turned, peering out the kitchen window.

McCullough's gun was hanging over the door, on pegs set into the logs, a gun made from the first steel smelted on Centaurus II. He reached down the gun as he stepped in the door.

There were two natives in the kitchen; one with a roughed-up look who might have been the one Watts had kicked, watching Mary as she huddled in a corner by the stove with her arms about the two children; the other still looking out the window. Both spun around to face him as McCullough burst into the room.

For a moment they eyed each other in silence, the two Centaurans and the Earthman.

"You hurt, Mary?" McCullough asked.

She was frightened almost speechless, but she managed a squeak and a negative shake of her head.

McCullough took his eyes from the natives for a moment and studied her searchingly. "You sure?" he asked. She nodded. Some of the color was coming back in her face again now, and she looked all right.

He looked back at the two natives. He should have them arrested, he supposed, but to file a complaint meant going to court and losing a day's work. It did not even occur to him to hold them for the mob.

He gestured with the gun muzzle. "OK," he said roughly. "Get out of here, now. Get!"

The natives looked at each other. Outside, there was a rattle of shots in the alley, and several high-pitched screams. The native by the

window wet his lips and shook his head, and the other turned back toward McCullough. He had a knife in his hand, which he swung menacingly.

"No," he said. "No go outside. Kill."

It was not clear if he meant the verb passively or actively, but with the knife not six feet from Mary and the children, it did not seem a proper time to discuss fine points of grammar. McCullough shot him in the belly. At that range, the charge almost tore the slight native in half.

The other Centauran turned and came lunging toward him, and McCullough fired again. The native stumbled and fell in a heap in the middle of the floor, half across the body of the first.

McCullough stepped over them to the back door and glanced out, dropping fresh charges in the gun as he did so. There were no natives in sight but several white men were in the alley, looking around, trying to decide where the shots had come from. Henry Watts was with them. He saw McCullough at the door and called out to him: "You hear those shots? Two of 'em ran back up this alley. You see them?"

"They came in my house," McCullough said. "I shot both of them."

"Good, by God," Watts yelled. "That's two we don't have to worry about."

"There's one more left," another man called from up the alley. "He ducked around through Gordon's lot."

The men ran off up the alley on the new scent, and McCullough turned back into the kitchen. Mary had collapsed into a chair and was sobbing with her head in her arms. The two children clung to her, staring wide-eyed at the bodies of the natives.

McCullough walked over and patted her on the back. "It's OK now, Mary," he said. "It's OK, nothing to worry about now." His wife went on crying, and he stood there awkwardly, not quite knowing what to do.

He noticed that the dark purplish blood of the natives, almost black, was spreading in little rivulets and pools over the kitchen floor. The floor was of sanded white wood, and stained easily. There were some folded tarps in the lean-to where McCullough kept his tools. He got one and rolled the bodies over onto it. As he did so, he saw that one of them, the second one he had shot, was still alive. The shot had gone low and mangled the native's upper leg. He stared up at McCullough with opaque expressionless eyes, slowly bleeding to death.

It was an embarrassing situation. McCullough was not any more callous than the next man, but he found himself wishing his aim had been better. He could hardly allow the Centauran to lie there and bleed to death while he watched, but neither did he feel any particular responsibility in the matter. The native had got what he was asking for, and that was that.

Finally he took the native's leather belt and tightened it around the leg for a tourniquet, got another tarp and spread it on the cot, and laid the native on it. The corpse he rolled in the first tarp and pushed under the cot. Throughout the injured Centauran said nothing,

either in thanks or protest, although the leg must have been painful.

He had just finished when he heard voices in the front yard.

Henry Watts was there with half a dozen other men carrying guns and clubs, all looking the worse for wear. Two were dragging a Centauran corpse by the pants legs.

Watts mopped at his sweaty, blood-stained face with his shirttail. "You still got those two grayskins in there?" he asked.

McCullough nodded.

"Fine, we'll take 'em off your hands now." Watts half-turned to the men behind him. "Come on, give me a hand to drag 'em out." He started up the steps.

"Wait a minute," McCullough said. He did not move out of the door, he was not quite sure why, a moment ago he had been wondering what to do with the natives, and here was Watts offering to take them. It may have been the way they were dragging the Centauran, face down in the mud, that bothered him. "What you going to do with them?" he asked.

"We got a use for 'em," Watts said with relish. "We're going to drag all the bodies up in front of Dubois' place and string 'em up to poles there, for a warning. We'll learn those grayskins what to expect, they come messing around here any more. Come on, toss 'em out, we'll take these two along with the rest."

"Well, I don't know," McCullough said. "One of these is still alive, I didn't kill him, just crippled him."

Watts showed his teeth. "That won't be a problem," he said.

McCullough shook his head slowly. He had counted Henry Watts as his friend, but he was not so sure now that he liked him. "No," he said. "I think we better just leave them till the cops come."

Watts laughed. "Cops? There ain't going to be any cops coming. We're handling this ourselves. Don't worry about the cops, even if they could get an indictment, there ain't a jury in this town would convict for killing a native."

"I'm not worrying about that," McCullough said stolidly, "but I don't like what you fellows are doing, I might as well say right now, and I'm not going to be a party to it. Those natives stay right where they are till the law comes and gets them."

Watts' grin faded. "John," he said, "we ain't fooling. I know you're no native-lover, but we're going to clean those devils out once for all. If you won't let us in for them, we'll come in anyway and take 'em."

McCullough shook his head again. "This is my house. Henry, you've been my friend, but I just shot two people for coming in here without knocking."

Watts looked around at the men behind him. Most of them knew McCullough. They did not seem taken with the idea of breaking into his house. Watts swung back to McCullough. "John," he said ominously, "you're just making trouble for yourself, that's all."

McCullough simply shook his head and stood blocking the doorway.

Watts glanced around at the other men again. One of them shrugged self-consciously and turned away, and after a moment

the others trailed after.

"All right," Watts growled. He shook his fist under McCullough's nose. "All right, John McCullough, I'll remember this, and I'll be back. Native-lover!" He spat on the step and went off after the others.

McCullough watched them go, uneasy under his surface stolidity. He liked to be on good terms with his neighbors, not enough to give in to them on anything he felt strongly about, but he knew this would be held against him, and it worried him, more for the sake of Mary and the kids than for himself.

He sensed his wife standing behind him.

"What did they want?" she asked.

He told her.

"But, John, why? Haven't we had enough trouble today? Do you *have* to get in a fight with your neighbors over a stupid native? What difference does it make to you?"

McCullough shook his head helplessly. "I don't know. I just don't like the idea, that's all."

His wife stared wordlessly at him for a moment. She went into the kitchen and sat down at the table and began crying again. The children ran to her and began whimpering also. McCullough prowled restlessly about the living-room, stooping now and then to peer out the windows as men shouted and ran by. The native lay silent on the cot, unmoving except for his eyes which followed McCullough.

McCullough stopped and studied the Centauran resentfully. Goddam natives, he thought, all they cause is trouble. He bent over and loosened the strap on the leg until fresh blood started to ooze out and then tightened it again. The Centauran winced a little and closed his eyes briefly, but made no other sign. Ought to have morphine, McCullough thought, but would morphine work on a Centauran? He didn't know.

He pulled a chair over to the window, where he could watch both doors and the cot, and sat down with the gun across his knees. The riot was apparently still booming along. Men trotted by outside now and then, singly or in little groups, calling to each other. Once several went by with another Centauran corpse slung hand and foot to a pole. There were no women or children in sight, those houses with blinds had them down, the tent-flaps were tightly drawn. There was no indication of any attempt by the authorities to halt the riot. Possibly Tallant had not gotten through, or possibly Watts was right, the Administration was keeping hands off.

After a while Mary came in and stood by the chair. Her eyes were still red, but she was no longer crying. "You want something to eat now?" she asked dully. "The roast is done."

"Yeah, I guess so," he said. He avoided her eyes.

She fixed a plate and brought it to him and sat down to watch him eat.

"You think there'll be more trouble?" she asked. "They surely won't bother us again, will they?"

McCullough chewed thoughtfully. He thought there would be more trouble, but he did not like to worry his wife unduly. "Well," he hedged, "that Henry's kind of a bull-headed fellow."

"Don't you be bull-headed too,

John. I know you have to do what you think is right, but please be careful."

He reached out and took her hand in his. "Honey, I'm sorry. I know it's mighty tough on women sometimes, but a man just can't give in on some things, that's all." He looked down, pleased as always by the contrast of her small, pale, delicate fingers lying in his large blunt chocolate-brown hand. The contrast seemed especially important today, for reasons he could not quite place.

Was there some special significance in a black man married to a white woman, a black man setting his will against white men, not as an enemy, but as an equal? Back a couple of hundred years ago, he knew, on Earth—but the thought eluded him, he was not a very articulate or subtle thinker and he could not pin it down.

"Don't you worry, Mary," he said, "it'll turn out all right."

IT WAS almost sundown when Watts came back. McCullough was checking the tourniquet on the native's leg when he heard a commotion in the street outside.

"John McCullough," a voice bellowed. "Come out!"

Watts' voice, McCullough thought. He picked up his gun, but then he thought he would not feel right facing the men outside, who were after all his neighbors, with a gun in his hands. He looked around. The double-bitted axe he had been using to trim the logs around his window-frames leaned against the wall by the door.

"Get in the bedroom, Mary," he said. "Pull the mattress off the bed and lie down behind it with the kids."

He took the axe and walked out the door onto the steps, squinting his eyes against the setting sun. The street was full of men in front of his house, perhaps half a hundred or so. Watts and a short stout man stood halfway up the path to the door. McCullough studied them in silence.

"Well?" he said finally.

"This man here's a deputy marshal, John," Watts said. "We'll take your prisoner and that body now, if you don't mind."

The stout man grinned placatingly. "That's right, Mr. McCullough, I've deputized Mr. Watts here and several others to help restore order. We've rounded up all the rioters except that one you've got in there."

"You got a warrant?" McCullough asked.

"Well, no, I don't really think—"

"Then get off my property. Go on, get!" McCullough came down the steps and began to walk slowly toward Watts and the marshal. "Get out of my yard!" he said. He did not raise his voice.

"You're bucking the law now, John McCullough," Watts warned.

"Get out of my yard!" McCullough said again. He was about three steps away from Watts. He took another step.

Watts had been carrying a pistol in his hand. His arm started to swing up. McCullough let out a wordless bark: *"Haugh!"* and the axe flipped in a short swift arc. He stepped over Watts' body, the axe again dangling limply from his hand with a few thin threads of

blood spattering from it. "Get out of my yard!" he said.

The nearer men backed away slowly, not really frightened, but uncertain. Single men have faced down mobs many times, but more have been killed by them. In a saner moment, McCullough may have known this, but his ductless glands were in full control now. He did not really care, he rather hoped, if he thought at all, that there *would* be a fight. He knew he could kill any man who stood against him.

Off to one side, a dozen yards away, a man tentatively lifted a pistol. McCullough caught the movement from the corner of his eye and turned and began walking toward the man, head a little forward, bright, slightly unfocussed eyes intent in his expressionless face. The men between the two moved back, leaving a clear path.

The man with the pistol glanced to either side and saw he now stood alone, all alone. There is a nightmare some men know—the implacable deadly-eyed enemy coming with the red, wetly gleaming steel while you stand all alone with the pistol that poufs weakly with the bullets dribbling from the muzzle. The man jerked the trigger and spun about and ran without waiting to see where his shot had gone, and the charge snapped two feet over McCullough's head.

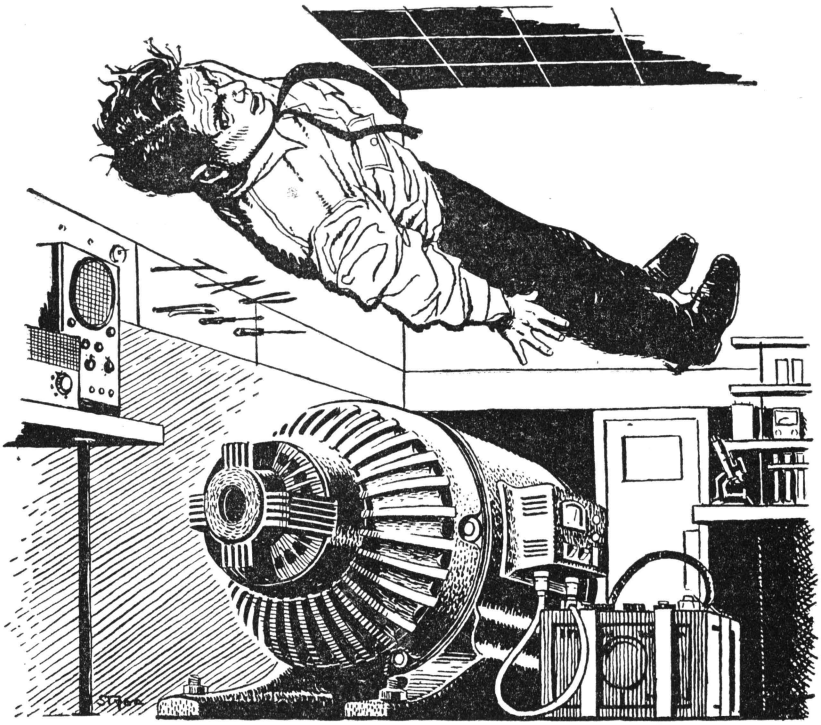
McCullough turned again toward the main body of the mob and walked slowly forward, his eyes searching the faces around him hungrily. "Get out of my yard!" he said woodenly.

The men he faced were not cowards, few men on that world were, and they had been killing natives all afternoon, their blood was up; but this was different, this was one of their own kind they faced now. If they had been able to see him as another outcast, as a traitor aiding the enemy against them, it would have made things easier. In spite of what Watts had said, however, they knew this was not true. McCullough was not a 'native-lover', he was not upholding the Centaurans, what he was upholding was the right of a citizen to hold his own opinion and keep his home as his castle—two rights which are extremely important in any frontier culture.

It put them in a very difficult moral position, and the physical pressure of McCullough's steady advance did not give them much time to settle the dilemma. Half a dozen men were elbowing their way back through the press now, the marshal had disappeared, there was no one to start things, and they kept fading back. McCullough never varied his pace, but the distance between him and the nearest man increased steadily. He stopped in the street before his house, but the mob kept moving under its own momentum for another fifty yards, and some still kept moving. A knot of perhaps a dozen stopped at the corner and muttered among themselves for a few minutes. One man started to raise a gun, and another knocked it down. They stood there a little longer, and McCullough leaned on his axe watching them, and then they moved off after the others, men dropping off here and there as they passed their own homes.

The riot was over. • • •

Illustrated by John Styga



TURNABOUT

BY GORDON R. DICKSON

Eva was the emotional problem which, indirectly, quite possibly caused the second problem, a rather baffling field force trap, which was a scientific one. Now, sometimes, if you solve the second first, you get the first second . . .

PAUL BARSTOW was saying, "And this is the gadget . . ."

His square bright face under its close-cropped blond hair was animated. He seemed on the verge of reaching up to hook a finger in the lapel buttonhole of Jack Hendrix's sportcoat to pull the taller man down into a position where he could shout into his ear.

"You aren't listening!" he protested now. "Buddy! Jack! Pay some attention. Or has that crumb teaching job got you to the point where money doesn't mean anything to you any more?"

Jack Hendrix's long, heavy-boned face almost blushed.

"I'm listening," he said.

He hadn't been, of course. This was merely one more piece of evidence to add to the mounting pile of proof that he was totally incapable of doing anything right. He had been mooning instead over Eva Guen, whom he had lost some months back. But they had passed her in the corridor on their way to this small, hidden workroom, and something in the way she had looked at him had set him spinning again. Peculiarly, there had been what Jack could have sworn was a hurt look in her eyes, in that brief moment that they looked at each other in passing. Why there should be a hurt look in *her* eyes, Jack could not understand. She was the one who had left him to come to work for Paul—and very sensibly, too, he told himself, self-righteously, but with the same old twinge of unhappiness.

Eva had been his graduate teaching assistant at the University where he taught physics. She was tall and quiet-faced, with startling wide blue eyes under soft blonde hair. Quite naturally, he had fallen in love with her. And it was then the trouble started.

For from the moment Jack was forced to admit to himself that he was in love, he had to take an unbiased look at his chances of doing something about it. And that look was crushing in its effect. For in the process of assembling Jack Hendrix, a somewhat devastating oversight had occurred. Whatever minor god had been in the supervisory position that day had carefully mixed strength with intelligence, added just a pinch of genius and a sort of ugly-handsome good looks, but had totally forgotten at the last moment to install a governor on Jack's imagination. The result was that Jack was a dreamer.

And the result of that was that he, with three degrees to his name, and a couple of honoraries of various sorts lying around, continued to vegetate in his teaching job, while Paul, in his typical hyper-thyroid fashion, was already managing his own commercial research labs. Not that the comparison was strictly fair. Paul had always been more promoter than physicist. And Eva had gone out of Jack's life to a better job with Paul's outfit.

Not that that had anything to do with his accepting Paul's offer of a job as consultant on a little problem he claimed to have on hand at the moment.

"I'm listening," said Jack.

"Praise Allah," said Paul. "No one knows about this but you and me. It's top secret. *My* top secret."

Women, of course, thought Jack were naturally secretive. They looked at you with unfathomable

blue eyes and waited for you to make the proper move. But how could you make the proper move if you didn't know what they were thinking? That was why he had never gotten around to telling Eva how he felt about her. And then one day she was gone. He didn't blame her, even if without warning it had exploded—

"—Exploded?" stammered Jack, guiltily. "Well, er—when did that happen?"

"Are you sure you've been listening?" said Paul, suspiciously. "I just told you. A couple of weeks back." He went on to explain the circumstances while Jack listened with one ear, the image of Eva flickering like a candle luring his moth-like powers of attention in the back of his mind.

He forced himself to concentrate.

"But what happened to the man you had working on it?" he asked. "And what is it, anyway? You still haven't told me that."

"You mean Reppleman?" said Paul, quickly. "He had a nervous breakdown at the time of the explosion. Got a complete block on the whole thing, and now, they've got him in a nursing home."

A flicker of genuine interest stirred for the first time in Jack.

"Oh?" he said. "How come?"

"Well, that's the thing," said Paul. "I'm going to trust you, Jack. I've got something here that's worth more money than there is in the world today; and I'm willing to give you a slice of it if you can work this thing out for me. But we've got to have secrecy.

"Right at this moment, you and I are the only ones who even know this room has been entered since the explosion. I rebuilt the generator myself from Reppleman's records. And nobody, but you and I, knows we're back here today. The rooms at the back of the building here are all storerooms except this one."

"Generator?" said Jack, for a second momentary instant distracted from the lorelei mental image of Eva.

"A generator," said Paul, slowly and impressively, "of an impenetrable, planar field of force. Come over here."

The image of Eva went out as abruptly as if someone had dropped a candle-snuffer over it. Jack blinked and followed Paul, as he led him up to the equipment in question.

The small room which housed it was right at the bleak northern end of the labs and terminated one narrow wing of the building. It was L-shaped, with the generator in question tucked away in the narrow recess of the foot of the L. The length of the long part of the L, at right angles to this, was strewn with odds and ends of tools and equipment piled on two long benches fastened to the wall. Along the end away from the recess was the door that gave entrance to the room; and just to the left of this as you entered; at the end of the long part of the L, was the room's only window, open at the moment to the summer breeze and the gravel expanse of the parking lot behind the labs.

His mind for once wholly concentrating on the subject at hand, Jack followed Paul into the narrow cubbyhole that was the recess and listened to the other man's explana-

tion of what was before him. It was not true, that Jack could not focus on a problem. It was merely that a thing to hold his attention, must first arouse his interest. Once it had, he dealt with it with almost fantastic effectiveness.

"You see," Paul was explaining, "it's a very simple sort of circuit. It's easy enough to produce it. The question is to handle it, after you've produced it. The initial power to run it comes from this storage battery hookup. That's all we need."

"Then what's the catch?" asked Jack, his nose half-buried in the creation's innards.

"The trouble is that once it's turned on, there seems to be a sort of feedback effect. Well, no, that isn't quite right. What it seems to do once it's turned on is tap some other source of power that's too much for it. It overloads and you get the explosion."

"But while it's on you have a plane of force?"

"That's right."

"How long?" demanded Jack, his long fingers poking in the wiring.

"You mean from establishment of the field to explosion?" replied Paul. "About half a minute, as far as I can figure from Reppleman's notes and what I could reconstruct about what happened the day it blew up on him."

"You haven't tried it since you rebuilt it?" asked Jack.

"Do I look crazy?" demanded Paul. He put his hand on Jack's arm. "Listen buddy, remember me? The boy with the crib notes up his sleeve at exams?"

Half-lost in the machine before him as he was, Jack felt a sudden little stir of warning. Paul was anything but stupid; and when he went into his dumb-bunny act, there was usually a joker somewhere in the deck. But before he could concentrate on the sudden small danger signal he ran across something that drove it out of his mind.

"What's this?" he demanded, pouncing on a part of the apparatus.

"Oh, that," said Paul. "Just a notion of my own. Obvious answer. A timer setup. You set it, say, to turn the field on for perhaps a ten-thousandth of a second, then turn it off again. I'll let you play with it."

Jack frowned.

"Where are the notes?" he asked. "I'd like to see just what—Reppleman, you said his name was?—had written down."

Paul grinned and shook his head.

"Not so fast. First I want an answer from you on whether you think you can tame this baby for me or not."

"But how can I tell without the background?" protested Jack.

"Won't cost you a cent to say no," replied Paul. "Don't look at me like that, Jack. Sure, I know I'm handing you a pig in a poke. But this thing is too big to take chances with. Do you want it or don't you?"

Jack hesitated. He was strongly tempted to tell Paul to take a running nosedive into the nearest lake, and walk out. Then he remembered the long life of financial ineptitude that had climaxed itself with losing Eva; and his good resolutions to mend his scatterbrained ways.

"All right," he said. "I'll have a shot at it, anyhow."

"Good boy," said Paul. He patted

Jack's arm, in a way which was somehow reminiscent of approving a large, shaggy dog. "I'll be in my office. You know where that is. If you want anything, just hustle me up."

He gave Jack's shoulder a final slap and strode out.

LEFT ALONE, Jack sat down on one of the long workbenches, filled his pipe and considered the problem. The situation was peculiar to say the least. Paul's odd insistence on secrecy; and Eva's strange look when she had passed him in the corridor. And this story about the man who had developed the generator. Typically, it did not occur to him to doubt the generator. Jack was one of those men who have entertained the impossible in their minds so often that there is little reality can do to surprise them.

So it blew up did it? Jack puffed on his pipe and stared at the generator. But—hold on a minute—if it blew up and when it blew up it sent a man named Reppleman to a rest home, could it have blown up more than once? And if it had blown up only once it must have been turned on only once, and if that was the case, how did Paul know that it had produced a plane of force? Of course he had probably known the theory Reppleman was working on. And what was his purpose in keeping that theory a secret from Jack?

In fact, if the dingus worked, how did it work? Jack returned to the mass of equipment and wiring and began to prowl through it. After a while he stopped and scowled. Nine-tenths of the junk in the setup was mere window-dressing. The only thing about it that could possibly have any effect or function was an oddly wound coil of ordinary silver wire upon a core of some strange-looking silvery metal. Jack tapped this latter with a fingernail and it rang with a faint, light-sounding chime.

By the time this point was reached his interest had been captured. On a hunch he disconnected everything but the coil on its peculiar core. He disconnected the timer, Paul had attached to the apparatus, hesitated a second, then made contact by crossing the two lead-in wires.

Nothing happened.

He disconnected the wires and sat back to think.

After a moment, he reached out and felt the winding on the coil. It was metal-cool—air temperature. On second thought, he connected the timer and set it to allow a warm-up period of fifteen seconds. At the end of that time the timer should activate the coil for the period of a ten-thousandth of a second.

Nothing happened.

Jack chewed the stem of his pipe. Once more he disconnected and felt the winding. It was faintly warm—but barely so. .

Now let me see, said Jack to himself. We run two sorts of power through this thing. One, low power and steady. To warm it up? That's what I assumed, but there's no indication of it. On the other hand this timer is definitely set to give a sudden short pulse of relatively high current. I tried the high current direct. No result. I tried a short

period of low current. What's next?

After he had smoked another pipeful of tobacco, all that occurred to him was to lengthen the warm-up period. Let's do it right, he said to himself. Let's give it a good five minutes.

He turned it on once more and set the timer for another ten-thousandths of a second jolt at the end of five minutes of low power. It occurred to him that the two upright metal poles, about two feet in length, between which the field was supposed to be generated might be too close to the coil, and he moved them out to the full length of their wiring, so that they were now actually in the long part of the room. He glanced at the timer. Almost four minutes yet to go.

He wandered down the long part of the room and stood gazing out the window. There was his car, sitting beside the row of others on the gravel of the parking lot. And there, farther down the row was Eva's. They were the two oldest cars on the lot. You'd almost think we had the same taste in automobiles, thought Jack, a trifle wistfully. Neither of them is worth much—

Abruptly, without warning, his traitorous imagination slipped its restraints and began to build a picture of Eva coming out on to the lot, seeing his old car not very distant from hers, and being overwhelmed by a flood of memories. He pictured her coming out the back entrance of the building as he stood here watching. She would walk across the lot with her smooth, lithe stride, toward her own old grey, four-door sedan. But partway there, her steps would falter as she caught sight of his equally ancient blue business coupe. She would not, of course, say anything, but she would stand there; and he, seizing the moment, would step from this window down onto the gravel only a few feet below and approach her.

The sound of his footsteps crunching the loose rock would warn her of his coming; and she would turn to look at him. She would neither move nor speak, but stand waiting as he came up to her and then—

He was just opening his mouth to speak to her in imagination, when unexpectedly from behind Jack there came the sound of a soft, insidious, click. . .

FOR A MOMENT he thought nothing had happened. The parking lot lay unchanged before him in the sunlight with its row of cars and the sky blue above them dotted with distant clouds. And then he tried to turn around and found he could not, with the slight movement of his effort the scene before him dissolved into a grey field streaked here and there by lines of various colors.

He froze, suddenly, and the scene came back to normal. He reached out to grab hold of the edge of the window to steady himself; but with the first movement he was plunged into greyness and his hands caught nothing. Once more he steeled himself into immobility, and for a moment he hung on the edge of panic. What had happened?

Slowly, he forced his mind back into control of his body and its emotions. Steady, he told himself, steady. Think it through.

As calmness returned he became suddenly and icily aware of two things. The first was that everything within his field of vision appeared somehow artificially frozen into immobility. Just what gave him this impression he was not able to understand. Part of it was the air. A small breeze had been bathing him as he stood in front of the open window. Now, there was nothing. The atmosphere around him was like intangible glass.

The second thing was the discovery that he was no longer standing with his feet on the floor, but lying crosswise athwart the window, in mid-air, at about the former level of his waist.

For a moment he was astounded that he had not realized this immediately. And then reasons began to appear to him. The first of these was the sudden realization that gravity appeared to have altered respective to his position. He felt not at all as if he were lying on his side, but as if he had remained quite normally upright. And another discovery following immediately on the heels of this was the sudden perception that while his body seemed to have moved, his point of view had not. He still looked out at the parking lot from the angle of vision of a man with both feet normally planted on the floor.

All of these, of course, were things that held true only as long as he remained perfectly still. The moment he attempted to move all his senses failed him and he seemed to swim in a grey mist. The conclusion was a very obvious one. Somehow, the generator had worked to produce its plane of force. And somehow he was caught in it.

The explosion should come at any moment now.

For one hideous moment he suffered death in imagination. Then reason returned to point out that the half minute Paul had mentioned as the time limit had undoubtedly been passed already. Still, it was a little while before he could completely fight off the tension of his body, bracing itself in expectation of the rending force that could strike at him from behind.

In the end it was his imagination that saved him. For long habit had made it independent of the rest of him; and it's first move, once the facts of the matter had been grasped and the immediate danger of explosion discounted, was to draw him a very clear and somewhat ridiculous mental picture of himself as he must appear to anyone who might enter the room, floating broadside as he was, in thin air. It reminded him suddenly that positions were no respecters of persons; and he remembered almost in the same instant of what the White Knight had had to say to Alice on the subject after resting head-downward in a ditch. And so, by way of the ludicrous, he scrambled back onto the firm ground of his everyday sanity..

He was caught in a force field. Very well. And what could he do about it? The obvious answer was to turn around, go back to the generator and turn it off. And the one flaw in this plan was that he couldn't apparently, for some reason, make the turn.

On the other hand, he was able to make some movements. He ex-

perimented, waving first an arm and then a leg, cautiously. Barring the fact that the slightest motion caused the room to appear a nightmare of streaks and lines in a grey field, there was nothing unusual about the effects of these motions. The room? He became suddenly aware that he seemed to have rotated around a center-point somewhere in the region of his belt buckle. He was now no longer looking out the window, but turned at a slight angle toward the bench on what had been the wall at his right hand. Filled with sudden hope, he closed his eyes firmly and took what should have been a long stride forward and up. When he opened them again he was staring back into the room, down the long length of the L.

For a long moment he hung, carefully motionless, considering the implications of what he had just done. It seemed apparent, he thought, that what he had actually accomplished was to turn himself about the way a paper figure would be turned on a turntable—the difference between this and ordinary methods being that as he was now facing in the opposite direction, his head was now where his feet had been and vice versa. Or, to orient more exactly by existing landmarks, where the force field had flipped him into position with his head toward the right wall, his rotation had changed him so that now his head was toward the opposite wall, the one originally on his left.

Conclusion?

Jack winced. The field itself appeared to be a two-dimensional phenomenon; and he, himself, caught up in it, to be restricted to two-dimensional movement. For a second the thrill of panic came back, and he was forced to fight for a moment before he could go back to looking at the situation sensibly and calmly.

The field appeared to be on a level with his waist as it had been when he had been standing normally upright. That was, in effect, level with the tops of the upright rods that had been supposed to generate the field between them. Hah!—*between* them, thought Jack, bitterly —And a few inches above the level of the benches. As he looked down the length of the room he noticed that whatever had touched the plane of the field at any point seemed to have been, like himself, caught up in it. He noticed a hammer and a soldering iron, both of which had been hanging from hooks on the left wall, now floating stiffly at right angles to it. Furthermore, there seemed to have been some sort of polarity involved. In both cases the end which had been upright was at the left and the down end out at the right—that was, of course, from his present point of view—and corresponded exactly with the fact that his own head had gone to the right, and his feet to the left.

But that was enough observing. The thing to do now was to get to the generator and turn it off before something else happened. Jack closed his eyes and made three quick steps, right foot first left foot following, toe to heel. When he opened them again he was mildly surprised to discover that he was still a little short of the end of the room, but a couple more steps

solved that problem. He rotated himself through a ninety degree arc and stepped *up* into the narrow alcove that housed the generator and the timer on a bench at its far end.

He banged his head on the wall and blinked with the shock of it. He opened his eyes and looked down at the generator.

With a sudden, sickening sense of shock, he realized that it was below him, and therefore outside of the plane of the field. His desperation was strong enough to make him reach for it, anyway, and to his surprise it seemed almost to flow upward to reach his fingers and his fingertips pushed against a short length of wire, which bent before them.

As they did so, there was a sudden flare of red light, from the coil and he snatched his fingers away as he noticed that that part of the generator was apparently red hot, glowing into incandescence. The whole apparatus, in fact, seemed to quiver on the point of exploding into flame. Curiously, however, there was no sensation of heat emanating from the coil; and what was apparently a wisp of smoke, rising above the generator and out of the field, seemed frozen in mid-air.

Cautiously Jack retreated slightly from the generator. Two things were immediately apparent. One, that the generator was evidently a part of the field, and reachable, even though it had not been in the original plane as he had. Two, that he had better be careful how he went about shutting it off. It struck him somewhat belatedly that Reppleman's explosion had probably occurred through mishandling the generator when it was in its present state.

No, the way to turn the generator off was the way it had been turned on—through the timer. He looked at the portion of the generator and bench that lay below him but did not see the timer. Then he remembered that this was the left side of the bench at the alcove's extremity and that the timer was at the right. Carefully he rotated to the right as far as the narrow width of the alcove would allow him and out of the corner of his eye, caught a glimpse of the timer on the bench far to the right. The position was an awkward one, but he was in no mood to consider comfort. It might be interesting for a while to be the two-dimensional inmate of a single plane, but the novelty wore off quickly. He pushed his head into the right hand corner of the alcove and started to reach back past his hip to the timer.

It was impossible.

For a moment he hung still, stunned. Then as the truth penetrated, he had to restrain an urge to burst into hysterical laughter. Of course, being two-dimensional he could not move the line of his hand past the line of his body, any more than a normal three-dimensional person in a three-dimensional world can lie on his side on a flat floor and duplicate such an action without moving either floor or body. As long as he remained an inhabitant of the force field, he would never be able to reach behind his back. Around his feet or around the top of his head, yes, but behind his back—never.

For a moment he yielded again

to panic and scrabbled around, trying to find a position from which he could reach the timer, but the alcove was too small to allow him his necessary two-dimensional turning radius. He stopped finally, and common sense came to his aid.

Of course, the thing to do was to back out where there was room and turn around, so that he could come in facing in the other direction.

He moved back out into the long part of the room, mentally berating himself for having lost his head. He closed his eyes and rotated. He was getting quite used to this business of blinding himself while moving and made a mental note that eventually he must get around to keeping his eyes open just to get a clearer picture of what happened, when he did move. Reversed, he stepped back *up* into the alcove.

He opened his eyes to find himself not in the alcove but against the wall of the long room opposite the alcove. For a moment he stared in puzzlement, then understanding came.

"Of course," he said. "I'm reversed. I'll have to step *down*."

He did so. Two steps down took him into the alcove. He opened his eyes to find himself finally facing the corner which housed the timer —*but his feet were the parts of him next to it, and his head and hands were away from it.*

This is ridiculous! he thought. One way it's behind my back and the other way it's down by my feet. He crouched down, trying to squeeze himself into the corner close enough so that he could reach the timer. But it was no use. The alcove was too narrow to allow him to put his feet in the opposite corner and lean far enough over so that his hands could manipulate the timer. The sort of person who can bend over and put both hands flat on the floor could have done it easily, but Jack, like most males of more or less sedentary occupation, was not in that kind of shape. He tried kneeling, squeezing himself as tightly into the right hand corner as he could. But here the earlier prohibition of his two-dimensional existence came again into effect and he was blocked by his own knees. Not only did he have to reach around them, but they blocked off his view of the timer.

In a cold sweat, he finally gave up and backed out into the relatively open space of the long part of the room. It was fantastic. There was the timer directly in front of him. A touch of the finger would shut it off, for he could see its pointer frozen on the mark where it had turned the generator on. And it was a part of the field like the generator wire he had touched, so presumably he could move it. Yet, because of the restrictions of two-dimensional space, it was out of his reach.

To Jack, a born and native three-dimensioner, it seemed grossly unfair; and for one of the few times in his life he blew up.

After having cursed out force-fields, force-field inventors, all known physical laws, the generator, Paul, and himself for being a damn fool and daydreaming when he should have been watching the timer, he found himself feeling somewhat better. From being excited, he suffered a reaction to calmness. Let's look at this sensibly, he told himself.

He reminded himself that he'd been acting like a wild animal caught in a trap, rather than a thinking man. The thing to do was to make an effort to understand what it was that had hold of him rather than just fighting it blindly. If he could not reach the timer, he could not reach the timer. What other possibilities were there?

One—somebody, say perhaps Paul, would eventually come in and perhaps he could turn the timer off. Jack shook his head. No, whoever stepped through the door of the room would probably be caught up in the field the way he had been. If indeed, the field was limited only to the room and did not extend beyond its walls already. Jack brightened. If the field was bounded by the room, then all he had to do was get out of it—

Painfully he maneuvered himself around until he was facing the door. The doorknob was below the field, but he had hopes of hooking his fingers onto the door's loose edge and pulling it open. It was a hope that was doomed to disappointment. Jack discovered that in two dimensions you could push, with fingertips, but not grab. The door, presumably because it was hinged to the walls outside the scope of the field, was strictly immovable.

It appeared to be a rule that whatever was loose and touched by the field, was picked up by it, but whatever was attached to anything else beyond the limits of the field was not. It did not strictly make sense, because where do you draw the line of attachment? His body was attached to his limbs and his limbs had been outside the field. A matter of relative mass?

Concluding this to be an unrewarding field for speculation, Jack returned to the matter of field size, and at that moment it suddenly dawned on him that all this time the window at the end of the room had been open. If he could get out through that and beyond the limits of the field—

The wish was father to the act. Hardly had the thought occurred to him before he was jockeying for position in line with the window. He got it—back in the same position in which he had first found himself when the field caught him up—and simply walked out, presenting the unusual spectacle of a man strolling through mid-air while lying on his right side. It was all so easy that for the first time he found cause to wonder about the fact that the walking motion enabled him to progress when he was apparently doing nothing more than flailing the empty air. He experimented a little and discovered that he had the sensation of pressing back against something whenever he moved. Apparently the field had some kind of substance of its own, or a type of tension that reacted like an elastic skin when pressed longitudinally.

As soon as he was free of the building he rotated abruptly and *walked* sideways alongside it. His hope was that the field would be cut off by any solid obstacle. He traveled for some little distance before he admitted to himself that this hope was vain. Cheerfully, the field continued to buoy him up and imprison him, even when he reached the street in front of the labs.

The street was unusually silent

and deserted. For a moment he considered waiting until somebody came by to help. But his natural shyness and sensitivity to embarrassment overcame the idea, and he turned back to cruise once more along the side of the building peering in the windows, with the hope of locating Paul himself, or at least someone connected with the labs.

The windows on the back and the side he had been down were all closed and the door had taught him that there was no use dealing with any three-dimensional object unless it was, like him, caught up in the field. He crossed past his own open window and started down the far side of the building.

Here there were several open windows, but they all gave on empty offices. But toward the front he came to one through which he could glimpse figures, at the far end. Without hesitation, he closed his eyes and stepped through the opening.

When he opened his eyes inside the room, he was astonished to see a tableau that was more than even his overactive imagination had ever conceived. Before him were Paul and Eva. They stood facing each other in a small room that seemed to be a sort of combination office and laboratory. Paul was leaning forward and his hand was on the smock-sleeved arm of Eva, who was pulling away from him.

For a moment the implications of the scene did not penetrate. When they did, Jack went skidding through the air toward the two figures, too angry even to remember to close his eyes.

When the grey field winked away to reveal the room in its proper dimensions again, he found himself floating in mid-air beside and a little above them. This room was evidently lower than the one from which he had started; and he glared down at the top of Paul's stubbled head and cut loose.

It was a fine exhibition of sizzling language, punctuated by flashes of streaky greyness, when in his excitement he forgot himself and moved or jerked his head. But when at last he began to run down, he was somewhat astonished to discover that neither of the people below had moved or shown any reaction to his presence. They had not even looked up.

In fact, Paul was still clutching Eva's arm and Eva was still leaning backward. They had not moved at all.

An awful suspicion struck Jack with the impact of a solid fist to the pit of the stomach. He had assumed until now that the timer had somehow stuck at the position in which it activated the generator, that no explosion had taken place because he had been careful after that first crimson flare not to monkey with the working parts of the generator. It had not occurred to him that the field in restricting him to two dimensions might *really* have restricted him to two dimensions.

Frantically he rotated until he was able to spot a large electric wall clock above the door of the room. Its hands were frozen at twelve minutes after two, and the long sweep-second hand stood motionless a little beyond the figure 12. He rotated back to where he could view the two people below. On the thick wrist above the hand that

held Eva's arm was a large gold wristwatch, and this also stood with its hands immovably at twelve minutes after two. Jack was caught, not merely in a single plane, but in a single instant of time.

Up until now he had not really despaired. Always in the back of his mind had been the notion that even if he failed completely, sooner or later someone would come to his rescue.

Now he realized that no rescue was possible.

SOMEHOW he survived that realization. Possibly because he was the kind of man who does survive, the sort of person who by birth and training has been educated to disbelieve in failure. It was just not in him to accept the fact that he was hopelessly trapped. And particularly in support of this was the discovery he had just made about Paul and Eva.

He looked down at them, with a sort of bleak clarity of understanding that he had never succeeded in obtaining before. He realized now that he had been—for all effective purposes—blind while Eva had been working with him at the University.

He had introduced Paul to Eva himself some six months back when the other man had dropped by to see him on one of his occasional forays into the academic area in search of likely hired help. Jack had not considered the introduction important. It had not occurred to him that Paul would find Eva the sort of woman he would want. In fact if anyone had asked him about such a combination, he would have thought it rather funny. The two, by his standards, were opposite as the poles—Eva, with her cool depths, and Paul with his violent surface huckstering. It had not aroused Jack's suspicion that Paul should visit frequently during the months that followed, and that his visits should stop with Eva leaving the U.

No, Jack had been blind to the possibility of anyone else wanting Eva but himself, obsessed by the battle with his inner shyness that twiddled its thumbs and hoped vainly for a fortuitous set of circumstances that would do his wooing for him. Paul might not have the inner strength that had just brought Jack through where poor Reppleman had foundered, but he had push, and guts enough in his own way. While Jack dreamed, he had carried off Eva; and now, at this late date Jack was finally waking up to the fact that where the mating instinct is concerned we are still close enough to our animal forebears to have to fight for our partners on occasion.

He swung around and made his way once more out of the room. He needed space to think.

Once more in the bright sunlight outside, in the eternal out-of-doors of twelve minutes after two on a warm June afternoon, he continued his survey of the situation he was in. But he returned to it with the cold, dispassionate viewpoint of the trained mind. He marshalled the facts he had learned about his situation and considered them. They amounted to the following:

He was involuntarily imprisoned in what appeared to be a plane of two dimensions only and of un-

known extent.

He was kept prisoner by a device operating at this moment.

The natural restrictions of movement in two dimensions, plus a matter of his original position in the plane, prevented him from reaching the means by which he could shut off the device.

Problem: How to shut off the device?

He returned to the room housing the generator and examined it. He studied the objects that, like himself, had been caught up in the field. He could not grasp any of them, but he could push them around within the limits of the field. It would, he thought, probably be quite possible to push the hammer, say, into the core of the generator and short it out. Also, probably quite fatal, if Paul had been telling the truth about the explosion. Reppleman had probably done some such thing. But he was in a rest home now with, again according to Paul, a complete block on the whole business. Still, the hammer possibility might be considered as a last-ditch measure.

"I have only begun to fight," quoted Jack softly to himself.

He studied the two upright rods from the top ends of which the field was generated. A thought occurred to him and he measured the distance between them (about three feet as nearly as he could estimate by eye) and the length of the room to the window in front of which he had been standing. He remembered that it had taken him more steps than he had expected to reach the generator from the window. He checked this and discovered that the first step back from the window was about the length of his normal stride, but that the second was only slightly more than half that, and the third diminished in proportion.

He returned to the window, went through it to the outside, and checked his stride in the opposite direction. His first step out from the window in a direct line away from the rods of the generator was not quite double his normal stride. With the next it doubled again, and half a dozen steps saw him sweeping over the countryside with giant's steps.

On impulse he closed his eyes and continued outward. After a few more steps he stopped and opened his eyes to look. Earth lay like an enormous, white-flecked disc below him. Space was around him. For a second, instinctively, he tried to gasp for air, then realized with a start that he was not breathing, nor had he been breathing for some time. Such things, evidently, were unnecessary in two dimensions.

He looked back down at Earth then ahead into space. Reppleman had gone mad at the end and wrecked the generator. But Reppleman was Reppleman; and he was —Jack. Moreover he had a score to settle back in his normal world. And he had every intention of getting back to settle it.

How far, he thought, had Reppleman wandered, before he had come back to destroy the thing that held him? The thought was morbid and he shook it from him. Firmly he faced away from the world and strode outward. For a moment he twinkled like a dot among the stars. And then he was gone, stepping into enormous distances with ever-increasing stride.

JACK closed the door of the little workroom behind him and turned left in the corridor outside. He went down the corridor, counting doors. At best it would have to be a guess, but if his estimate was right the room he wanted should be—

This one.

He pushed open the door and stepped in, interrupting two people in the midst of an angry argument. For a moment they stood frozen, interrupted and staring at him, and then Eva literally flew into his arms, while Paul's astonishment faded to a bitter smile and he sat down on a corner of the desk beside him and crossed his arms.

"Oh, Jack!" choked Eva. "Jack!"

Jack folded her in his long arms almost automatically, with a feeling of bewilderment that gradually gave way to one of pleasure. He had never seen the calm, self-contained Eva moved like this before; and the corresponding role it demanded of him was rather attractive. He felt sort of contented and self-righteous; and at the same time as if he ought to do something dramatic, like, say, picking up Paul and breaking him in half, or some such thing.

At that, however, it was Paul who got in the first punch.

"She's worried about you," he said, dryly, jerking a thumb at Eva.

"You are?" demanded Jack, looking down at her.

"Oh Jack!" said Eva. "You mustn't do it. You don't know how dangerous it is!"

"What is?" asked Jack, becoming bewildered again.

"The field," put in Paul, as dryly as before.

"Oh that," said Jack. "Well—"

"You don't know what it's like," interrupted Eva. "I was here when they took Max Reppleman out after the explosion. Jack—"

"Never mind that," said Jack, strongly. "Paul said you were worried about me."

"Jack, please listen. That whole business is dangerous—"

"You wouldn't be worried about me unless you were—well worried about me," said Jack stubbornly. His blood was up now. He had almost lost this girl once to Paul through hesitation and delay. "Eva —" He tightened his grasp on her —"I love you."

"Jack, will you lis—" Eva stopped suddenly. Color flooded her face. She stared up at him in shocked speechlessness.

"Eva," said Jack, quickly, taking advantage of this golden opportunity and talking fast. "Eva, I fell in love with you back at the University, only I was always looking for the right chance to tell you and I didn't get around to it because I was afraid of making some mistake and losing you. And when you left and went to work for Paul I gave up, but I've changed my mind. Eva will you marry me right now, today?"

Eva tried to speak a couple of times but no sound came out.

"The whirlwind lover," said Paul somewhere in the background.

"Well?" demanded Jack.

"Jack, I—" trembled Eva.

"Never mind," said Jack, breaking in on her. "Because I won't take no for an answer. Do you hear me?" He paused for a second to be astonished at his own words. "You're going to marry me right away."

"Ye gods!" said Paul. He might have saved his breath. Neither one of the other two was paying attention to him.

Jack let her go, and looked at Paul.

"Paul—" he said.

"Yes *sir!*" responded Paul, getting up from the desk and popping exaggeratedly to attention.

Jack looked at him with the jaundiced eye of a conquering general for his defeated rival. Though temporarily vanquished, this man was still potentially dangerous. Proceed with plan B? asked the front part of his mind. Proceed with plan B, responded the back of his mind.

"Paul," he said. "I've got the answers for you on the field."

Paul's ironic pose slowly relaxed. A wary, calculating look came into his eye.

"What?" he said.

"I'll show you," Jack said. "Come on with me. You too, Eva."

And he turned on one heel and led the way out of the room.

"You see," said Jack, "you were wrong in your picture of what the generator does." They were all three standing in the little L-shaped room and Jack had just told them what had happened to him. "It doesn't produce a field at all. What it does is affect certain types of objects close to it so that they become restrictd to a certain limited two-dimensional plane in a single moment of time. The generator itself tries to exist both in this and in normal space at the same time, with the result that it blows up—what you might call a paradox explosion —not after some seconds, but immediately. Of course, this doesn't affect what's been caught up in the single moment-and-plane, because for them that single instant is eternity."

"But it didn't blow up on you," said Paul.

"I turned it off before it had a chance to," replied Jack, a little grimly.

"Now wait," said Paul. "Wait. You just finished telling us you couldn't reach the timer switch because of your position which was essentially unchangeable in two-dimensional space. How did you turn it off? In fact, how did you ever get back?"

Jack smiled coolly.

"What happens to a plane in curved space?"

Paul frowned.

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

"It curves, of course," answered Jack. "And where it's dependent upon something like the generator, it curves back eventually to it."

Paul's eyes narrowed.

"Well—" he hesitated. "What good did knowing that do you, though? You could walk clear around the circle and still not change your position so as to reach the timer switch."

"Ah yes," said Jack. "If it was just a simple circle. But it was a Moebius strip."

"Now wait—" cried Paul.

"You wait," said Jack. "How many points determine a plane?"

"Three."

Jack turned and walked down the length of the room to where the two upright rods still stood connected to the generator. He touched their tips.

"And how many points do we have here?"

Paul looked bewildered.

"Two," he said. "But—"

"Then where's the third point we need? As a matter of fact you're standing right at it."

Paul started in spite of himself and moved slightly aside.

"What do you mean?" he asked.

"The third point," said Jack, "is the focal point of the two lines of force emanating from the two rod tips. They converge right in the middle of the window at the far end of the room there."

"But I still don't see!" said Paul.

"You will," said Jack. He turned and stepped into the alcove. There was a moment's silence, then the sound of tearing paper and he stepped back out holding a long thin strip of newspaper. He walked back to Paul.

"Let's see your thumb and forefinger," he said. "Now look here. This one end of the strip for the length of about an inch we'll say is the part of the plane in this room that's determined by the three points, the two rod tips and the focal point of their lines of force. Hold that."

He transferred one end of the strip to Paul's fingers. Paul held it pinched between thumb and forefinger and watched.

"Now," went on Jack, demonstrating, "the plane goes out like this and around like this and back like this in a big loop and the end approaches the generator between your fingers again. It comes in here and the last inch of it goes back between your fingers, and there you are, reversed and ready to shut off your timer."

"Wait," said Paul, now holding the two ends pinched between his fingers together and the big loop of paper strip drooping in midair. "Why does the end come back in the same place? Why doesn't it just circle around behind and touch ends?"

"For two reasons," answered Jack. "The plane must end where it began. Right?"

"Yes."

"But," said Jack. "To remain the same plane it must have the same three points in common. And the plane takes its position from the focal point, not the two rod tips. The result is what you've got in your hand there, a loop with a little double tag end."

"But I don't—well, never mind," said Paul. "The important thing is that this is still a straight loop, with no twist in it at all. "You could never get reversed on this. This is no Moebius."

"Think again," said Jack. "With that tag end it is." He turned to Eva. "Come on, Eva. We'll leave Paul to figure this out while you and I go get our own affairs taken care of." He took her hand and opened the door.

"Hey!" cried Paul. "You can't—"

"Oh yes, I can," said Jack, turning in the open doorway. "I've answered all your questions. Just take an imaginary little two-dimensional figure and run him around that strip of newspaper. You'll see."

And he led Eva out the door, closing it behind them. Once in the corridor, however, he took her shoulders in his two big hands and backed her against the wall.

"Tell me," he said. "Just why did you quit me at the U. and come down here?"

Eva looked guilty.

"He—Paul said—"

"What did he say?"

"He said," hesitated Eva, "you'd always told him you never intended to marry anyone." A small note of defiance came into her voice. "What was I going to do? Every day I'd come to work and you'd be there, and you never said anything—" she broke off suddenly, eyeing him curiously. "Why did you ask me that now, Jack?"

"Because," said Jack. "For a minute I was tempted to save Paul a walk—a long, long walk."

She stared up at him.

"I don't understand."

He smiled and took her hand.

"Some day," he said tenderly, "some day when we are very old and married and well supplied with grandchildren, I'll tell you all about it. Okay?"

She was too much in love with him to protest—then.

"Okay," she smiled back.

They went down the corridor toward the door leading out to the parking lot behind the labs.

IN THE room Paul stood frowning at the strip of paper in his hand. It didn't seem possible, but it was. He had just finished walking, in imagination, a little two-dimensional man all the way around the strip; and, sure enough, he had ended up facing in the opposite direction. It was simple enough. But it wasn't a Moebius. Or was it? If the two ends were one end—

Outside on the parking lot he heard the roar of a motor; and he looked up to see a battered old blue business coupe make its turn on the gravel expanse and head out the driveway. As it passed it stopped; and Jack stuck his head out the car window to shout something to him. Paul stepped to the window.

"What?" he yelled.

Jack's words came indistinctly to him over the distance and the racket of the ancient motor.

"—I said—stay right where you are—"

"What?" roared Paul.

But Jack had pulled in his head and the car pulled ahead out the driveway and into the street. Paul watched it merge with the traffic and get lost in the distance.

What had Jack said? Stay right where you are? *Why* should he stay right where he was?

Suddenly he felt the unexpected cold squeeze of suspicion. It couldn't be that Jack would—

—Behind him and from the direction of the timer, came the sound of a soft, insidious *click.* • • •

I'm not sure that the mathematician really understands this world of ours better than the poet and the mystic. Perhaps it's only that he's better at sums. —*Sir Arthur Eddington*

We ought to regard the present state of the universe as the effect of its antecedent state and as the cause of the state that is to follow. —*Laplace*

Illustrated by John Styga

JOURNEY WORK

Get mad, old man, but don't give up; you're not through by a long shot. Somewhere there's a job for you, a job that youth can't do . . . a dangerous job, but a good one that'll bring you fame, fortune and peace . . .

BY DAVE DRYFOOS

IN A CENTRAL California tomato field a dusty-faced man opened the autodriver of a nuclear-powered truck and inserted a cannery's address card so the truck would know where to deliver its load.

Six old men—the tomato pickers—waited for their pay in the truck's lengthening shadow. Most of them smoked or dozed, too tired for talk.

Ollie Hollveg, tallest and oldest of the pickers, eyed the heavy-set rancher who sat at the tally table figuring the payroll. For this day's work Ollie expected even less pay than usual; the mumbling, pencil-licking rancher—his name was Rost—seemed to be overacting the role of harried proprietor.

Soon Ollie saw his guess confirmed. A look of frustrated rage spread from face to face as each of the other pickers was in turn called to the table and paid.

All were overage. None dared protest.

At seventy a poor man without

relatives willing to care for him was supposed to let himself be permanently retired to a Home for Seniles. If he wasn't senile and didn't want a home with barred windows and a barbed wire fence, he had to lie low and keep his mouth shut.

Anyone could charge an overage person with incompetence. The charge was not a crime and so had no defence.

All of which was old stuff to Ollie Hollveg. He'd been dodging the geriatricians for sixteen years. He considered himself used to the setup.

Yet something about the rancher, Rost—maybe his excessive weight, in contrast with the pickers' underfed gauntness, or maybe his cardboard cowboy boots and imitation sombrero—made Ollie boil in spite of himself.

He tried not to show his feelings. But when he was called to the tally table the rancher scowled up at him defensively and said, "Don't glare at me, Hollveg! If you moved as fast picking tomatoes as you do collecting your pay, you'd have earned more than this."

He pushed out a little pile of coins that came to four dollars eighty-seven cents.

"Odd pennies?" Ollie's voice broke as he fought to keep it under control. "Odd pennies, when picking's at the rate of two bits a lug? That can't be right. Just because we're old, you're stealing from us!"

Rost's fat face turned livid. "Call me a thief?" he sputtered. "Get off my land!"

Rost jumped clumsily to his feet, upsetting the tally table. Ollie bent to retrieve the coins scattered in the dust.

"Don't try to steal from me!" Rost shouted. He pulled out a small gas gun and discharged it under Ollie's nose. Ollie pitched forward onto his face, twitched, moaned, and lay still.

The deputy sheriff held an ampoule under his nose and brought him to after setting the squad car on the beamway, proceeding under remote control toward the county seat.

The first thing Ollie thought of was his day's pay. He'd never received it. Worse—his bedroll was left behind. And there was no stopping nor turning on the beam way.

He complained bitterly.

"You won't need that stuff," the sharp young deputy said. "Not where you're going."

"I suppose Rost needs it!" Ollie protested.

"He might at that. All he's got is those measily four rented acres of tomatoes. The cannery pays him the same as if he had four hundred acres and could pick by machine.

"About all the profit he can make is what he chisels out of his pickers. You'll be better off in a Home, Pop, than trying to work cheaper than a machine."

"Those Homes are prisons!"

The deputy sighed. "I know how you feel. My old grandfather cried when we put him in. But we couldn't support him and he had no way of making a living.

"The world changes faster than the people in it, Pop. Science all the time lets us live longer, but faster and faster it keeps changing the way we do things. An old guy falls so far behind the times, the only place for him is a Home."

"But if a man wants to stay out," said Ollie, "I don't see why he can't."

"Old guys are dangerous to the rest of us. I saw three people killed, not long ago, trying to dodge an oldtimer who walked too slow to get across a wide street before the lights changed against him."

"They could have slowed the signal," Ollie said. "But no! Always it's the man who has to adapt to the machine, not the machine to the man. The only way to get by in this world is to find some machine you just naturally fit."

"You sound kind of bitter."

"Why not? I used to be a stock control clerk, keeping track of spare parts supply for a nationally distributed line of machine tools. I had twenty girls working for me. Then one day they put in a big computer."

He sighed. "No wonder these suicide salesmen do so well. If I had the money I'd hire somebody to knock me off right now."

"Don't be stupid!" the deputy snarled. "You wouldn't be losing your freedom if you'd had sense enough to stay out of a fight. And when you talk about suicide salesmen, you sure prove you can't take care of yourself!"

But the deputy was kinder than he sounded. Rather than allege incompetence, he charged Ollie with an assault against Rost. So instead of being remanded to the geriatricians, Ollie was kept overnight in jail and ordered held, next morning, for want of fifty dollars bail.

An hour after bail had been set, a dapper thin faced bailbond broker came to see him.

"Want out?"

"Sure."

"If I put up bail you'll be out."

"No Home?"

"You're classified as a criminal, ineligible for a Home till either you're found not guilty or serve your time."

"Well, but I'm broke. I can't buy a bailbond."

"You can work it off. I'm going to spring you right now. As soon as they let you out, meet me in the southwest corner of the park, just across from the post office."

Ollie did. He thought his bail had been arranged by the deputy.

The broker kept him waiting in the park for half an hour, but was brisk when he appeared.

"My name is Lansing," he said. "Come on. We're taking a little trip."

He steered Ollie to the copter tower at the park's center and with him boarded its endless-belt manlift. They were carried ten stories to the roof, and as they stepped off the manlift an empty copter hovered at hand. It bore on sides and bottom an address, a phone number, and the word *Bailbonds,* all in big letters.

The copter rose under the tower's control as soon as they'd entered it, and continued to rise till Lansing selected a prepunched destination card and slipped it into the autopilot. Then a knowing red light winked on, the copter levelled off and headed southwest, and Lansing took one of a pair of chintz-padded wicker seats, motioning Ollie into the other.

"How do you like the idea of going to a Home?" he asked abruptly.

"I'd rather be dead."

"I know someone who agrees with you. A fellow with bad health who wants to die but doesn't have the guts to do the necessary. Feel like helping him out?"

Ollie sighed, smiled grimly, and shook his head. "No, thanks!"

"You might die yourself, Hollveg." Lansing's voice was heavy with menace.

"I might," Ollie agreed hotly. "I might get murdered. And maybe the same thing will happen to this supposedly sick man you want me to help out. He may not want to die any more than I do. I've heard you suicide salesmen do a lot of murder-for-hire."

"You've heard too much, Hollveg."

Lansing took a plushlined metal case from an inside pocket and removed from it a filled syringe, complete with needle.

"This won't hurt," he said in a sneering imitation of a doctor. "But it'll end your independence like a barbed wire fence."

Ollie began to sweat. "I've heard of those zombie-shots too," he said. He looked wildly around, then controlled himself and gestured almost calmly toward the sky, land, and water visible through the cabin's plastic walls.

"Maybe you can put the needle away for a while," he suggested. "I'm not going to walk out on you right now."

Lansing smiled and complied. "You may keep your health a long time yet," he said urbanely. "If you're sensible, we might even find steady work for you."

Ollie suppressed a shudder.

Lansing tuned in a Western on the physeo. Soon the odor of sage

and horse-sweat filled the cabin.

Ollie watched avidly. He hadn't seen enough physeo to be bored with it.

There was a mouth watering camp supper scene, with pleasant odors of broiling beef and burning wood; and a stirring moonlit love scene with a wholesome girl who smelled of soap and starch, and only faintly of cosmetics.

But then came the climactic chase, a combined stampede, stagecoach race, and Indian fight. So much alkali dust poured from the physeo that Ollie got a fit of coughing.

He couldn't stop. After several excruciating minutes he lay down on the floor and gasped to Lansing for a drink of water.

"There isn't any," Lansing told him sharply. "And brother, you'd better get up from there, because you'll have to move fast when we get to Frisco."

Without knowing what would result, Ollie made sure he neither got up nor stopped coughing till they reached San Francisco which was fifteen minutes later.

The pretense involved intense effort for so old a man. His voice went. He was clammy with sweat from head to foot. His face was pale and his hands cold.

By the time the copter reached the roof of San Francisco's Union Square tower, Ollie was actually unable to jump out of the cabin in the thirty seconds allotted by the remote traffic-control system. Lansing tried to carry him out, but the result was merely a delay that damned the stream of traffic.

A winged inspector buzzed them, took remote control of their copter, and led it to the emergency tower at Civic center.

Ollie was taken off on a stretcher. Lansing, his urbanity washed away in a flood of redfaced rage, was still in the copter when it rose. And the hypo was still in his pocket; with Ollie due to get medical attention, he hadn't been able to use it.

Ollie didn't dare stay long in the hospital. As soon as his stretcher was set down on the receiving ward floor, he rolled out of it and with the help of a fat steward struggled to his feet.

"Thanks," he whispered hoarsely. "I have to go now."

"You can't!" said the steward. "You haven't even been examined yet."

"It's against my religion to have to do with medicine," Ollie improvised. "Besides, I'm perfectly well."

"Yeah? What about your voice—or lack of one?"

"A coughing spell. I'm over it now. And my voice is coming back." It was.

The steward unbuttoned his coat and scratched his belly meditatively. "If you don't want treatment you don't have to have it," he said finally. "The joint's overcrowded now."

Ollie didn't congratulate himself when he got out. He was now a fugitive from both the geriatricians and the underworld. Soon the police would want him for bail-jumping, and meanwhile they'd grab him for vagrancy if they caught him off skidrow.

He headed that way at once, walking over to Mission and down it toward Third. A clock on a storefront said five twenty. He felt over-

due for supper and bed.

He counted his change—three dollars and forty-two cents. He had no bedroll; no overcoat, either. Even in this nice summer weather it might be a little tough for a fellow to get by on the road with so little plunder. Eighty-six was a trifle old for the rugged life.

What he needed, of course, was a white-collar job. Not only needed, but deserved—he was a good clerk. Therefore he should go to the Hearst Building at Third and Market and scan the want ads posted there. As he'd been doing when in San Francisco for forty years.

He thought of some of the many times he'd stared at that bulletin board. He'd gone there often during the years he'd worked as a construction timekeeper, before that skill became obsolete. Then there'd been an interval when he'd sold rebuilt window washers—for a firm which still owed him money. And he'd haunted the board during the months he'd had that job in the automatic grocery, replenishing the dispensing machines' merchandise.

None of his jobs had come from a want ad. But he had to go look. It was a ritual.

THE YEARS had made the ritual a hard one for him. He could read the fine-printed columns only with head cocked an arm's length away from a cheap reading glass held up to them. He took a lot of room; forced a white-capped young mechanic to peer awkwardly around him.

Embarrassed, Ollie moved out of the way. He'd begun to walk off when the young fellow stopped him.

"I don't think you saw this one, Dad," he said, pointing.

> OLDER MEN (the ad read) without dependents needed for dangerous scientific experiments. If able to pass intensive physical and mental tests report for interview to Civilian Personnel Office, Short Air Force Base, Short, Utah.

"I don't know where the place is at all," Ollie complained wearily.

"Just this side of Salt Lake, on the main line," the young man said. "I served there, so I'm curious. If you're not—well—" He shrugged and edged away.

"Thanks, son," Ollie called after him. "I'm going to follow that up."

The young man walked on without looking back.

Ollie felt committed, not only by his offhand declaration, but by his ritual. He'd come to look for a job; he'd found one for which he was eligible; he must go after it.

He headed down Third Street toward the freight yards but stopped at a skidrow restaurant for a bowl of stew and a cup of coffee. Passing an old-fashioned catchpenny grocery he went in and bought a half-dozen rolls to take with him. The proprietor, squat, unshaven, and swarthy, picked out a large red apple and slipped it in with the rolls.

"Good for you," he said, smiling.

Ollie shook his head.

The grocer frowned, then replaced the apple with an orange. "Easier on teeth," he said.

"Thank you," said Ollie, smiling. "You make me feel lucky. I'm answering a want ad—maybe I'll get the job."

The grocer smiled vaguely. "I

hope." Then his face livened. "What job? In paper?"

"Yes." There could be no other, for a man his age.

"It says 'dangerous,' " said the grocer. "I think maybe they cut you up, find out how you live so long. Or make you sick to try new cure.

"You find better job—or Home. That one bad." There was a slight pause.

"Look. I close soon. You sweep store, I give you dollar."

"You're a good guy," said Ollie. "But I've got three dollars now." He showed them proudly. "You save yours for somebody who doesn't have a job to try for."

He tucked the rolls and orange inside his shirt, marched valiantly out of the dark little store, and continued on to the yards.

The heavy traffic there confused him briefly. Transcontinental freight was carried in long trains of rubber-tired cars towed on elevated beamways by remotely-controlled, nuclear-fueled steam tractors. Here at the San Francisco yards the trains were broken up and the individual cars hauled by turbo-tractor on city streets and suburban roads for delivery at the addressees' doors.

The cars were huge, the noise and bustle awe-inspiring. Ollie stood outside the main exit watching the little tractors and big cars emerge, till a beamway bull came over, flashed a badge, and told him to move on.

He did. He was a fugitive from so many things; he couldn't afford resentments.

He went on around the yards. They were vast. He felt sure that somewhere there must be an unguarded entry, and set out to find it, moving cautiously from shadow to shadow along the high plastiboard fence.

Twice he blundered into watchmen. Once he nearly got himself run over. But after a couple of hours he saw a bindlestiff slip through an unguarded gate, and in half a minute he was right behind the man.

Ollie moved away from him. There was safety in solitude. Besides, he had to find a Salt Lake train.

The sealed cars were addressed like so many packages. But he had to have light to read by, and he risked discovery every time he moved into the light and took his stance behind the reading glass.

There were other hazards; television beams for the yard clerks to read numbers by, invisible beams for the bulls to catch him with, headlights that suddenly flashed on blindingly, humped cars rolling unattended on silent, murderous tires.

Ollie felt like an ant on a busy sidewalk, liable to be crushed under foot at any moment.

But an added hazard helped him find his train. The bulls had read that want ad too. They were out in force around a string of cars. He slipped between two sleepy-looking men, checked an address, and then slipped out again, certain every car would be inspected before departure.

A good way down the yard he hid at the base of the fence, dozing and shivering for several hours as he lay stretched out on the dew-chilled concrete. He checked each outbound train as it went by, and again knew his by the bulls on it.

They were on the cowcatcher and in the cab, on the car roofs, and in the caboose with the train-crew of three trouble-shooting mechanics. Highlights gleamed on their weapons. Their job was to keep or get all transients off that train—and they would if they could.

Ollie let most of the train go past. The caboose came by at about fifteen miles an hour with a sharp-eyed guard head-and-shoulders out of the cupola. Ollie let him get past, too—and hoped he went on looking toward the front.

He began to hobble parallel to the train, dismayed at the stiffness that had set in while he lay out on the damp concrete.

As the rear of the caboose drew even with him he emerged from the shadows and dived for the coupling at the car's rear. He caught it clumsily, tore the nail off his left ring finger, but hung on.

He tried to trot but the train dragged him. He gave a leapfrog player's jump and landed on top of his own hands, his thighs around the coupling, his nose against the rear platform-wall of the caboose.

The engine jerked slack out of the long train and nearly dislodged him. One at a time he moved his hands from the coupling to the base of the wall. He edged in a little closer. The train gathered speed.

He wasn't really on but he couldn't safely get off. He'd intended climbing under the caboose to its rear truck, but the bulls and his own lack of agility made this impossible so now he must ride where he was, exposed to battering wind and searching cold as the train crossed the High Sierras, and also exposed to the whims of the trainmen if any should come out on the platform and look down.

He'd seen men shot off trains. But he didn't worry about it. Instead, like the old hand he was, he tried to sleep while clinging there.

At Sparks the train stopped for a maintenance check. The guards formed a perimeter but Ollie was inside it. Too stiff to move far, he stayed in a shadow while the mechanics inspected, then he climbed under the caboose and stretched out on a girder separating two tires of the rearmost, six-tired truck.

The tremendous tires fanned up hot winds when rolling, and these had warmed the steel he lay on. Before the train started he ate a roll, sucked the orange, and stretched out face down for the speed run across the central Nevada flatlands.

The guards stayed behind. After the train had started, one of them shined a light directly in Ollie's eyes.

The train kept on. And he was too close to the tires to be shot at; rubber-coated death whirled within three inches at either side of him.

As the train picked up speed he was careful to lie still, but beyond making sure he didn't touch the tires Ollie tried to put all thought of risk from his mind.

He saw a sudden vivid picture of his dead wife and son as they'd looked before the undertaker fixed them. They'd been killed while travelling. In times when to succeed was to get somewhere, they'd been killed en route. He couldn't remember where to.

They'd died in a head-on crash caused by a stranger's error in judgment. A thing that didn't happen

any more, now that highway vehicles were controlled by beamed energy instead of individual drivers.

The highway was one place where the human had been tested against the machine and found inferior. The office was another. If Minna and Charlie hadn't died so long ago, they might have lived to see him now—a bindlestiff so low he even lacked a bindle.

Still, it was lonely with no one in the whole wide world to care whether he lived or died.

He sighed, shifted his position, and was nearly jerked under the wheels by sudden contact with the tire on his right.

It was over in an instant. The tire simply ripped the coat from his back.

He still wore the sleeves. The rest was gone. Weathered thread had saved him.

HE HAD ample time to think about the irony of that before rosy dawnlight was reflected into his face from a glittering salt-pan. He knew then he was still west of Salt Lake City, and that Short Air Force Base was close.

Also close, now that night had withdrawn its concealment, was discovery. He was sure to be found when next the train stopped.

Therefore he eased himself out of his coatsleeves. He moved gingerly, but still chanced death to improve his appearance.

The train slowed, stopped.

Someone called, "Here he is," and a redhaired Air Policeman leaned under the caboose, looked him over, and said, "Come on out, Pop."

Ollie's legs were stiff. The airman had to help.

"You're in kind of rough shape," he said. "Where did you think you were going?"

"Why—uh—east." Ollie cast down his eyes, ashamed even to admit he'd once entertained the notion he might get a job.

The airman wasn't fooled. "You slipped through the train guards after the job we've got here. Didn't you, Pop?"

"All I want is out," said Ollie stubbornly.

"Well," said the airman, "you can't get off the Base without a pass. You'll have to go up to Civilian Personnel and get one."

"Can't I wash first?"

He could. He could also get a jeep ride to the terra cotta headquarters building, with a stop along the way for a canteen-cup of coffee and a slice of bread.

When they got to headquarters the airman asked, "Tell the truth, now; didn't you really come after this job?"

Ollie wouldn't admit he'd lied about it, so he lied again.

"I've seen some of the other guys come in after it," the airman insisted, "and you look as good as any of them. Why not try for it, now you're here?"

He gave Ollie a long application to fill out and left him at a desk just outside the personnel office.

From somewhere came the clatter of a facsimile-printer, carrying the day's message from GHQ. A boy whistled above the squawk of a superwave radio. But otherwise the place seemed deserted at that early-morning hour.

For lack of anything better to do,

Ollie filled out the application, leaving the job title blank. The only thing that gave him pause, aside from the difficulty of seeing, was his arrest record, and in time he decided to put it down just as it was, including the pending assault charge with its implication of jumped bail.

After an hour a young captain entered the building and went to the office marked Adjutant. A fat major gave Ollie a piercing glance and then entered the Civilian Personnel office. At about five minutes of eight the place suddenly boiled with military and civilian people of all ages and both sexes.

Things quieted promptly at eight. A blond youth came out of the office, glanced at Ollie's application form, kept it, and invited him inside.

"First thing for you," he said, "will be a physical exam."

He took Ollie to another room and turned him over to a young medic who put him in a box like a steam cabinet, attached electrodes to his temples, wrists, ankles, and chest, and put a helmet on his head.

For five minutes Ollie stood encased, his stomach fluttering as he recalled the grocer's warning. He waited for the vivisection to begin.

It didn't. He was removed from his shell and handed an inked graph.

"Here's your profile," the medic said. "It's good, considering. Take it back to the fellow who brought you here."

He did and was ushered into a glassed-in office containing two desks, each labelled Civilian Personnel Officer. At one sat the fat major. At the other, a tallish young civilian held Ollie's application.

"My name is Katt," the civilian said, getting up to shake hands. "This is Major Brownwight."

The major also shook his hand. Katt placed a straightbacked chair between the two desks, and invited Ollie to sit in it. Ollie did, gazing uncertainly from one man to the other.

"We heard you arrived by train early this morning," Katt said.

"Yes, sir."

"You were first reported in Sparks, but I'll bet you boarded that train in San Francisco."

"Yes, sir. What's the penalty?"

"None. I like it. It's enterprising, athletic, and even brave for a man of your years to do that for a job. Shows resourcefulness. Also skill, because men are trying to nip rides here from all over the United States, but very few arrive."

"They're too old," said Major Brownwight. He turned to Katt and added, "I still don't think it's an old man's job!"

"Well sir," said Katt, stifling a sigh, "your predecessor understood and approved of it. These old-timers have a lower metabolic rate than younger people, with all that that implies. They don't mind the enforced inactivity, they won't use up so much oxygen nor need so much food, they won't spend so many hours in sleep. All qualities we need."

"Maybe so." The major turned to Ollie and said, "I just transferred in here. You know more about this than I do."

"I don't even know what you're talking about," Ollie told him.

"Without divulging classified information," said Katt, "for which

you are not yet cleared, I can tell you these are little one-man jobs. Small stuff—for pioneering. That's why we want you men with lots of patience, who're used to being alone. People without a fixed place in society, and not too much to leave behind. A husky old itinerant like you is just what we want."

"For what?" Ollie insisted.

"To travel—as a sort of working passenger, since piloting will of course be mechanical—in the first manned spaceships to leave Earth for the stars."

"Spaceships?"

"Sure. Solo spaceships. Superfast, which means the trip will seem relatively short while you're on it, and will give you extra earth-years of life in the end.

"The job is much easier and less hazardous than the trainride that brought you here. You're a natural for it. You really fit it."

"Do I, now?" A quick glow of inner warmth melted many bad years away. Ollie grinned.

"You know," he said, "in a way that's a disappointment."

"How so?" asked the major aggressively. "Don't you want the job?"

"Yes, sir. I want it. But all these years I've been telling myself that somewhere on this earth was a place I'd fit into, if only I could find it. Now you tell me I fit in, but the place isn't here on Earth after all!"

"Not right now, no," said Katt. "But you'll be back. Rich and famous, too. No Home for you, Mr. Hollveg—you'll have a nice place of your own."

And he did—after photographing the planets of Arcturus. • • •

THE EARTH QUARTER *(Continued from page 45)*

for orders; he had no idea where he might be sent after that. Cudyk had not yet made up his mind. He thought that perhaps he would go with the priest; if he should change his mind after landing it would be no great loss; one wilderness, as Exarkos had once said, was as good as another.

It will all be anticlimax, he thought, and perhaps that is the definition of Hell: unending anticlimax.

He wondered how it would feel to be Earthbound again. The repatriation ship was to be the last Galactic vessel which would ever call at Earth. And there would be a constant guard. The Niori had learned, belatedly but well. If humanity ever climbed high enough again to reach the stars with its bloody fingers, the citizens of the galaxy would be ready.

Cudyk looked at his watch. The man in the powerhouse must be a sentimentalist; he was waiting until the last possible moment.

He heard the soft hum of the aircar behind him, turned and saw it settling lightly to the clipped lawn. The remaining passengers were moving toward it. Exarkos stood up and lifted his suitcase. Cudyk turned back for one last look at the Quarter. It was full dark now, and all he could see of it was the blocky, ambiguous outline of its darkness against the glowing buildings beyond, and the cross-hatched pattern of yellow street lights.

The lights went out. • • •

BY WINSTON MARKS

WEDDING DAY

Some folks say a good wife is a composite of many things. And sometimes a girl finds it tough. But with the ratio of the sexes drastically changed . . .

AT BREAKFAST Polly and June had an argument over the coffee. Polly had brewed it. June thought it was too strong. Doris and Sue stayed out of the argument at first.

Polly defended, "Sure, it's a little stronger, but men like it strong. You might as well get used to it."

June said, "See here, he's got to make some concessions. After all, why should four of us suffer—"

"Suffer? You call being married to Hollis Jamison suffering?"

"Don't be so impressed. He's not doing badly marrying us, either. He could do a lot worse."

"Why, you vain witch! Just because you play a fair game of chess—"

"Oh, I'm not taking all the credit. You're a fine cook, Doris is witty and Sue's body would make any man's mouth water—but that's just the point! Look what he's getting! Why should we have to change all our habits and tastes to conform with his?"

Now Doris entered the argument. "You know darn well why! It's still a man's world and a man's choice. Back when there was a man for practically every woman, it was different. But it's five women to one man right now—don't ever forget that—five to one, and so far the law only requires a quadracell. Just be grateful you aren't the one who's left out. You and your chess-playing! How far would you get attracting a man, all by yourself?"

"Shhh, now, all of you," Sue broke into the telepathic conversation. "Let's clear the dishes and get the apartment straightened up. Hollis did make one concession—

moving in with us, instead of making us live in that dismal bachelor's hole of his. Let's not make him regret it."

They heeded Sue and got busy. Sue was the arbiter. She ruled the quartet with a gentle but confident mind. All four knew that her lithe, athletic body with it's soft curves and golden hair was the greatest asset in this transaction of matrimony.

There had been no dissension on this point, nor could there have been. The bureau would never have allowed them to be together and form a marriage cell had there been the slightest dispute.

Many differences of opinion were allowable, but the four had been carefully screened in certain matters of basic tastes. They liked the same colors, foods, styles of clothing, video programs, sports and vacation activities. All were carefully schooled ambiverts of roughly equal education. Instead of conflicting, their differences of skills, talents and personality traits complemented each other.

Even with all this care in selecting and matching, however, the big test was the culmination of the marriage, itself—the whole purpose of this banding together. The unpredictable quality of the most stable feminine emotions made the choice of a mate most difficult of all.

This awareness was in all their minds this day, and it made them a little nervous. Even the argument that had started over the coffee had been faintly alarming to Sue. They were a team, welded together by the wonderful gift of telepathy, which was only possible through formation of a marriage cell. The most complete intimacy of thought and feeling had been nurtured for a whole year before marriage was permissible. Sympathy, tolerance and sharing a common experience with mutual enjoyment and happiness was the keystone of the polygamous unions. Nothing must spoil it now.

The delivery vault thumped, and the signal light flicked on. Sue rushed to slide up the door.

"Orchids!" they chorused mentally, and Sue noticed with satisfaction that June's thought was as strong as the others. The lovely flowers were put in the cooler, the apartment was tidied and they turned to the exciting task of becoming beautiful for their handsome husband.

The tiff over the coffee was forgotten as they became immersed in sprays, powders, tints, cosmetics, body ornaments and the precious nuptial perfume. This latter, issued to them only yesterday when they signed the register and received the license, was now as traditionally exclusive to weddings as trousseaus had been centuries ago.

Feminine clothing, of course, had long since been eliminated from the occasion, along with other redundancies such as waggish and mischievous guests, old shoes, rice and hectic honeymoon trips.

The official and religious arrangements had been completed yesterday at the registry and the chapel, the union to become legal and effective at noon on this day. When Hollis Jamison walked through their door at twelve o'clock he would bring four gold rings, and the moment the rings were

placed on the proper fingers the ceremony was complete.

Doris said, "Let's steal just a tiny whiff of the perfume. I'm too curious to wait."

June and Polly were game, but Sue cut them off. "Not on your life! I used to know a chemist at the hormone labs where they compound this stuff, and he told me about it. We have things to do, and if what he told me is true—well, it's very distracting."

Polly backed her up, "I hear it is terribly volatile. I guess we wouldn't want it to wear off before Hollis came."

"Hollis!" The thought was June's, and it came thin and quavery. "What—do you suppose it's like to be married?"

No one answered, for there was no experience among them. Each had her own romantic idea, so cherished, so private that even within the intimacy of their clique it was too sacred to discuss.

Suddenly June said, "I'm scared."

The thought had come sharply and unexpectedly. It was contagious. Polly said, "Me, too."

"Of what?" Doris asked, "Of drinking strong coffee the rest of your lives?"

It was a weak, nervous stab at humor, and Sue knew that Doris was as jumpy as the rest of them. "Steady, gals," she said sympathetically. "It'll be worth it. We want a baby, don't we?"

It was the right thought at the right time. Sue felt their minds relax, and the thought even did her some good. A sweet, little, round, pink baby—

She let the mental picture flow out to the others, and the little crisis passed.

The minutes flew, and soon it was five minutes to twelve. "Have we forgotten anything?" Sue asked.

"The perfume!" Polly and June said together.

"Hurry!" Doris said. "I think he's coming."

The seal on the tiny vial was broken, one drop on each breast, and the rich, exotic fumes exuded a gentle, warm excitement that was entirely different from the innocent scents they had known.

The door was unlocked, and now it opened.

Hollis stepped in, bronzed body bared to the waist.

"The flowers!" Polly wailed inwardly. "We forgot the orchids—

But Hollis Jamison didn't notice the discrepancy. He advanced smiling from his gray eyes and strong mouth. Sue opened her lips and her fine, white teeth showed a welcoming smile. She was proud of her lovely body, and June, Polly and Doris shared in that pride.

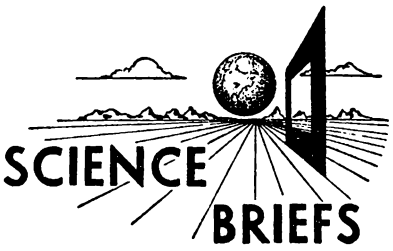
Sue held out her left hand with fingers outstretched. Her man came forward jingling the four rings in his right hand. He paused before her, drew her left hand to his lips, kissed the little finger and slid the proper ring on it, then, in order he kissed Sue's other three fingers and banded them with the remaining rings, symbolic of the four separate feminine entities who dwelt in this one magnificent body.

And with each ring he said a name: "June, Polly, Doris, Sue—"

He straightened and gazed into the two blue eyes.

"I thee wed," he said simply.

• • •



Science may some day reduce the function of memory to a mathematical formula involving electrical impulse frequencies and durations at certain sites in the brain. Experiments with rats have shown that the frequency of electrical impulses on the brain's memory unit determine whether the memory is good or bad. Rats whose brains were stimulated at high frequencies were able to master a maze much more rapidly than those which had been stimulated at one-fourth the frequency rates.

Vertical conveyor belts may replace the elevator cage in the future. Such a system was recently installed in a New York City garage. The continuous 105 foot belt has steps placed sixteen feet apart. When stopped, two steps are on each of the four levels of the building; four ready to go up and the other four ready to go down. The rider standing on a step, grasps a safety handle and starts the "Man-Lift" by pulling a rope beside the belt. The rope starts a three horsepower electric motor that turns a pulley at each end of the rubber and cotton belt.

The first man on the moon may find that he's surrounded by some pretty valuable crystals when he steps out of the spaceship. Recent studies have indicated that the specific gravity of the lunar crust is about equal to that of a diamond. Crystallized carbon could be formed by a fusion of the lunar surface caused by internal forces, such as modified volcanic action or meteorite bombardment. Indications point to the theory that the craters of the moon were formed by such actions; and strengthen the possibility of valuable crystalline formations dotting the lunar landscape.

The dentist may soon be drilling your teeth without causing any pain or even audible sound. A new drill has been introduced in tests which uses a machine tool designed for cutting metals and hard minerals. The device is vibrated electromagnetically for a distance of less than a thousandths of an inch at a speed of 29,000 times a second. The vibration activates the particles in a cutting liquid which do the actual work of wearing away the tooth material.

The traffic problem created by freight delivery may be solved in the future by a new push-button device that enables a pilot to drop as much as twenty tons of cargo by pressing a button in his cockpit. A fully loaded cargo platform is dragged out of the rear of the plane by an extraction parachute, and when the platform clears the plane a large parachute opens and lands the cargo safely. Special shock absorbers help to protect the cargo from impact on landing.

By next summer you may be able to spray your patio, picnic ground or campsite once—and have it rid of flies, mosquitoes and other insects for the entire season. U.S. Department of Agriculture scientists hope that chemical "extenders" added to present insecticides will do the job. Experiments have proved that the use of such extenders as a solvent for DDT has lengthened its effectiveness from 5 to 60 days.

Transport planes may some day have detachable cabins that can parachute to earth if the plane runs into trouble. A Danish engineer has patented the model which will protect passengers in case of catastrophe. The cabin has a huge parachute packed on top of it, with small "pilot" chutes attached to the big one. The whole works is encased in the plane's skin. In an emergency the pilot could close the water tight door, and pull an emergency lever which would rip the skin covering the cabin away. One small parachute would pull and slide the cabin away from the plane, and then the big chute would take over and land the cabin intact on land or water.

Patients of the future may be put into artificial hibernation to protect them from traumatic shock and pain. The drug induced sleep was tried with some success in the underground hospital of the French in Indo China. The drop in body temperature, pulse rate and blood pressure relieve pain and relax the patient until he is able to stand the shock of drastic surgery.

Edible corncobs may be among the cattle feeds of the future. Improved corn is already making a trend in this direction. Plant geneticists are constantly working to increase the pentosan chemical yield. Breaking the atom structure of pentosan into pentosan sugar is the next step on the agenda. When this is accomplished the cob will become a valuable food source.

Window air conditioners or household cooling systems may someday contain a trace of a rare element to freshen indoor air with invisible health-stimulating particles of electricity. Experiments have shown that use of radioactive polonium 210 to generate alpha particles in air conditioning systems creates air that is equally as benificent as fresh air without forming ions that are irritating to health if inhaled for any long periods of time.

Summer vacation clothes may soon include disposable bathing suits. A specially processed wall paper has been found to have high "wet strength" and several feminine bathing suits have been made of it and are undergoing strenuous tests this year.

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—Continued from Back Cover

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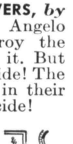

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