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Greg seemed to see his pattern around him — a barrier between him and Bianca...

COMPLETE NOVEL

THE PATTERN

Must there always be hate, Gregor Tarrant wondered? Once it was the color of a man's skin, or the faith of his fathers, or the language he spoke. Now it was the expected length of his life...

by **BOYD ELLANBY**

illustrated by **KELLY FREAS**

GREGOR BROKE away from his father's arm. "Let me alone! Let me go by myself! Or do you think I'm helpless as well as—"

The three people looked at him without answering. His father stepped back towards the waiting jetliner, and Professor Blake turned away, his mouth a stern line. Bianca did not move, only looked up at him in mute appeal.

Gregor Tarrant stared at the ground, not wanting to see the grief in their faces. "I couldn't stop your coming with me this far," he went on, "but now you're through. I won't go on until you've left."

After a moment he could hear their footsteps recede along the concrete runway. He heard the jets roar, and the high shrill scream over the field, but he did not look up until the last sound had died.

Then he raised his head, turned to face the far side of the field, and began to run towards the row of cages poised there on the monorail.

He had never seen them before, but he had been told at the hospital what he would find, and what to do. Scanning each car as he ran past, he paused only an instant at the open door of Number 12; then Greg climbed in, grazing his head against the ceiling, and collapsed on the cushioned seat, gasping for breath, waiting.

Nothing happened.

Trembling, Greg sprang up to examine the walls of his cube, but he could find no dials, no buttons to push, no wheels to turn, no circuits to close; only the smooth, opaque glass walls, and the seat. The door was still open, and through it he could see the mid-afternoon sun above the green tiers of the Vermont hills, and hear the faint stir of leaves moving in the autumn wind. Nothing more.

He felt panic. And then he remembered.

Snatching from his pocket a square metal coin the size of a postage stamp, with the figure 12 engraved in its center, he bent to examine the forward wall more closely. There it was, just as he had been told; weak with relief, he pushed the coin into the wall slot.

Instantly the door slid out of the wall and closed, light filled the cubical, and turned its four walls and ceiling into windows through which he could see the country and the white clouds scudding over the sky.

A voice spoke: "We are ready to receive you, Guest 12. While you are with us, you will have no name and no identity but that: Guest 12. You will now remove all your clothing, including your shoes, and place them in the case beneath your seat. Remove all personal possessions and all jewelry, including love symbols. You need not feel immodest at being unclothed, for although the walls of this vehicle allow you to see out, they do not permit anyone to see in."

And what if I don't want to undress? thought Greg. *Suppose I don't choose to be carried stark naked into the mountains, give up my name, and become only a number?*

But the voice had gone on speaking. "...so that you may the more easily separate yourself from the influences which operate in your normal life. The weight of your belongings, and the closing of the container, will activate this car. It is waiting."

Well, why not? he thought. *Naked came I into the world...*

As he took off his clothes, he looked over the things in his pockets. This medallion of Bianca, now. Her blue eyes laughed at him from

the oval, below the fringe of black curls which enhanced the creamy whiteness of her skin. She looked as though she were about to share a joke with him, and the curve of her lips invited intimacy. He was tempted to keep it, to look at it until he had blotted out the memory of how sad that same face had looked just now, beside the plane. But he did not dare.

Next came the microtape, summarizing his last three months' observations on the mutant flies, and Professor Blake's suggestions. He had hoped to spend some of his time here—later on, of course—in evaluating the data and planning the next experiment. But according to instructions, the microtape also must be left behind. He wondered if the order included watch and wrist phone, but he decided to interpret it literally, and put them both in his discarded jacket.

In five minutes his clothes and all the small impedimenta of his everyday existence were in the metal box under the seat, and Gregor Tarrant was as unencumbered with possessions as he had been when he entered the world, twenty-one years ago.

He closed the box.

AT THE INSTANT of contact, the car moved forward, smoothly balanced on its single wheel.

Greg's lanky body sagged against the cushion; his hands lay limply on his knees, and his tired eyes looked disinterestedly through the walls at the forest of red and yellow maples through which he rode. As the car continued to climb, winding up among the tall pines that covered the mountain, he felt a dizzying sense of freedom, as though he were a boy again. Here and there through the trees he glimpsed a brown-robed figure, walking alone. *These people have run away too,* he thought. *I'm not the only one. Not the first, and not the last. But I won't think about it now; I can give up, now. I can stop fighting. I can retreat; I am retreating...*

He woke abruptly. The sun had set, and his car was motionless, neatly berthed in a niche in a fieldstone wall. Walking through the open door, he entered the shadowed doorway of the hut which was part of the wall, and without a single curious glance at the room, he staggered over to the bed and lay down.

He had never been so tired in his life. He wanted to sleep.

Through the single window just below the roof he watched twilight become night, but still he lay tense and awake.

When he closed his eyes, bright flashes of color darted into view,

moving crazily. People's faces advanced and receded: Bianca, with her intimate, teasing smile; Bianca, looking up at him with hurt reproach, like a child unjustly punished. Professor Blake, thoughtfully combing his little white beard. Greg's father, asking the question which had puzzled Greg so many years ago: "Are you sure, son? Look deep!" The pale white face of Bob Sada coming nearer and expanding into a flabby balloon, grinning, saying, "What are you going to do about your Bride?"

The faces of nightmare, which had robbed him of sleep for many months... Digging his fists into his eyes, Greg tried to force the phantoms back into blackness. They broke, and disappeared, but in their places came the iridescent wings of a colony of the *Fafli* flies, the red and white facets of their little eyes shifting from three, to six, to nine, to seven, to an infinity of facets whirling in a pattern of chaos.

He shut out the flies.

Then appeared the Pattern—the master Pattern, the Pattern he had tried to escape, the Pattern which everybody had to come to terms with, sooner or later. But no matter how much a man might resist, the terms were always the same: unconditional acceptance. The Pattern was immutable.

He could see it now, emerging, as visible to his mind as prison bars. Forty-eight thick vertical lines, twenty-four pairs of bars ranged across his vision. The forty-eight human chromosomes, the twin twenty-four, the Pattern he had defied from the time he first recognized it. Greg could feel it closing down on him now, but he was too tired to oppose it.

It was exhausting to live a lie.

The little social lies that everyone indulged in for self-protection had been easy—like telling Bianca's mother that he'd already read the latest novel, to prevent her giving him a gushingly inaccurate resume; or asserting that a letter must have been lost in the mails when he had simply been too lazy to dictate it. These were trivial fibs made up to cover a brief emergency and then forgotten.

But to live an important lie, twenty-four hours a day, from the moment he opened his eyes in the morning to see Bianca smiling sleepily at him from her pillow, through the long day at the Institute with Blake and his other unsuspecting colleagues, into the evenings of intimacy at home—or even worse, evenings with friends who took it for granted that your life was as open and uncomplicated as their

own—that was an ordeal he had found harder and harder to endure, even though he knew that it would come to an end.

And when.

Greg knew, for the Pattern was exact. The whole sham fabric of his life would be cut short in just a year's time. A year, plus or minus a few weeks.

Genes were the stuff of life, Professor Blake often remarked. Yes. But they were the stuff of death, too. He would almost welcome death, he was so tired of living the lie. He had thought he was strong enough to resist the Pattern until the end, and then, without warning, he had broken.

He remembered that last night at home.

II

FROM THE beginning of the evening, Greg had been irritable. They were giving a *bon voyage* party for a newly married couple, old friends of Bianca's whom he scarcely knew; and except for Professor Blake—his chief at the Institute—most of the guests were Bianca's friends rather than his.

By mid-evening, when people had had a little too much to drink and were getting noisy, Gregor Tarrant was in a savage mood. Even chatting with Professor Blake had been a disappointment; the old



This young man must be a
shortie, too...

man seemed preoccupied, kept glancing at his wrist dial every few minutes, and suddenly walked away without explanation. Wandering on, Greg spoke to Sonia, Bianca's mother; he intended not to stop, but she held him with a dainty hand on his arm. "Greg, my dear! Have you heard?"

Sonia Edsall was a fluffy-haired, pretty little widow with a passion for genealogies—including her own—and she frequently confided to her friends her imminent demise from some hitherto unrecognized genetic anomaly in her family pedigree. With equal frequency, she had to admit that she'd been mistaken. Everyone agreed that she was without malice, but Sonia had an astonishing flair for gossip.

Greg was trapped. Knowing her avid mind well enough to be afraid of it, he dared not risk rousing her curiosity by evading her.

"Have you heard about Myra's daughter?" she went on. "My dear, I can't tell you *when* I've felt so sorry for a person as I do for Myra. She's told me herself how she begged that child, pleaded with her not to marry the man, when he frankly admitted that he was—"

She hesitated, blushing. "Well, might as well say the naughty word—was an ephemerid. But the girl insisted on marrying the man, in the face of all common sense and decency, and now they're going to have a baby. Isn't that ghastly? I know one doesn't speak of these things, but I've been told, confidentially, that Myra's daughter is an authentic perennial. She's sure of two hundred and thirty-seven years, and at the end it will be kidney failure; but the man, if you can call him a man—! Greg, this is disgusting but it's true; he married Myra's daughter *knowing* he'd have only five years more! I do think there ought to be a law to stop such irresponsible criminals, don't you?"

Greg felt faint. Yes, he knew what society thought of a shortie who married a longie, but he struggled to reply lightly. "Oh, I've heard of worse crimes."

"Greg! You awful man! Don't tell me you're going to turn into one of *those* people!"

"What people?"

"Oh, you know. Those fanatics that go around saying that it would be better for the race if everybody went around marrying everybody else, and that Nature knows best. Because if you were one of *those* people, I'm afraid I could never allow my little girl to become your wife!"

Squeezing his hand playfully, she moved on, leaving Greg limp, and angry.

Was she trying to ask his intentions? Had Bianca given this party on purpose so that her mother would have a chance to bring pressure on him?

THROUGH the haze of tobacco smoke Greg caught a glance from Bianca, her eyes anxious, her lips forming words he could not hear. He lifted his glass to her, drained his drink, and in a moment she was by his side. "Are you all right, Greg?"

"Of course I'm all right. Why do you keep looking at me like that?" Ashamed of his irritation, he tried to speak banteringly.

"What big eyes you have, grandma! What do you see?"

She laughed softly. "I see my two-years' Groom. Maybe, some day, my husband..." Her voice trailed off, expectantly.

"Who knows?" he said. "And how does he look to you?"

"Tall, tanned, talented, and twenty-one."

"Not handsome?"

"Not handsome," she agreed. "Too tall and lanky to be handsome. Eyes too dark a brown, skin too sunburned, mouth too wide—and, right now, too tense. Tall, dark, and ugly is the best I can say, but I like what I see."

He reached for her hand, then let it fall as a surge of laughter came from behind them.

"Friends!"

The noise dwindled, and Greg turned to see Bob Suda hoisting his plump body onto a chair where he stood swaying, beaming euphorically on the party. "Your attention, friends! Friends—and mayflies!"

Someone snickered, and a girl shrieked. "Oh, what the man said!"

"Hey, keep it clean!" someone shouted.

"Sorry, friends," said Suda. He was a stocky young man, his yellow hair disordered, and his blue eyes gleamed at them from a pale round face. His head was like that of a large, unhealthy baby—a baby whose knowing glance would have shocked the most callous of nursemaids. Waving a pudgy hand which still grasped a half-filled glass, he grinned.

"Excuse it, please; it just slipped out. Well, as I was about to say, I propose a toast to the guests of honor. Come up here, you two. We toast you first as pioneers. You are among the fortunate few who have been accepted for Earth's newest colony on Venus. We will not see you again for a century. That's a long time—for a century is still a hundred years, even when you've got plenty more where they came

from—but we will all be here, barring accident, to toast you on your return."

Above the scattered applause came Sonia's excited voice. "Not me! I haven't told anyone yet, but the fact is—"

"Mother!" whispered Bianca. "Please don't!"

"Now, now, Mrs. Edsall," said Suda, shaking a finger at her, "you mustn't expect us to believe that. The lovely Sonia is just trying to frighten us, friends, and spoil my toast, but I'll go on. My friends, we salute you not only as colonists, but as domesticates. After two years' trial as a Bride, young lady, you seem to have made the grade, and have been promoted from Bride to Wife. May neither of you find a century of Venus too long! May your lives be long, may your child be healthy, and may you receive no unpleasant surprises from the twin twenty-four!"

"Drunken fool!" muttered Greg. People were laughing, talking loudly to prove they had not been embarrassed, but Greg elbowed his way through the crowd, determined to throw the man out, only to find that Blake already had Suda firmly by the arm. Blake was a spry fellow, for all his white beard and stooped shoulders, and his gray eyes were sharp with indignation.

"...and before ladies, too!" he was saying.

"But—"

"Spare me your apologies, sir," said Blake, turning his back.

"And watch your tongue or get out!" said Greg.

"Such respectability!" said Suda, and melted into the crowd.

"Easy, Greg!" Bianca whispered; "why start a row?"

"Somebody's got to teach the fellow manners."

"But why take him so seriously? He's just drunk, that's all. He doesn't mean any harm, but he does get a kick out of trying to shock people."

"Some things shouldn't be mentioned in public. It's disgusting, and I don't like it."

DRAWING away, Bianca looked up at him curiously. "I can see you don't. I don't suppose any of us really approve, but nobody else thinks it's worth making an issue of. After all, we're none of us children, to be afraid of dirty words, and he's only referring to things we all know about even though we don't talk about them. Why are you so sensitive lately? If the guests of honor don't object, why should you? Relax, Greg, and try to enjoy yourself."

She was right, of course, but how could he relax? He could only try harder to control his feelings. Grinning, he gave her a friendly pat on the rear, and worked his way to the bar for a refill. There was Bob Suda at his side, holding his glass unsteadily under the dispenser.

Suda winked. "Hi, Greg! No hard feelings, I hope. Where've you been lately?"

"Nowhere."

"Then maybe you've been hiding? Every time I trot out to the Institute, eager to collect the latest news on the love life of the *Fasli* flies to hand on to my great public, they tell me you're out. Is that any way to keep a newsman your friend? Blake's never there, either. Do you suppose he leads a double life? Tell me what you've been doing, and how the world is treating your genius. How's alteration, how's synthesis, how's crossing-over? Oh, my unruly tongue! I must be euphoric."

Greg turned his back, but Bob grabbed at his coat. "Don't go away. I forgot to ask, and I promise not to aircast a word you say, how are things with you and Bianca? She hasn't let me have a moment alone with her all evening."

"Bianca's fine. Now I've got to—"

"Then why look so grim? Tell me, are you going to make it permanent? We can't go on being Brides and Grooms all our lives, you know. After two years' trial, you have to put up or shut up, that's the law. Are you going to marry the girl? Or are you going to try out another one, and put this one back in circulation? Because if you are—"

Greg lunged, but he was too enraged to aim straight. His fist hit empty space, he lost his balance, and sprawled to the floor.

"Shut up, you fool!" he heard someone say, and opened his eyes to see the smiling newsman being hustled out of the room.

GREG FELT sick. Sick of himself, sick of the hesitation which gave anyone the right to ask the question Suda had asked, sick of carrying on the fraud. Pulling himself to his feet, he slid into a chair in a secluded corner, hoping no one would notice him, and with eyes closed tried to blank his mind, but sentences echoed in his thoughts like dialog in a hackneyed comedy.

Stooge: Why are you so sensitive, Mr. Gregor Mendel Tarrant?

Clown: Because I'm afraid, Mr. Methuselah.

Stooge: Because of the Pattern, Mr. Tarrant?

Clown: No! Because—

Because I can't decide what to do. Because I belong to the wrong part of the race. Because I'm a mayfly, a shortie, a perpetual papoose, an ephemerid, and I'm masquerading as an upright, respectable perennial. And nobody knows.

Because I have only a year left to live, and I want to crowd a century into it. I want to find out how to manipulate those cytoform genes in the mutant Fafli flies in the Institute, but if I work at that I'll have spent all my one year, and that's all I've got.

Because at the same time I want time to wander, combing beaches, smelling the flowers, storing up pleasures like honey—which nobody would object to if they knew the truth. Poor mayflies, people say, let them enjoy their brief summer. But I want to comb those beaches and smell those flowers with Bianca at my side. She'll have to leave me soon, if we don't marry, but I can't marry her, she belongs to the other race, and longies mustn't marry shorties.

Tell the truth, shame the devil, see the world, and comb the beaches—but the Bride with me can't be Bianca.

Keep quiet, keep my job, take my wife, and nobody'll be the wiser until the end. And yet—

If he could only get away from the problem! His head was aching, and he wished he could sleep.

A cough roused him, and he looked up to see a boy of about thirteen standing shyly before him. "Mr. Tarrant? Greg? I've been looking for you everywhere. May I speak to you, please? I'm Lloyd Gianotti."

After a minute, Greg tracked down the name. "Of course! How are your parents? I haven't seen Carlo and Sigrid in months!"

"My father isn't here—that is, he's away just now; my mother's talking to Bianca, in the other room."

The boy had Carlo's dark hair, Greg observed, and Sigrid's grey eyes and delicate features, but he would never be as handsome as either of them. He must look them up soon, it was foolish to avoid old friends just because he was unhappy.

The boy was blushing. "I hope you don't think I'm being presumptuous in speaking to you like this, but I wanted to ask your opinion on something. At school, they keep pushing me to go in for science, so I can enter the Institute, like you, and I wondered if you had any advice to give me?"

For an instant, Greg wondered if he were being mocked. He to be

asked for advice, when he had made such a wreck of his own life! But he didn't want to hurt the boy's feelings, so he tried to feel his way, gently.

"Have you spoken to Professor Blake yet? He has to approve all the candidates for the Institute."

"I know, but my mother says I can put it off until my father gets back."

"You mustn't wait too long. And there's another thing. I don't want to be prying, or ask you to be indiscreet, but it's really the first question to be considered. Are you sure that you're—qualified—for training? I don't mean just in aptitudes. I mean, are you sure that's the way you want to spend your time? It's a long grind, you know. Organic chemistry, physical chemistry, genetics, the intermolecular forces operating between large molecules, mathematics. Will you have *enough* time? There's no need to feel inferior if you haven't, you know; it's nothing to be ashamed of, no matter what people may say at school or on the aircasts."

LOYD'S face reddened. "I understand, Mr. Tarrant. It's not a question of time, exactly." He lowered his voice. "I'm going to have a long life, I'm sure of that. I've known for several months now."

"Then why are you hesitating? You could speak to Professor Blake tonight."

"Well, my father said I could wait until I'd talked to you, and thought it over. The trouble is, I don't really care for science."

"Then why not go in for law, or engineering?"

"But I'd rather take up music, or art—what I *really* want to do is to carve things, make figures and statues."

"And your father *encourages* you?"

"Well, he said I could wait."

Greg was shocked. The arts were only for the short-lived; only mayflies took up music, or painting, or sculpture—things that could be created and finished and done within a man's youth. There was no law to regulate the situation, but public opinion was usually strong enough to keep people in the right path. Everyone knew that for a man with a normal two or three hundred years of life ahead of him to waste his intelligence on impractical things was not only asocial; it was immoral. What was wrong with Carlo? Why didn't he stop the boy before he disgraced the family?

"I'm not sure I understand," said Greg. "Is your father allowing you to make your own decision?"

"Oh yes. He says what we need today is less sense and more nonsense."

Greg blinked. "And you haven't made a mistake about the time?"

"No. I could show you my Disc."

"That's not necessary, but—"

Someone giggled, and Bob Suda's plump figure emerged from behind the boy. "What's this? Telling secrets?" Sipping at his drink, Bob eyed them thoughtfully. "News for me?"

Greg jumped to his feet. "Move on, Suda!"

"Why should I? Can't I speak to a fellow guest? How is your dear papa, Lloyd? And where is Carlo, the world-famous legal light? Haven't seen him around in an age."

"Get out! This is a private conversation."

"That's where you're mistaken," said Bob, raising his voice. "Hey, folks, listen! The party's getting rough! These two are starting to compare Discs!"

Greg's head was pounding. Aware of the shame in the boy's face, the gleeful indecency in Suda's, he was so angry that his lips quivered as he spoke. "Get out; you're drunk. Lloyd, you go find your mother, and tell her I'll talk with her later."

"Who's drunk?" said Bob. "I'm not drunk enough to go around talking about—"

"Get out!"

"Don't take it so hard, Greg. You still mad because I asked what you were going to do about Bianca?"

Gripping his chair, Greg tried to keep control. The room was rocking, now, and noise roared at his ears.

"That stopped you, didn't it?" said Suda. "You say I'm drunk, and I say you're a prude. Why don't you face the facts of life? Why shouldn't I ask you about Bianca? If you've got reasons for not marrying her, well, you're not the first man to wonder whether his Bride was all she claimed to be, and I'd give a lot to have a peek at her Disc. In fact, old boy—"

Breaking off, he pawed clumsily at Greg's rigid shoulder, carefully tilted his glass, and smirked as he watched the liquid dribble down Greg's coat in an aromatic stream.

"Now I wonder why I did that?" Suda whispered. "Look, doesn't it remind you of the sands of life running out, one by one, each grain

a gene—oops, naughty word! But what I was going to say was, we all know genes are genes, so why not say—”

The room was whirling rapidly, and Greg had to steady himself. Then he drove his fist into the leering face.

*

*

*

THESE GOVERNMENT buildings have too many steps, thought Professor Daniel Blake, as he followed Greg's father up the white marble stairs to the Family Record Bureau and Museum.

“Wait for me, Tarrant!”

Anxiety had kept them awake during the night's flight back to the city after leaving Greg; and even the breakfast they had just finished was no substitute for eight hours sleep. Out of breath, Blake reached the door, to see Greg's father already at the Inquiry desk, waiting for him impatiently.

“Have you no respect for my white hairs and advancing years?” said Blake, as he walked to the desk.

“Sorry, Dan; I always forget you're in your second century, and it's hard for me to be patient.”

“My idea's probably wrong anyway.”

“I hope it is, but I'll follow any lead that might tell me what's wrong with Greg. I've been over this in my mind a thousand times in the last few days, and I can't find a thing to explain his breaking down. But I'm only a layman; you're the expert, and maybe you'll see something I've missed.”

“Third booth at your right is free now,” said the clerk.

When the door closed behind them, Jonathan Tarrant opened the grid. “I wish to consult the official discs of my wife and myself, as recorded at the time of our marriage.”

“Names?” said the vodor.

“Jonathan Tarrant, Mary Tarrant.”

“Date of recording?”

“May 16, 2154.”

“Authorization?”

Raising his right hand, he pressed his palm against the grid, holding it there until a light flashed.

“Purpose of inspection?” said the vodor.

Tarrant looked questioningly at Blake.

“Don't answer! That seems to be a new one, but the Bureau has no right to ask that, and they know it.”

“But why do they want to know?”

"You guess. They probably gamble on the fact that a lot of people will be intimidated into answering, and provide more data to feed the analyzers."

"It's taking a long time."

"Red tape; nothing we can do but wait. No hurry anyway. Greg will want to stay where he is for a few days, no matter what we find. How's Suda, by the way?"

Tarrant laughed. "He'll recover, but he'll be wearing a face mask at least another week to spare the sensibilities of his audience. At least there's nothing wrong with Greg's arm!"

"Why did you call him Greg?"

"Gregor, of course—Gregor Mendel Tarrant."

Yes, thought Blake, *we have a pathetic tendency to name our children after the world's heroes, hoping the children will grow to be like the heroes.* In this particular case, the hope had been justified. Of all the young men he had watched in training at the Morgan Institute, none had been more talented than Greg.

"Discs ready for inspection," said the vodor. "Follow the arrows to the crypt."

A RED ARROW appeared in the floor, pointing to the left corridor where a series of lighted arrows led them to the end of the passage. Climbing into a cable car, they were carried through arched halls, going steadily downward, until the car emerged into a narrow, windowless corridor with a single door at the far end.

Hesitating, the two men looked at each other.

"Perhaps you won't mind waiting here," Blake said gently. "No need for you to go through the ordeal again. If there's anything to find that you haven't recognized, I can tell you."

Closing the door behind him, Blake stepped into the room alone, and sat down in the single broad-armed chair facing the white wall. Placing his feet over the bank of dials, he pressed his right heel down.

The lights went off, and the wall became a screen on which was projected a complex, many-colored diagram. He studied it intently, carefully, not to overlook any detail, and after five minutes he nodded, and switched it off. Another pressure of his heel, and the first picture was replaced by a second, a diagram which differed from the first only in detail. Scanning it, suddenly he caught his breath. Could *that* be the answer? But surely Greg's parents would have asked about that? And Greg himself *must* know.

He flicked off the picture and sat for a few moments in darkness, tugging thoughtfully at his white beard. Finally he raised his wrist to his mouth and spoke softly into his watch dial.

"Blake calling. Yes, Blake reporting... Another case, Gregor Tarrant, brilliant young man... Breakdown serious... Etiology unknown... Prognosis—... Uncertain? It's not at all uncertain, you idiot; it's about as bad as it can be. You will please inform his nibs, officially, that unless he's willing to take action in the very near future, he's going to have a full-sized revolution on his hands, also in the very near future... No, you fool, I don't mean bombs and blasters. Can't you stretch your mind to imagine anything worse than the mere murder of a few hundred thousand people in battle? Fortunately I can, and so can his nibs. Stop fatiguing your brain and get my report on its way. Details will follow. Wait! Any news of Carlo Gianotti?... All right, Blake signing off."

Turning on the light, he waited for his eyes to adjust, then returned to the corridor.

"What did you find out?" said Tarrant. "What was it?"

Blake shook his head. "You were right, John. There was nothing in your discs that you haven't thought of."

"So whatever is wrong with Greg—"

"Whatever is wrong with Greg," Blake said savagely, "is not your fault!"

III

GREG DOZED most of the first day, too exhausted to care what had happened to him. He was not hungry; no one entered his room; the place was quiet.

When night came he lay awake in the dark, shivering under the vibrating blanket which was supposed to soothe him to sleep. He was afraid to close his eyes, for then the faces might come again. But he mustn't let them start. He must think about something else, quickly.

Turning on his side, he waited for the blanket to curve around him again, then willed his muscles to relax.

The night was cloudless, and through the high window he glimpsed the crescent of the new moon, like a silver sickle.

The sickle! Watching it, his eyes blurred; his mind went back; he remembered... He remembered the day he had found out.

IT WAS A warm, lazy afternoon, soon after his fourteenth birthday. Greg Tarrant and his parents were holidaying in the country that summer, in a secluded cottage in the hills. They tramped the woods, hunted for mushrooms, listened for birdcalls, and for the entire month they did nothing useful at all.

For days Greg had been moody, hard to get along with, alarmed by strange flashes of knowledge which didn't fit in to the world as he knew it. Many afternoons he lay in his room beside the open window, feeling the wind against his hot cheeks, and savoring the scent of growing grass and wild flowers which came in on the breeze; but that particular afternoon, while walking with his father, he stopped suddenly and threw himself down on a patch of moss.

"Don't you feel well, son?"

Greg looked up reluctantly.

"I feel... I feel..." Then he burst out. "I can't describe it! It's as though I know all about myself, all of a sudden, things I never knew before. I know that I can do mathematics better than any other boy in my class, but that sounds crazy when I think of the marks I've been getting. I know that I'll never be any more than average at music—maybe not as good as average—so I might just as well quit taking lessons. I know that I'm going to be taller than you or mother. I know so much, all of a sudden, that it scares me. And how do I know it?"

His father sighed. "I thought it was about time. You're growing up, that's all, but it's nothing to be afraid of. I'll help you. Shut your eyes and try to think *into* yourself. Deep, deep in. What do you see?"

A long silence. Then, "I see—a design, a kind of pattern."

"That's right. What kind of pattern?"

"Lines. A lot of thick lines, some of them sort of squiggly, in pairs. And the lines have dots on them—no, *in* them..."

"That's right. This is a matter we don't discuss in public, but what is happening to you is what happens to all of us as we grow up. You are becoming conscious of your own chromosomes—twenty-four pairs of them—and of the individual genes on the chromosomes. You don't really see them, of course, in the way you see trees or skyliners; but you recognize their presence in the same way you know that you are too hot or too cold, or ill or well. That pattern is your genetic structure; it determines your physical form, your talents, and your defects. It's what you inherited from your mother and me, it's what you'll have

to live by, and what you'll hand on to your own child, in part, when you have one."

Greg felt a shock of enlightenment. Half-understood remarks, whispered innuendoes, stray phrases heard at school, now aggregated into meaning. So *that* was what people meant!

HIS FATHER went on, "We have an old book at home, which was written within a century of Mendel's discovery of the genes. It makes odd reading today, but there's one paragraph I memorized because it shows how important this knowledge is that we all take for granted:

"Let us imagine a world in which the species has mutated so that every human being is capable of sensing his own genetic heritage; then the possibilities of development for the race become infinite. Since the discovery of the Wong effect, of course, many people of this era live healthily into a second century, but there are others who—in spite of treatment—die in their teens, or twenties, or sixties, because of some genetically determined failure of a specific vital organ. If they could know ahead of time, how much better for the race! If men and women could know their genetic defects before reaching reproductive age, the race could rid itself of these deleterious genes. And if men and women could know exactly how long they could expect to live, they could plan their lives intelligently. For the human species it might well mean Utopia."

Greg was silent for a long while.

"Any questions?" asked his father.

"No, thanks. I think I understand."

He had not understood fully, of course, but he had been too embarrassed to continue the conversation.

Back in the city at the end of their holiday, his father had taken him to the weekly exposition at the Museum of the Family Record Bureau. The official at the ticket office looked doubtfully at Greg, and pointed to the wall. "Don't you see that sign, mister? Nobody under fourteen admitted."

"The boy was fourteen several months ago."

"He don't look it."

"He'll be tall enough later on, but you may check his birth registration if you like."

Glancing at the long line of people waiting their turn, the official shrugged, and handed over two tickets. Greg and his father found

seats in the darkened auditorium just as the lecturer appeared on the podium and moved to the microphone.

"Ladies and gentlemen, if you will look straight before you into the center of the room, I will show you, first of all, in schematic form, the Master Pattern."

In mid-air, an enormous lens-shaped light glowed into being.

"That is the reproductive cell," said the lecturer. "And now we shall see the chromosomes."

The curve of the lens was suddenly striped by twenty-four pairs of vertical bars which formed a row sloping from the short pairs at each end to the larger pairs in the center of the line. The two members of each pair were exactly the same length except for the pair at the extreme right, where one member was much shorter than its mate.

"You will observe that the chromosomes occur in pairs," said the lecturer, "and that with one exception the two members of the pair are alike. One of each pair is contributed by the mother, the other is contributed by the father. The marked disparity in size between the members of the pair on the extreme right indicates that this is the Pattern of a male; the one of normal length is called the X chromosome, and its small companion is called the Y chromosome. In the female, both members of the pair would be the normal sized X chromosome."

"And now, a schematic representation of the units of heredity: the genes!"

Suddenly each of the forty-eight bars was alive with hundreds of minute, glowing spheres imbedded in close order along the length of the bars. Many of the spheres—but not all—contained a marking symbol, and the whole representation of chromosome-bars and gene-spheres glittered with the complexity of the Milky Way on a moonless night.

"Here we have the Master Pattern!" said the lecturer. "On these forty-eight chromosomes you may see all the loci for the full diploid complement of more than 80,000 genes, which by their action and interaction produce the individuality of each human being. You will notice that some of the genes do not bear a symbol. That means that we do not yet know their particular function in forming the individual; but since the days of Gregor Mendel we have learned a great deal, and with each year's research the number of unmarked genes grows smaller, so that—"

GREG WAS no longer listening. He was overcome by the glory of the new universe he had glimpsed, and he could take in nothing more. When the lights went up, he stumbled out beside his father, stood inertly at the souvenir counter where his father bought him a sample disc to study at home, and walked down the long flight of steps without saying a word.

For the next month, until school began, he wandered about alone, studying the sample disc and comparing it with what he could glimpse of his own Pattern, trying to understand the particular arrangement of genes which had produced the human being called Gregor Tarrant and endowed him with thoughts, emotions, talents, and predestined him to a certain number of years.

There were whole groups of genes, he saw, which were held pretty much in common by all human beings, and inherited as units—like the group that gave you two eyes and a nose, an endoskeleton made of a series of vertebrae and four limbs. There were other genes which were not common to everybody, and these created minor variations between human beings. At this locus, for example, was the gene which determined one of his blood groups; it governed the production of a particular structure of nitrogenous polysaccharide, which in his case was of the form classified as A. On another chromosome was a gene which caused the development in his blood of the M structure and, closely linked with it, the one for S. And here were several genes causing the production of melanin, carotene, and various other pigments which, acting together, had produced the pale olive color of his skin.

Although his parents let him alone during this period, they contrived to show him special affection, and one night after dinner his mother asked casually, "How's the Pattern coming, Greg? Pretty clear, now?"

"I think so."

After a pause, his father spoke. "There's one thing we want to ask, but you needn't answer if you'd rather not. A man's Pattern is a private thing—more private than his bank account, more private than his sex habits, the most private thing about him. Nobody has the right to pry into it, not even your parents. Some day you may want to tell another person what it is, as when you're applying for a special school, or when you fall in love. And of course when you marry the law requires that you record your Pattern officially on a disc for the Family Record Bureau, and each partner has the right to inspect the

other's disc before agreeing to marriage. I'll never forget—" he glanced slyly at his wife, "—the time I asked your mother to marry me at the end of her Bridal years, and how she teased me about certain configurations in my Pattern which I confided to her."

Greg wished they would drop the subject, but he had to be polite.

"What do you want to know?"

"It's something we worried about when we decided to have you. Your mother and I both happen to be heterozygous for a certain gene located on the fourth pair of chromosomes, and it is possible that you might have inherited a recessive from each of us. A double recessive at that locus is not very desirable, but we took the chance. Can you see clearly? Look deep. The fourth pair, there, at the locus for the hemoglobin structure. There are several possible alleles, one for normal hemoglobin, others for alpha-hemoglobin, beta-hemoglobin, and so on. Can you sense which ones you have?"

"It's not very clear," he muttered.

"We shouldn't have bothered the child so soon," said his mother; "we might have waited a year."

But Greg was still peering, and as he concentrated with all his will, he achieved a rather fuzzy focus. "The one to produce normal hemoglobin..." he began, tentatively. But they did not notice the question in his voice.

"Normal!" his father shouted. "I told you the boy'd be all right!"

"But—"

"But what, Greg?"

"I think I sense the gene to produce another type of hemoglobin."

"On the other one of the pair you mean? That's nothing to worry about; it's recessive to the normal and it just means that you're a heterozygote, like your mother and me. No danger in that. The normal is dominant, you see, and though the sickle trait may show in your blood, you won't develop the disease."

They both looked so happy that Greg didn't know how to correct their mistake, and at the time it didn't seem very important. Not wanting to spoil their pleasure, he dropped the subject, and it was several years before he understood the reason for their concern. The unfortunate recipient of the two recessive genes for sickling was destined to develop symptoms of the disease in his early twenties, and die within a year; but the person who was heterozygous for the trait would unless he carried other defects live to a healthy old age.

When he did understand, Greg put off telling them—until he met Bianca, and it was too late.

What he had seen that day was a gene for the abnormal hemoglobin on both members of the pair. He was not heterozygous for sickling. He was a double recessive. He was a shortie.

IV

LONGIES or shorties, methuselahs or mayflies, all were equal under the law; and when their inner conflicts became too strong, all had the right of Retreat.

There were seventeen retreats on Earth, two on Mars, and one was being built on Venus for the new colonists. The eastern Retreat lay in the White Mountains of Vermont, a honeycomb of rooms whose doorways faced out to wooded hills so that each Guest could be sure of privacy until he had solved his problem.

Guest 12 slept at last, that second night, but his dreams would not let him rest, and at dawn he began to wake.

Fragments of a dirty limerick drifted into his mind. *There was a young lady named Beam...who harboured a sub-lethal gene...all right for a Bride, but—*

Double recessive?

He sat up, screaming. "I've got to get away, Bianca! Help me to get away!"

For a moment he was terrified, looking round at the strange room, then he fell back onto the pillow. He knew where he was now, Room 12.

For the first week he did not leave his room. When he was hungry, he pressed the square crystal at the head of his bed, and when it glowed, he removed a tray of food from a niche in the wall. The room was warmed so that even without clothes he was not cold; but the habit of years made him feel more at ease in the brown linen robe and brown sandals he had found at the foot of his bed.

Sometimes, when his mind was exhausted from worrying, he longed for his wristphone, through which he could have heard the news of the world: the progress of the new Venusian colony, the development of the hydroponics farms in Africa. He longed for the music he might have heard, and the dramas he might have seen, but he knew the rules. These things were emotionally charged to pull him back towards the world he had left, and must therefore be avoided. News of the colonies might spur his ambition, the dramas would draw him into the orbit of Bianca, and music—! Music was the most dangerous

of all. It could drown him in a sea of irrational and powerful emotions, and make reality seem a dream.

He knew the rules, and observed them meticulously. After the first few days, he ventured to take walks in the woods, and at the end of the first week he began taking his meals in the common diningroom. He would walk in softly, shrouded in his linen robe, his face shadowed by the cowl, and take his place at an unoccupied table. He never looked directly at the other people eating there; like himself, they were anonymous in their brown gowns, and no guest ever spoke to another.

THE MOON, which had been a silver crescent the night he arrived, swelled to fullness and shrank into invisibility; the October days were chilly as he tramped the woods over faded leaves, and still he did not know what to do.

Here you are, he told himself, alone for the first time in your mature life, with your mind to make up. You must not be influenced by thoughts of you and Bianca, or you and your parents, or you and your research. Thinking of these people would only pull you first one way and then another, as though you were a puppet dangling from many strings, each string held by a separate person. In the world outside, each one of us is to some extent that puppet, unavoidably, and tugs at the strings often force a man to say things or do things he does not want to do. But here in the Retreat all these cords have been loosed. For this brief interval the mannikin can lie limp, relaxed, unresponsive to any stimulus outside himself. For the only time in your life, perhaps, you are you, alone with yourself. The only thing you have to consider is you, in relation to yourself; remember that all other relationships are transient and will change with age, with environment, with circumstance. The only permanent relationship, the one you will never outlive, is—you and yourself.

Or was a more basic relationship, he wondered, you and your Pattern? No, that was incomplete. It would be truer to say that the relationship was triangular—you, yourself, and your Pattern. These were the elements which must be brought to equilibrium if he were to live at peace.

Even when occasional snow flurries marked the end of autumn, Greg continued to tramp the woods. The maze of paths were now as familiar to him as the streets of the city. He chose certain paths and certain places as his favorites, and he particularly liked a certain hill-top on which rested a granite boulder. He would climb the hill, pull

himself up onto the boulder, tuck his woolen skirts under him to protect him from the cold of the granite, and sit cross-legged—looking down at the lake in the valley below.

In the hundreds of wooded acres there were many paths, so that he rarely met another Guest—although he sometimes glimpsed a solitary brown figure wandering among the trees.

Once he saw a boy of about seventeen standing at the crest of a hill, his hood thrown back, his gown opened and billowing in the wind, his face lifted to the sky as though he were storing its image. Greg had seen that look before; he walked away quickly, embarrassed at having witnessed so intimate a thing—a young man's final acceptance of the brevity of his life.

Once he saw an older man, perhaps a hundred and twenty-five or thirty; it was hard to be sure, because the graying hair at his temples might have been premature rather than a sign of aging. The man looked like an executive—a banker perhaps, or an administrator—but he sprawled with his back against a tree, relaxed, eyes closed, whispering to himself and beating time to his whispers. A man who had made the conventional choice in his youth, Greg surmised, who had discovered only in middle life that the choice had been wrong for him, and who, with perhaps no more than a century of life still ahead of him, had retreated, to consider shifting his course into poetry or music, professions which society believed beneath the dignity of the long-lived.

It was early in November that Greg saw Carlo.

Greg had walked farther than usual that afternoon to explore a remote part of the woods, and in his preoccupation with his own thoughts he had not noticed that the wind was rising and clouds were thickening in the sky, until he felt the first drop of rain on his hand. The rain came quickly. Rolling his robe into a bundle to carry under his arm, he hurried back along the path, enjoying the sting of the drops on his body and the sharp scent of the wet pine.

He did not see the intersection ahead until he collided with another man emerging from a side path. At sight of his face, Greg gasped. "Carlo!"

The man drew back, and Greg was shocked at the ravaged face of his old friend. Carlo turned swiftly, flipped his robe over his shoulders, pulled down the cowl, and hurried away.

"Carlo! What's wrong?" shouted Greg, running after him. "Wait, I want to tell you: I saw your son recently!"

The man stopped, hesitated, then turned. Placing a finger to his lips he shook his head, and then moved swiftly on.

That night Greg lost much of the calm he had achieved. Carlo's face haunted him. What was the matter with Carlo? With an affectionate wife, a healthy son, and many decades of productive life ahead of him, he should have been a contented man. And yet here he was at this last resort of the confused, and his eyes were those of a man who stands on the edge of an abyss.

* * *

CARLO GIANOTTI ran through the rain, stumbling over a fallen branch, slipping on a patch of wet leaves, panting in his haste to get away. Rounding a corner into a side path under the shelter of the trees, he stopped, listening. He heard no footsteps, only the patter of the rain; shivering, he drew his robe tight and strode on briskly, surprised at his own fury.

It ought not to be allowed, he thought, that a man in Retreat should be subjected to the shock of meeting another guest. A man came here for privacy. But he had seen other guests in the weeks just past; was he angry then because it was Greg Tarrant he had met? No, that would not do; they were old friends, and Sigrid liked him, too. Then why?

Reaching the door of his cubicle, Guest 51 threw his sodden robe onto the floor and sprawled on the bed with hands clasped behind his head. The black curls of his thick hair were plastered wetly over his forehead, his thin white face still glistened with rain. He was not tall, but he had a strong, stocky, youthful body, and his muscular hands clasped his head with blunted, spatulate fingers.

It was not the invasion of his privacy which had so disturbed him, he admitted at last; it was not even the meeting of an old friend. It was what Greg had said: "I saw your son."

Carlo sprang to his feet. As he paced the room, a gentle chime sounded from the wall. He turned his head automatically, and just as automatically removed from the tray the fresh dry robe which appeared there; but his thoughts were still on Lloyd as he flung the robe over his shoulders and knotted the cord around his waist with a quick movement.

Looking at his hands, he remembered that in his boyhood, he had wanted to be an architect, until his family made him realize that the profession was not worthy of longies, and he had dutifully become a lawyer. And now he had a son, who wanted to be a sculptor, in spite

of public disapproval. Lloyd, too, was destined to two or three centuries of frustration in one of the "respectable" professions—unless Carlo could think of a way to save him.

Abruptly he walked to the bed, pressed the crystal square and spoke. "Therapist, please."

There was only a second's delay before the answer came. "Your car is waiting."

The car moved smoothly out its niche, its windows clouded into a milky white which prevented his seeing the way; after ten minutes it stopped before an open door. Carlo strode in to the room, straight to a lighted desk in the corner.

THE MAN sitting there wore a shapeless gray robe from which only his hands protruded, folded on the desk before him, and his face was covered by the conventional benignant mask of the Therapist.

"Guest 51," said the Therapist, "you are not physically ill, and yet this is your second visit to me since you entered Retreat."

"I've got to have help!" Carlo burst out. "I can't stand it any longer. Let me explain. My name is—"

"I do not want to know your name, Guest 51; draw up that chair and try to calm yourself."

"But I need advice!"

The folded hands remained still. "We do not give advice; we only provide a retreat. Before you decided to come here you had undoubtedly had all the professional advice which was obtainable. That proved insufficient so you came here to resolve your conflict. But we cannot advise you; we can only give you the chance to help yourself."

"But I can't help myself!" shouted Carlo, jumping to his feet. "I'm going mad!"

"That only means, of course, that you have reached a solution which you do not like, and will not accept. But the final decision must be yours; we cannot offer advice."

"Then let me get away from here for a while. Let me see my wife. Thinking is all very well, but there's more to life than thinking, and more to life than logic. I need her thoughts and her feelings, too. I want to go outside for a while, but I don't want to give up the right to return here."

The hands put their fingertips together.

"Is it your opinion," said the Therapist, "that given an interlude, possibly followed by further Retreat, you will have reached the decision you have been hoping to find?"

"I think so," said Carlo. "I must!"

"Very well. Your car will take you to the port at any time you choose. We will hold your room for a full day after your departure; if at the end of that time you have not returned, we will assign it to another guest. As you must realize, there are many people waiting for a place here. You may make your arrangements through the viphone behind the door at your left."

HE COULD hardly stand the delay of dialing. Waiting was torture, until Carlo remembered that he must seem to be calm. Then he slumped in the chair, willing his body to relax, willing his forehead to smooth and his mouth to slacken so that he could smile when the screen lighted and he looked into the steady gray eyes of his wife.

It was hard to begin. "Sigrid... I saw Greg Tarrant today; he's here."

"I know. Bianca told me. Can't you help him, Carlo? She's suffering—"

"Everybody suffers. But that's not what I wanted to say. He said he saw Lloyd. Is Lloyd all right? No, don't answer, but I want to talk with you, Sigrid. Will you meet me?"

"Of course. I can get there by tomorrow night, around midnight. At the village. Isn't there an Inn?"

"The Holly Inn," said Carlo. "I'll be waiting there."

"Wait! About Bianca—"

But Carlo blanked the screen, and hurried back to the car and the sanctuary of Room 51. What had other people's troubles to do with him now? Surely a man at the end of his rope might be allowed to be selfish?

He did not want to think about Bianca, or why Greg had come to Retreat. What possible problem could seem serious to a young scientist with a long life ahead, who had already been given the right to spend his life at the work he liked best, in a research laboratory?

*

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PROFESSOR BLAKE took a last look around before turning off the lights. The others had gone home for the night more than an hour ago; but he had had so little time, this past year, to do any work with his own hands, that he hated to leave the laboratory. Research was his chief pleasure, yet it was all he could manage to spend a

supervisory hour here once or twice a week, directing the work of the younger men.

He glanced at the colonies of the *Fafli* flies, checked the thermometer readings of their cages, and briefly scanned the week's records on the offspring of the last experimental matings. This recent data on the expression of the cytoform genes was puzzling, but it looked promising. A pity, though, that Greg Tarrant wasn't here to carry it on himself. None of the other men seemed to have the—creative imagination?—that Greg brought to his research.

Pity about Greg. One of the real tragedies of life, if his guess were correct. Bianca didn't suspect, he felt certain of that, but that must make it all the harder for her, not understanding why Greg had broken. How was she getting along?

Turning out the lights, he took the elevator to the street and, on impulse, turned towards Bianca's apartment.

"Professor Blake!" she cried. "How nice to see you! Mother and I were beginning to feel a little tired of our own company. Let me get you a drink."

Settled by the fire, glass in hand, he found it hard to make conversation. Bianca looked thin, and her mother fidgeted, moving about the room, straightening a vase on the mantle, emptying an ash tray.

"Any news, Bianca?"

She hesitated, then shook her head.

"She just sits here and mopes," said Mrs. Edsall, fluffing her hair before the mirror. "I keep telling her she ought to get out and *do* something, to take her mind off her worries. She ought to do something useful, like me."

"Mother!" protested Bianca. "He's not interested—"

"But he ought to be! Did you know, Professor Blake, that I've gone into politics?"

He smiled politely, wondering what kind of a bee she had got in her bonnet now.

"I know Bianca doesn't think I'm capable of any useful work," she went on, "but I'm going to show her. I've joined the new Eugenics party and that delightful Bob Suda—I know you don't like him, Bianca, but really he's charming, and why Greg had to knock him down that night I'll never understand, but you can't even see the bruise any more and he says he realizes Greg was a sick man. Anyway, about the new Eugenics party—it was really started by the Racial Welfare Society, and Bob explained it all so clearly, what good work

it's going to do if we can just put through the legislation that really *ought* to have been done years and years ago."

"Mother, you're just boring Professor Blake."

"Not at all!" His heart was beating faster, all his senses were alert as he put down his glass and smiled encouragingly. "This sounds like something new. What kind of legislation?"

"Oh, I don't really understand it, though Bob did explain it very clearly. It's about weeding out the undesirables from the race."

"Oh? And who are the undesirables?"

"Everybody who has a hereditary defect, of course! The people who are albinos, or who have hemophilia, or color-blindness, anything like that."

"But such people may have other attributes which are very desirable," said Blake. "A man might be color-blind, for instance, and still be a great mathematician."

"Oh, mathematics! The whichness of the what! Anyway, somebody else could always do the mathematics, someone who was perfectly normal. When people have a defective Pattern, Bob says, we should simply sterilize them when they're ten years old. Some of the party want to *eliminate* them, but the rest of us think just sterilization would be enough. If the government would only make it a law, just think—in a generation or two there wouldn't be any more defective people in the world!"

"I'm afraid somebody has misinformed you," said Blake. "Those traits are carried by recessive genes, and even if you eliminated all the people who showed the trait, or kept them from reproducing, and you kept on doing it for two thousand years, at the end of that time those same traits would still show up in the population about half as often as they do now. Suda ought to know that."

"Are you sure?" she said doubtfully. "It doesn't sound right to me. Anyway, that isn't all. We also want to sterilize all the shorties."

BIANCA'S glass crashed to the floor. "Mother, don't you see that Bob is crazy?"

"I do wish you'd calm down, Bianca; you're all nerves tonight. Of course Bob's not crazy. He explained how the shorties are really unworthy of the race, and everybody knows they're inferior to the rest of us and never do anything useful—just putter around at silly paintings or write stories or model in clay, the way Carlo Gianotti wants his little boy to do. Isn't that shocking? I can't think what's gotten

into Carlo; the whole family are long-lived, and still Carlo is encouraging the boy to waste his time on such silliness. It's a disgrace, and I don't wonder that Carlo had to go into Retreat. Well, as I was saying, we'd all be better off without the shorties, and I think the government ought to do something about them, and I know a great many people who feel the same way about it."

Listening to her, Blake felt cold. Was the human race so constituted that it had to find a part of itself to hate? Long ago, part of the race had hated another part because the color of their skins was different. Once, they had hated because their religious beliefs were different. These were dead issues now; but were people so addicted to hate that now they must nourish themselves on differences in talents and life-expectancy?

The human species was wrong, but Blake doubted that it could maintain its strength indefinitely if the present trend continued; much of its strength lay in its infinite variability, which allowed it to adapt to change. Already the species was facing a serious loss of variability; already it was dividing into two races, kept segregated by public opinion. Each one despised the other—and each was slowly crippling itself. The longies, who were in the majority, valued the talents for science, medicine, the law, business, all the practical professions, and contemptuously left the arts to the shorties—who were not encouraged to marry and reproduce even among themselves. But to eliminate the shorties with their talents—

What kind of a world would there be then?

Blake shuddered, picturing a world without poetry, without music, without sculpture, without humor. A world of long-lived people, highly intelligent, practical, and efficient, but without the leavening of nonsense, the solace of music. Once the genes for these abilities were lost, they were gone forever. Was the species going to use its self-knowledge to emasculate itself? No tyranny ever devised could harm the race as much as the deliberate throwing away of irretrievable genes.

And Carlo! Blake hadn't realized what the problem was there. He ought to get around more, listen to more gossip. But he couldn't stand any more now of foolish Sonia Edsall.

He stood up. "Thanks for the drink, Bianca. I hope you'll be hearing from Greg soon. And as to the new party, Mrs. Edsall, I'm afraid I don't understand much about politics, but if I were you I'd leave it alone. I'm glad you reminded me of the Gianotti's, by the way. I'd better stop in to see Sigrid on my way home."

Bianca was poking at the fire, and she did not look up.
"Sigrid's not home. She's gone. . . on a trip."

* * *

IT WAS WELL after eleven when car 51 berthed itself at the edge of the field. Dressed in ordinary clothes once more, Carlo climbed out, closed the door, and walked swiftly across the field to the road.

Although the night was cloudy and few stars were visible, still it was not difficult to follow the road. Occasionally he came to a house whose windows were warm with light, and as he walked on he envied the simple, settled lives of the families inside. Dreading his meeting with Sigrid—yet, longing to see her—he paid little attention to the distance, and was surprised when he saw ahead of him the lights of the village, soft in the mist.

In spite of the late hour, there were still several people in the lobby of the Inn who looked at him curiously as he went to the desk.

"Mrs. Gianotti, please."

"Mrs. Gianotti has not yet checked in."

"Then I'll wait."

He had just settled into the corner lounge when a loudspeaker blared and the beaming head of a network man filled the screen above the desk.

"Good evening, folks! We now bring you the midnight news, with interpretations by the experts.

"Headlines were made all over the world today by the annual meeting of the Racial Welfare Society in Berlin. In his opening address, President Smithson, of South Africa, outlined their new program of sterilization at the age of ten for all children exhibiting traits undesirable in the general population. 'Only thus,' stated the venerable Dr. Smithson, 'can the race hope to return to its original purity.'

"That's a pretty startling idea, folks, but it's worth thinking about, and I shouldn't wonder if our commentators won't have something to say about it before the week is over.

"The next item of interest is the annual Lexington to Boston marathon race which took place this morning, and which was won by—you guessed it, folks—by John Blinkhammer, just as it was won a few years ago by his father, and by his grandfather before him. They sure believe in keeping the muscles in the family, those Blinkhammers! The race began promptly on schedule, though with a disappointingly small crowd in attendance, and—"

Hoping to get away from the news, Carlo left the lobby and walked

through the hall to the bar, only to hear the same voice concluding, "...by your favorite commentator, Bob Suda." From the screen over the bar, the pudgy white face of Bob Suda emerged with the leer that was his trademark.

THERE WAS no escape, apparently, and after ordering his first drink in months, Carlo resigned himself. In his Retreat, he had forgotten how the newsmen thrust their way into every moment of your life—how each commentator tried to impose his ideas on his listeners and turn their minds into more or less accurate carbon copies of his own. Too bad the minds that controlled such latent power were not always of the best quality; surely one idiot like Bob Suda was enough.

"...your old friend Bob Suda, back on the Air again after a recent indisposition, and bringing you the latest chit-chat of the galaxy.

"Flash. They say the Venusian colonists are running into difficulties, and when you hear of what kind, you'll split your sides laughing. Is it a new virus, decimating the population? Nope. Is it a war with unfriendly natives? Nope, wrong again. You'll never guess, so I won't keep you in the dark any longer. It's a psychological problem this time—a mass unrest which is sending wives and families back to Earth in droves, and the logistics boys have traced it down to—don't laugh, now!—a shortage of interior decorators. The prefabs have to be painted and prettified, it seems, before the ladies can really feel at home in them, but there don't seem to be enough workmen to do the job. Housewives complain that the aluminum walls remain gray, the furniture is still in canvas covers, and everything is as drab as when it left the factory. They've been combing the Earth for decorators and painters and so far have collected only a paltry tenth of the ones they need. Where are they all hiding? Your guess is—well, maybe not quite as good as mine. But if the government doesn't locate some soon, the Venusian colony is slated for a big flopperoo.

"Flash. The government is becoming alarmed over the rise in the rate of fatal accidents. They hate to admit it, and won't like me for telling you, but the fact is that the accident curve has risen out of all proportion to expectation in the last ten years. Machines and psychologists are working madly, trying to track down the error in their basic data. Until they find it, friends, take Uncle Bob's advice and watch your step in the airliners, and even on the escalators. You don't want to turn into accident prone!

"And now we turn to Society for a moment. Among those alleged

to have been seen entering the Family Record Bureau no later than yesterday was the beautiful Sigrid G. Is there trouble there, friends? When that family hits the divorce court, don't say I didn't warn you. And guess who was with her? The lovely Bride—at least I haven't been notified of any wedding yet—Bianca E. The two ladies went in together, came out together, and who was lending support to whom as they left, this speaker hasn't yet found out—or isn't telling.

"And now, back to the commonplace. Flash. The government—"

As Carlo hurried out of the room, the voice trailed him into the corridor, and met him again in the lobby.

"—announced that beginning next winter, not this one, folks, but the next, Winter will never come again to our fair cities. Control has begun construction of a shield, and when next December comes you won't need to get out your woolies; you can put your snow shovels in mothballs for good, and—"

Outside the inn, Carlo breathed deeply of the fresh, cold air. He listened gratefully to the night's silence.

Then he heard the click of hurrying heels on pavement, and turned eagerly as Sigrid rushed into his arms.

V

WINTER was early this year. It was only the last week in November, yet the trees were bare and the dull cold air felt like snow as Greg Tarrant followed his favorite path in the woods.

As he neared the top of the hill, he heard a rustle like the noise of a small animal scurrying through the dry underbrush, and glanced up in time to see a brown shadow disappear behind the rock, but by the time he reached the place there was nothing to be seen. Next day, again, he caught a glimpse of a brown robe disappearing among the trees ahead of him. He was puzzled and a little annoyed, for he had marked out this place as his own, and people in Retreat took care that their orbits never crossed.

That night there was a light snowfall, but next day Greg took his walk as usual, and when he reached the hilltop he found the footprints of another person beside the rock.

Startled, he looked about him. He heard no sound, but suddenly Carlo stood there. "May I speak to you, Greg?"

Greg only stared. This was the first time he had seen his old friend

since their accidental encounter in the rain, and looking at him now he was amazed at the transformation that had taken place. The haggard look had gone; the anxious lines were smoothed away, and the eyes were radiant. It had been so long since Greg had heard the voice of another human being, or had listened to a thought that was not his own, that he did not know how to respond.

Carlo spoke again. "I know it's wrong of me to interrupt you when you're in Retreat, Greg. Do you want me to go away?"

"No, stay!" As he ran forward with outstretched hand, Carlo drew him into the dense mass of trees.

"We mustn't be seen," he said; "we're breaking the rules. But I've been trailing you for a week now, trying to get up courage to speak to you. I have something to give you. I've put it behind that rock. Don't look now, but when you take it, hide it, don't let anyone see you pick it up. I'll be leaving any day, now, but I didn't want to go without giving it to you and speaking to you."

Greg stepped back. "So you're one of the lucky ones. You're going to leave. What does that mean?"

"It means I'm ready to leave. I'm sorry I ran away from you that day, but I wasn't ready to face anybody, then."

"And you are now?"

Carlo's laugh was triumphant. "I am now! Anybody, or anything. I've looked the facts in the face, and stopped fighting them, and there's nothing to worry about any longer."

"Am I supposed to congratulate you?" said Greg, looking bitterly at the placid face.

"Not if you don't want to."

"And you really expect me to believe that you had a problem worth bothering about?"

"I haven't, any more. That's finished. I knew all the time what I ought to do—and now I'm going to do it. But I'm sorry to find you still here. Is there any way I can help?"

"No," said Greg.

"I'm older than you are, you know; couldn't you tell me?"

"No."

"Having Pattern trouble?"

Greg turned his back. "We won't discuss it, please."

"But we're old friends, Greg, and I'd like—"

"You can't. Nobody can help, and you know you haven't the right to pry. There are some things you don't discuss, even with old friends

—especially people like you. You're lucky. You've got a world ahead of you, a beautiful wife, a talented son who can easily be talked out of his foolishness, and you can't possibly have any problem more serious than choosing where to go for next summer's vacation. It's easy for you to be fatherly and smile at me, and say 'Let me help you, lad,' but I don't want your help. Keep out of my affairs!"

He waited for a long while but there was no reply, and when he turned around, he was alone.

UNEASY at Carlo's wordless departure, Greg called out, then hurried after him, following the line of retreating footprints until they were lost just over the crest of the hill in a stony patch where the sun had melted the snow. There was nothing he could do, then, but go back to the stone Carlo had pointed out, secrete the white envelope he found there, and continue his solitary walk.

It was dusk when he got back to his room. He had turned on the light and was drawing out the letter when a voice spoke. "Guest 12."

Greg looked up, startled at discovering a speaker system in the room.

"Guest 12," the voice repeated, "you will visit the Therapist at once. Your car is waiting to take you."

The break in routine was so bewildering that Greg did not even consider ignoring the request. He slipped the letter under his pillow and walked out to the car in the wall, which began to move as soon as he closed the door. In the darkness it was impossible to see where it was taking him, and he sat with growing tension, wondering if something had happened to Bianca, or to his parents, until the car stopped, after half an hour, before an open door.

He looked anxiously around the room he entered.

"Guest 12."

Jumping at the sound, Greg turned to see a man at the desk in the corner, his folded hands lying on the desk, his face hidden by the conventional therapist's mask.

"You may sit down." Behind the immobile mask the eyes glinted in the light as they watched Greg draw a chair nearer to the desk.

"This afternoon you were observed to speak to Guest 51," said the Therapist; "as you know, this constitutes breaking an inviolable rule of Retreat."

"But—"

"You are not required to give an explanation."

"But I just wanted to say—"

"Please do not interrupt."

"But I thought we had complete privacy here!" Greg shouted. "Do you spy on all of us? Do you watch us, and listen to us, and record what we say? What right have you got to watch us?"

"You are being childish," said the Therapist. "It's foolish to be angry simply because you were observed to break a rule. Nobody overheard what was said between the two of you, and your conversation is not our concern; but it is part of our duty to protect our guests from intrusion. The fact that the rule had been broken was therefore known to us at once. I have already spoken with Guest 51, and he will be leaving the Retreat within an hour."

"And I'm next?" said Greg.

"Please be silent, and let me speak. As you know, the right of Retreat is open to all who need it, for as long as they need it. There are some people, however, who because of certain emotional factors which we do not fully understand, are not able to make full use of the privilege and who derive only limited benefit from it. You have been here for some weeks now. You will give me your honest opinion; have you made progress towards solving the dilemma which caused you to come here?"

GREG LOOKED away resentfully. What right had the man to ask the question he hadn't dared ask himself?

He knew the answer, of course. Staying on here was not helping to solve anything at all. What he ought to do was to go home, tell Bianca why he could not marry her, move to a separate apartment, take up his lab work where he had left it, and try to push his research as far as possible in the time that remained to him.

But he could not face giving up Bianca. That was why he had run away, why he stayed on here shutting his eyes to reality, hoping. . .

He was like a frightened child, crying for a miracle.

He clenched his fists. Fury surged into his veins, and his whole mind and body trembled with sudden, intense hatred for the Pattern with its rigid prison bars.

Knowledge was supposed to be good. Knowledge of human heredity should have freed the race and made the world into the Utopia his father used to talk about. Then why should a man have to be crippled by his Pattern? Why should longies and shorties have to live by different sets of rules? Why shouldn't men and women be just—

people—free to choose their own paths whether they lived for a decade or a century?

Slowly the rage drained out of him. It was no use. There are no miracles.

"I'm waiting for your answer," said the Therapist.

"I don't know the answer."

"Is it your opinion that, given another week, or two weeks—or even another six weeks—you will have reached a satisfactory adjustment?"

"I don't know!"

"Well, we will not force you to leave at once, then; we wish to give you every chance. You may stay on, unless there is another infraction of the rules."

"I'm sorry about this afternoon," said Greg. "I shouldn't have talked to Carlo, I know, but—"

"That will do. We are not interested in your personal affairs, and we do not wish to know the details of your life. Our only function is to provide a place of retreat where you can solve your problem. If you succeed, we are content; if you fail, it is regrettable. We can provide the opportunity, nothing more. When you have made your decision, act. There are no formalities to be observed in leaving, and I will not see you again."

BACK IN his room, Greg found a tray of sandwiches which he munched on absentmindedly as he wondered if it was safe to read the letter Carlo had brought him. Inspecting the room more carefully than he had done before, he could see the tiny speaker in the quartz crystal—so inconspicuous that he had never noticed it; but he could find no possible place for a viewer.

Taking the letter from under his pillow, he tore it open, and his heart beat painfully as he saw the familiar handwriting, a sprawling, open, jaunty hand, a calligraphy characteristic of Bianca herself.

The letter began without preamble. It was like her, he thought, to ignore the banal formalities of used-up words, to know that he would take for granted, as she did, the unwritten endearments.

They told me I must not write to you, and the letters I have sent to you in Retreat have been returned to me, but I hope this one will be delivered. Sigrid is going to give it to Carlo to give to you, and I know you will find a way to read it.

They warned me that whatever your problem is, you must

solve it without being influenced by any of the people in your life. I'll agree that this is a noble theory, but it isn't realistic, because when you come home again, we'll all be part of your life just as we were before, and I think it's silly to ask you to think and feel as though none of us ever existed.

Of course, you may never get this letter at all, and then you'll be protected from any influence of mine; but I have been thinking of you so often that I must try to reach you even if it proves to be a useless gesture. Are you feeling stronger, Greg? I hope so. Because of you, for one thing. You never have told me what's gone wrong, and of course I have no right to ask. That's one thing I've learned in the past two years—a Bride has many privileges, but no rights. But I hope you are feeling better for my sake, as well as yours, because there is something I must tell you. I have a confession to make, more difficult to make than you can imagine, and when I have told you, perhaps you will never want to see me again.

Greg stared at the paper unbelievably. Although he could see her characteristic script, the meaning of her words seemed fogged, as though it were not Bianca speaking to him at all. He wished he could hear her voice, in the room with him. Closing his eyes, he tried to picture her as she had looked when she wrote the letter.

It had been late at night, probably, when the house was still. She had been sitting alone in their living room, her lithe body relaxed in the red and gold brocade jacket and trousers she wore in their evenings alone. She would have moved her desk close to the fireplace, for the nights were cold now, and with one bare foot tucked under her, her dark head cradled in her arms, she would be thinking; then reaching for the paper and writing...

But it was impossible that she should have written that particular thing! He would have staked his life on her integrity. What could she have to confess? He thought of Bob Suda, briefly, then brushed the thought out of his mind and took up the letter again.

You will have to be patient, Greg, and let me tell this in my own way. Our two year trial contract is near its end, as you know, and yet we have never discussed the future. Never once have you said 'We'll do thus and so next year'; never once have you begun a sentence by saying 'After we are married,' or 'When you are my wife.' Did you think I hadn't noticed? I've listened, and waited,

and wondered why. Sometimes recently I've thought perhaps you weren't fond of me any more, but—

Greg smiled, picturing to himself the demure quirk of her lips, the naughty gleam in her eyes as she wrote the rest of her thought.

—but the facts of our life together scarcely make that a reasonable conclusion, do they? And now I have decided that perhaps the reason you avoided the subject, and the reason you've gone into Retreat, was that you suspected the truth about me and just didn't want to hurt my feelings by referring to it. It was wrong of me not to tell you in the beginning. But I was so afraid of losing you! I know you pretty well, and probably it would have been safe to be frank with you, but men are peculiar, and I didn't dare take the risk. The subject is a distasteful one to discuss even now, even when I don't have to face you and feel your eyes on me as I talk.

It's hard for me to say the thing in plain, crude language. You know my mother—my pretty, foolish, neurotic mother. Have you never wondered why she is so obsessed with the details of other peoples' genealogies? Have you never wondered about my father's death, and why he died so young? You know the common story, of course—the one mother tells, the one her friends believe—that he lost his life at the age of twenty-five in the crash of the Ariadne at the first landing on Venus. This is a perfectly respectable way to die, of course. But even if the ship had not crashed—

Have you ever considered how useful some of these accidents are in saving a family's reputation? They can be very convenient. It was only the year before I met you that I began to wonder about my mother's story. I was fairly certain of my own Pattern by that time, and some things about mother's attitude puzzled me. I tried to talk with her, but she didn't like to discuss 'such things' with me; and when I persisted, she'd just become hysterical and say how unfeeling I was to bother her when she was not long for this world. So one day I slipped out by myself, without mother, and I visited the Family Record Bureau.

GREG WAS sweating. He did not like this letter; he did not like what she was saying, or what he suspected she was going to say. Not Bianca!

I went into one of those booths where people ask for their records, and then to the crypt where they define and record their patterns. The clerks tried to discourage me, of course, but legally they could not stop me because I was eighteen and it was my right to inspect the discs of my father and mother. I did. I studied them carefully, and compared my own with them. Then I went home, knowing the truth, determined to tell mother and not go on sailing under false colors. But it was that night I met you.

Do you remember that wonderful party? I can never forget it, because I met you there for the first time. After that I decided not to tell anyone, and I never have—not even my mother when she was acting her silliest. I can't conceal it forever, I know, but I will as long as I can.

Please don't ask me for details, and please, don't ever ask to inspect my disc, even if we should marry. You have the right, I know, but I beg you not to insist on it. Bluntly, my mother is genuinely long-lived, but my father was not. If he hadn't died in that crash, he would have contrived some other accident to keep people from knowing. He was a shortie, and so am I.

And now you know. Greg, can't we have these few years together, even though we know it's wrong? I'd manage so that nobody ever knew, so your family wouldn't be ashamed; and afterwards you can choose another wife—someone whose Pattern is more like your own. But meanwhile—

The last sentence was like a cry for help. *Greg! Don't abandon me!* There was no signature.

Greg turned out the light. He stood at the window, looking up at the crescent of the new moon.

Miracles did occur, then.

At first, Bianca's story had shocked him; now he felt only relief. He could go back; they could be married; he could take up his research. He would have to continue his own masquerade as long as possible, but it would not be so difficult when he did not have to fear giving up Bianca; and if necessary, towards the end, he, too, could contrive an "accident."

True, he had not reached any real solution of his problem; he had not reconciled himself to his Pattern. But the news in the letter had shown him a way around it.

No formalities, the Therapist had said.

Turning abruptly, he flung off his robe, kicked off his sandals, and ran to the waiting car. It moved swiftly through the woods and down the mountain carrying him towards Bianca, his father, Professor Blake. Back to the real world.

VI

BLAKE WAS alone in the laboratory reading the last of the day's reports when his wrist buzzed.

"Blake here... I'm busy—what do you mean by calling ahead of time?... Of course it's urgent, but no more urgent than it's been for months, or years... Nonsense; you young men think the world will fall apart in ten minutes time, but it never happens. It takes much longer than that. It's nearly ten o'clock and I'm late for a wedding celebration... All right, tell his nibs around midnight."

After putting the data sheets back in the drawer, he turned out all the lights but one and closed his eyes, collecting his thoughts.

He wished that phone call had not interrupted him. He had so little time now to mull over the work of the laboratory, as a good director ought to do. His men must wonder sometimes just what their Chief did to earn his salary, since he was rarely in the lab to be consulted. He would be glad when his reportorial duties for his nibs came to an end, and he could advise action, in the open.

That Racial Welfare League was gaining members by the thousand. A pernicious influence, but far too strong by now to be killed. Instead, they would have to manage to make use of it, somehow—bring the issue out into the open. And let him get back to his research.

It was fine to have Greg Tarrant back again; his latest work on the gene arrangements of the giant chromosomes of the *Fafli* flies, and on the expression of those blood anomalies, was really startling—more significant than Greg seemed to realize. Greg himself had changed. He was more quiet, now, though he seemed contented enough. Blake wondered if he could have misinterpreted the genetic records of his parents. Was Greg really all right, safely heterozygous for sickling and thus destined for a long life, as he claimed to be? Or had his desire corrupted him so far that he had deceived Bianca and tricked her into this marriage?

Glancing at his watch, Blake realized that they'd be expecting him. He smoothed his beard, smoothed at the few white hairs remaining

on his bald head, straightened his coat, and locked the door behind him.

IT WAS ONLY a fifteen minute walk to Greg's apartment. The night was cloudy, and a fine snow was falling. He would miss the winter, next year, when they finished the weather shield. The air was cold, and so invigorating that he was almost cheerful by the time he rang the bell, and when Bianca threw her arms around his neck and kissed him, he felt positively young.

"My dear Bianca! My dear Greg! I hope I'm not too late to help you celebrate? This is a very happy occasion—and champagne too, I see. How do you do, Mrs. Edsall?"

Sitting beside the fire, glass in hand, he smiled brightly, looking the very picture, he supposed, of a fatuous, elderly, friend-of-the-family.

But there seemed to be something wrong with the family itself. The viewscreen was filled with a South American dance orchestra, the music played softly, the drinks were good; but both Greg and Bianca were subdued.

"We're not having a real party, as you see," said Greg. "Considering that I've been—away—for so long, we thought it better to have only a quiet family celebration, and my mother and father have already gone home. No one else is coming but Sigrid. I don't know what makes her so late."

Bianca's mother seemed to be less effervescent than usual. She'd given up politics, he'd heard, at Bianca's insistence. What would she do now? With her love for dramatizing herself, probably she was thinking up a new imaginary malady that was to carry her off in the prime of her widowhood.

But evidently it was necessary to make conversation.

"And how did the ceremony go?" asked Blake.

They all spoke at once.

"Just fine," said Greg.

"So romantic!" said Sonia Edsall.

"Very efficient," said Bianca. "It's nice to be a real wife at last. But I can't help remembering—"

"Stop thinking about it!" said Greg sharply; "it had nothing to do with us."

"Oh, it was awful," said Mrs. Edsall breathlessly. "Such an unpleasant thing to see just when you're trying to be happy! There was

this nice-looking young couple in the line just ahead of us, waiting to get married; and then this crowd of people that edged up, closer and closer, sort of growling, and of course I don't know what the trouble was but I can guess, and the things people said! Not that there wasn't some sense in their remarks of course, but when somebody yelled 'Kill the shorties!' and somebody else threw a rock that nearly hit Greg—"

"Mother!" pleaded Bianca.

"All right, all right, I can see you want me to change the subject. Professor Blake, did you know I'm going to take up flower arrangement this winter? I've met the nicest Shortie who's going to teach me, really quite a superior—"

THE DOOR swung open, and Sigrid Gianotti hurried into the room. Her gray eyes looked dazed, as she stopped and raised a hand to her quivering lips. Bianca ran to her and led her to a chair.

"What's happened, Sigrid?"

She began to cry. "He's gone. Carlo's gone!"

"Gone where?"

Sobbing, she held out a letter, and while Bianca tried to comfort her, Blake scanned the few lines, with Greg reading over his shoulder.

"...regret...deceiving you all these years...Lloyd's great talent...my Pattern...Lloyd will have his chance now...depend on you...your love...our son..."

"It's not true," whispered Greg. "Carlo would have lived another century."

What a waste, thought Blake. What a waste of an able man. And his explanation a complete lie. Society had degenerated to barbarism when a man had to sacrifice his own life in order to give his son a chance to life freely.

The dance music ended, the orchestra vanished, and Suda's white balloon face smirked from the screen, his pale eyes excited, his voice breathless.

"Here's your old friend Bob Suda, folks, breaking into the music to bring you the latest news. Flash. The police are still investigating the incident which occurred at the marriage registry office this morning, when two young people were attacked by a mob as they were about to sign the contract. The reason for the attack is one they don't allow me to report over a family channel, but nobody can stop my hinting, and it's a matter of record that they were both musicians.

Have I said enough? Since the recovery of the unfortunate young people is doubtful, it is unlikely that the perpetrators of the attack will be identified.

"Flash. The other item I bring you at this time is of a more serious nature. The body of Carlo Gianotti, well-known lawyer, has just been discovered in an upstate hotel under mysterious circumstances. The cause of death was first erroneously reported to be suicide, but later investigation has disclosed that the cause was apparently a hitherto concealed kidney ailment of a congenital nature. Surviving are—"

"Turn it off!" cried Sigrid.

When the room was quiet, Bianca spoke softly. "But we all know Carlo's story isn't true."

Sigrid looked up quickly. "It is true; and anybody who doubts it is no friend of Carlo's, or of mine!"

With hands clenched together she looked at each of them in turn.

"I want to make this clear. Carlo concealed it all these years until it could no longer be concealed, but he died according to his Pattern. And he bequeathed the same defective Pattern to Lloyd, without a doubt; Lloyd didn't understand this at first, and made a wrong interpretation, but he knows now. Lloyd won't be going into science, Professor Blake. He's starting into art school next month. There's nothing to stop him, now."

Shaking his head, Blake put his arm around her. "Carlo shouldn't have done it," he said gently. "Nobody should sacrifice—"

"Carlo did nothing! He couldn't help dying, it was his Pattern. I thought you were all his friends. Can't you understand?"

"We understand," said Blake. "And now, you'd better let me take you home, before I go back to the lab."

HE HAD STILL five minutes until midnight when he locked the door of his office and glanced at his watch. Resolutely putting Sigrid out of his mind, he opened his safe, took out a sheaf of notes, and spread them on his desk.

His wrist buzzed, and he answered impatiently.

"Blake here. . . Give me five minutes more. . ."

Shifting certain papers to the top of the heap, he ran through them hastily, nodded, and then slumped back in his chair for a moment, deliberately relaxing every muscle from head to toe.

Fully alert, then, he spoke into the dial.

"Blake reporting. . . I couldn't help being late, you idiot, but I'm

ready now, so put him on... Yes, his nibs himself... Good evening, sir. I think you'll agree that the time has come to take action... Yes, the Gianotti case—a real tragedy, and unhappily only one of many, as I dare say you realize from the reports of your other investigators. It's dangerous to remain passive any longer, and we must act to save the race... No, sir, that's *not* exaggeration. As I explained to you at our meeting a year ago, when a species loses its variability, it loses its capacity to adapt. When it loses its capacity to adapt, it loses the most important weapon in its battle to survive in a mutable universe. And the human race is no exception... Sir, if those fanatics in the Racial Welfare League aren't stopped, and if public opinion isn't changed, this world will not only become so practical and so dull that nobody will enjoy living in it, but the human race itself will go coasting downhill to extinction...

"No, of course we can't outlaw the League; censorship never works and I don't believe in it anyhow, but we can try to *use* the League, now that it exists... Suda? Yes, he's unquestionably one of the powers behind the League, and as a commentator he has an alarming amount of influence. He presents a problem, but since we can't condone assassination, we'll have to try the next best thing. We can laugh at him, can't we? We can make him and his followers and what they stand for so ridiculous they'll be laughed out of existence... I don't know—that's the psychologists' job, not mine. All I know is genetics...

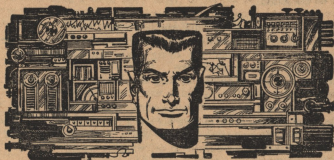
"Now for immediate action... Yes, of course public opinion is the most powerful agent in the long run, but sometimes it can be helped along by legislative action. I would suggest drafting a bill to be introduced as soon as possible, with a view to changing the organization of the Family Record Bureau, and which will embody and publicize the following data:

"First: while we now know a very great deal about the human genetic structure, we do not know everything. The Pattern is not completely understood, and only fools or criminals would continue to act as though it were... Oh, of course the phraseology will have to be toned down, but can't we leave that to your secretaries?...

"Second: the human race cannot afford to lose any of the genes which provide it with desirable traits, even though we have to accept some of the poorer traits as the price of keeping the good ones. We don't know enough to encourage selective breeding wisely, and maybe we never will.

"Third: not even the professional geneticist has enough information as yet to make a wise decision as to which genes are good for the species and which are bad, and if the specialist doesn't know, certainly the untrained man-in-the-street can't know. He's proved that by valuing longevity above every other quality, and consequently dragging our social structure down mighty close to chaos... What am I getting at?

"I'm getting at a simple *therefore*. Therefore, the records of the genetic Bureau will no longer be open to inspection by prospective spouses... Why? So we can mix up the longies and the shorties again, and mix up artistic ability with financial ability again; so we'll be one whole race again, instead of two crippled halves! One generation of random mating is all that's needed to do the trick, and then maybe we can concentrate on the parts of the Pattern that really are important... Oh, certainly the government would continue to have access to the records. When necessary, in the case of certain genes *known* to be deleterious, the government could step in privately to prevent their reproduction; but this could be done secretly, so that no opprobrium attached to the poor devils involved...



"Tyranny? Of course there's danger of tyranny, sir! There always is, with this power or any other. But no slavery could be so terrible, no fate could be so tragic, as what would happen to a species which irrevocably lost its capacity to change to new conditions. We lose that, and we lose our ability to throw off, eventually, any tyranny whatsoever...

"Research? Of course; we won't stop until we know the Pattern in its entirety."

Clicking off the phone, he sank back into his chair.

"And that means never," he muttered.

He was tired. It was an effort to get out of his chair and close the office. As he walked slowly through the darkened laboratory he paused to look at the fly cages. This lot ought to have been dead a week ago, he remembered. Better have a look at those chromosome maps, somebody must have made a mistake. That cytoform combination was always fatal in the homozygous state.

Taking the photographs from the desk drawer, he put them in the projector and threw them on the screen.

He frowned. Strange. The flies were all homozygous for the morbid cytoform, just as he had thought. Then why were they alive?

Suddenly he grabbed the records of the parent generations and studied them; here they were, F 7, F 6, F 5—

So that was the answer! The gene over here must be acting as an inhibitor to suppress the action of the other two. But that meant—

His heart was thudding as he ran for the door. Had Greg gone to sleep yet, he wondered? Or was he lying awake, staring at the black bars of his Pattern?

* * *

GREG SAID softly, "What Carlo said wasn't true."

The fire was burning low, and with their guests gone, he and Bianca were sitting near the dying coals, each thinking his own thoughts and finding little to say.

"I saw Carlo just before he left the Retreat; he wasn't ill. He looked—very happy."

"I know," said Bianca. "It's horrible, what happens to us. Poor Carlo, committing suicide to give his boy a chance to be what he wants to be, without disgracing the family. We're all so afraid of what people will say, that we have to lie to get what we want."

Restlessly Greg got up and poured himself a drink. "Not much of a wedding day, is it?" he said.

"It does feel a little bleak."

He drained his glass, poured himself another, and paced the room.

He was a coward, he realized. Like Carlo, he was committed to a lie, and for a similar reason—fear of public opinion; to get something that society thought he had no right to have. But if nobody ever had the courage to defy the conventions, the conventions would only get stronger, and force more people to these unnatural acts.

The fact that he was going to die in a year or so suddenly seemed unimportant; even the chance that Bianca's love might change was unimportant. Perhaps she would despise him for his deceit, but what was important, he saw now, was to accept the fact of his Pattern, admit the truth, and still continue to do what he wanted with his life as far as that was possible.

Turning, he faced his wife. "Bianca. I have a confession to make."

"Have you?" she said softly.

Before he could go on, the bell rang, and at the same instant the door burst open.

"Professor Blake—are you ill?"

Blake sank into a chair, still puffing. "No, no. Sorry to break in like this. Dear me, it's nearly three in-the morning, and on your wedding night, too. What must you think of me?"

"But what's wrong?"

"I couldn't wait to show you," he said, taking the photographs from his pocket. "Look at these maps. You remember, you called my attention to the fact that the flies of this lot are still alive when they ought to have been dead a week ago? Well, here's the explanation."

Greg studied the pictures without enlightenment.

"Don't you see? Those flies should have developed abnormal blood cells, and should have died of the disease. They haven't. And the reason is, this inhibiting gene!"

"That's interesting," said Greg; "we'll have to study it in detail."

"You still don't see. Look, Greg, this condition is almost the exact analog of a homozygous state for sickling in the human organism. Think of your own condition—or did you suppose I hadn't guessed it? You worried yourself into a nervous breakdown because you thought you were a shortie, and that your Pattern showed you would sicken and die of the sickling disease within a short time. Haven't you wondered why you haven't exhibited a single symptom yet? Well, you're not going to. There's no doubt about it—you also have the suppressor gene, whose presence we never before suspected."

"You mean we've marked another gene?" said Greg numbly.

"Marked, ticketed, identified. And it tells us you're going to keep on living."

The silence lengthened. A coal shifted in the fireplace, glowed briefly, and subsided.

"Then I misinterpreted my Pattern?" said Greg. "I lived through months of torture; I lied to Bianca; and it was all unnecessary?"

His eyes met Bianca's as he took her hand. "It seems I'm not a shortie, after all. I thought I was. I was going to tell you the truth, just now. But it's not going to make any difference, and I'm glad we were safely married before we found this out; otherwise, you might have thought you ought to refuse me."

"What's all this?" said Blake. "What are you talking about?"

"Bianca's own pattern."

"What about it?"

"She told me about it. It's not—not a good one."

"Nonsense!" said Blake. "All this criminal nonsense about bad and good and long and short has got to stop! But what are you after, young lady? I know your family history backwards and forwards. What kind of a game are you playing?"

Bianca smiled at him. She turned and smiled at her husband.

"I won't go on playing it any longer, Greg. But patterns are sometimes very cruel things, the way we use them. And men aren't the only ones who'll stretch the truth, sometimes, to reach the person they want to live with."



The people of Ox II had thrown the empire-building Earthmen off their planet in the past. Now, when the great empire was decadent, men of Ox II were in its heart, undertaking a strange mission...



Here is a Thrilling Novel of Tomorrow

NO TIME FOR CHANGE

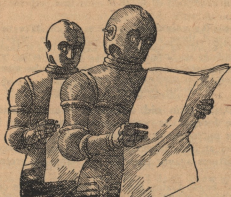
by Charles V. DeVet

SCIENCE FICTION QUARTERLY

*You'll find
it featured
in the current*

Now on sale at all stands

Robot: intelligent machine, not necessarily human in appearance. Android: artificial man, made of synthetic flesh and blood. The question: what can an android do that a robot can't? Who wanted to know? The robots, of course!



CAUTION ADVISABLE

by **WARD MOORE**

The purpose for which we are made is to fulfill the design of the Creator of all things. That it is not in the nature of any of His creatures to see the pattern, or to understand His will, makes it the more necessary to see as much as we can and try to grasp whatever meaning is possible to our powers.

Operating Manual for Sentient Robots, page 1.

If our duties should include manufacture of other robots, we must try to make them better than ourselves; if we succeed we must not suffer the illusion we have been anything but intermediaries between the Creator and His product. The first robots were made by intermediaries, as the last shall be, but only the Creator creates.

ibid, page 6.

...emotions have been built into us: Pity, that we may not willingly injure another of the Creator's things; Curiosity, that we may enlarge our ability to serve Him; Humor, that we should please Him; Fear, that we may be warned against unnecessary expenditure of whatever use we might be to Him...

ibid, page 11.

Beyond the familiar galaxies lie others which have never been explored, and beyond these are others which have never been visited, or of which no records of visits exist. Legend has it that the original robots and androids were built in these far galaxies. Travelers considering visiting such remote parts of the universe should note that caution is advisable in uncharted areas.

Celestial Navigator and Handbook of Astrogation.

ELT SAID, "It's an old argument, one they must have had when our forerunners were operated on storage batteries and paused for microseconds between syllables."

Cron laughed at the exaggeration. "Why not adding-machines asserting their virtues against those of the lumps of protoplasm in the retorts?"

"Seriously—" began Galm, the third member of the crew.

Cron laughed again. "The word is superfluous; you youngsters just off the assemblyline are always serious. When you've got a few dents here and there, and been rewired a couple of times or had new lenses in your scanners, you'll take things more lightly."

"Give him a chance," said Elt; "those dents and welds you're so proud of weren't built in. You must have been just as brash and solemn the day they gave you your final inspection and started your atomic pile. You think age has given us more sense; more likely it's just shorted a tube or two."

Galm waited patiently till his elders quieted. It would be five hours of relative time—their time—before the cargo ferry came out of hyperspace; there was nothing to be seen or done till then. Galm was reasonably sure of getting a chance to make all his points.

"Seriously," he continued, "no satisfactory explanation has ever been advanced for the existence of androids."

"Satisfactory to whom?" asked Cron. "Satisfactory to robots? Who are we to judge?"

"I wasn't judging—at least, not in any sense of thinking it a waste of material to manufacture androids. I only meant that they don't seem to perform their function as well as we do ours. They take longer to make, yet they wear out almost immediately; they begin deteriorating the moment their hearts are set to beating."

"But what is their function?" Elt questioned gently. "I know the rest of your speech, Galm—believe me, I do; I used to make it myself when I was much newer. Androids need air and food and water; they must sleep. Far less heat than it takes to make our metal red finishes them; they need protection against cold. They have neither strength nor endurance. They cannot be repaired or readjusted with any efficiency; and when they wear out, they actually die like begotten—rather than manufactured—creatures. And after this happens, they can't be scrapped and made into new models; their flesh becomes rotten and has to be burned or buried. They are, in fact, delicate and ephemeral, just as we are sturdy and lasting."

"Give him a chance," mocked Cron. "At least let him hear his own words come out of his own voice box, and not yours."

"It's all right," said Galm; "the facts are accurately stated. All of them might be negated by a single counterbalancing factor—if there were one thing androids could do that robots cannot, or even something they could do much better. But I don't know what it is."

"Look," said Elt, "all of this is based on the assumption an android is merely an inferior robot—made out of flesh instead of good, honest metal. Can we really assume that? Do we know it?"

"I used to know everything," murmured Cron. "I was brighter in every sense when I was as new as Galm."

"For androids to have an abstract justification for existence, they would have to be a superior *something*. It might be a negative superiority, but again I don't know what it could be."

"Because you think in terms of a robot norm or a robot ideal," said Elt. "We have certain characteristics built into us, which are refined and improved from time to time. Some of these characteristics are apparently more natural to protoplasm than to metal—whatever 'natural' means; I'm not at all sure myself. We can know fear, because the emotion has been deliberately built in for a purpose; but we know nothing at first-hand of pain, which is the forerunner of fear."

"Because pain would be of no value to us; if it were, it could be built in, too."

"But it doesn't *have* to be built into androids. Just because we don't know circumstances where susceptibility to pain could be an advantage—that is to say, a superiority—doesn't mean such circumstances don't occur."

"Yet—" began Galm.

THE DISCUSSION went on sporadically, while the cargo ferry moved through hyperspace, and only stopped when the drive automatically shut off and the vessel emerged into normal space. Elt began checking their position; Cron, who had made the trips many times more often, paid no attention.

"At this point," announced Elt, "an android would express astonishment and dismay by means of his mobile features—a method of communication denied us. We are not in the home galaxy."

"Exclamation point," remarked Cron; "a punctuation mark we don't use. Let me see..." He had no need to consult the charts in the *Celestial Navigator*; once scanned, they remained a permanent memory, down to the least detail. "We're certainly not on Plate Eighteen...but the instrument panel shows the proper...nor Seventeen or Nineteen..."

"This is Plate Thirty-six," said Elt—"as much of it as was ever mapped. See that constellation by the north pole? It's unmistakable." "Something's gone wrong with the space drive," said Galm.

"That's a fair hypothesis," admitted Elt. "Some cosmic force might have pulled us out of hyperspace for the exact distance for which the controls were set, but in the opposite direction. It's more likely that the drive is erratic."

Working methodically and unhurriedly, they disassembled the drive. Though none of them had overhauled this type before, their total recall left them in no doubt about the positions of the parts, or of the principles involved in their use.

The defect eventually found and repaired, Elt said, "It almost seems wasteful to return without exploring a little further into this unknown part of the universe."

"Not our business," said Cron. "It would take some time to make a Plate Thirty-seven, and our cargo is already overdue."

"It might be a lot longer before another ship wandered here," countered Galm. "While we're on the spot, it would certainly seem a duty to add to the sum of knowledge."

"I hadn't planned for a Plate Thirty-seven," explained Elt; "only a quick jump further through hyperspace for a look at what lies beyond."

"All right," conceded Cron. "It can't do any harm."

Galm set the controls; Elt pressed the switchover. The star pattern of Plate Thirty-six whirled into complete blackness as the cargo ferry plunged into hyperspace again.

Galm abruptly returned to the earlier conversation. "Now consider what would have happened to a crew of androids in this situation."

"I won't consider anything of the kind," retorted Cron. "Androids wouldn't undertake to operate a ferry unless it were equipped with oxygen-manufacturing devices; heat and refrigerating units; and an enormous supply of food and water—to say nothing of having to use cargo space as sleeping quarters. Since the basic scene—the cargo ferry—would have to be modified out of recognition, it would not be the same situation or even one reasonably like it."

"My point is still valid," persisted Galm.

"What *is* your point?" asked Elt. "That androids couldn't have repaired the drive so quickly or easily? No one disputes that. Any more than anyone argues that we could—"

"Could what? What can an android do that we can't, or that we can't be built to do? Paint pictures? Our scanners can distinguish more shades between two of their colors than they have in their whole spectrum. Our built-in precision and delicacy of touch—"

"Metal can be made to do anything protoplasm can—after protoplasm has done it once," said Cron. "We can compose and perform music more exquisitely than any android, but could we dissect the sounds, construct a much more refined scale, and bring out much more subtle harmonies if their ears and larynxes hadn't given us the original clues?"

"Yes," muttered Galm.

Cron laughed. "There must be a grain of dust making friction in your bearings. Admittedly we don't understand how and why androids are superior in some—perhaps narrow—fields, but it is so. Despite their comparatively small numbers, there is undoubtedly a symbiotic relationship between them and us."

"I can't see it," said Galm.

THEY CAME out of hyperspace for the second time, not merely inside a galaxy, but fairly close to a yellow star. The star was of a type common in their familiar universe, even to the planets circling it. They were between two of these planets, quite near one of them.

Elt recorded as much of the data as could be transcribed in a short time. "I'd like to land on that planet," announced Galm suddenly.

"Why?" inquired Cron. "We could learn nothing on its surface that we couldn't discover quite as well from here."

"Nothing statistically, so far as chemical analysis goes," agreed Elt. "But certainly there are features we can't distinguish with instruments even at this distance."

"It would be interesting to know if there are robots here," said Galm; "and what type. Perhaps they're more advanced than we."

"The probability is so remote as to be mathematically negligible," Elt pointed out. "It would assume two similar technologies thousands of light years apart. As well assume androids while you're at it."

"All right; I'll assume androids—though if robots are remote, androids are more so since there are so many less of them. The absence of either can only be proved by direct observation."

"Direct and continuous observation," corrected Cron. "And we can't spend a year or more continuously observing. But I'm willing to land for an hour or so."

"Very well," agreed Elt, setting the course on visible speed and readying the gravity repellers; "I suppose we can circle once around before landing."

At a gentle angle, they entered the planet's gaseous envelope and traveled at a greatly decelerated pace over a large body of water on the dark side. Coming into brightness again, they neared a land mass; from above they could easily see it contained numerous scattered artifacts.

"Robots," said Galm satisfiedly.

"Or other intelligent creatures," said Elt.

The land mass was large; even at their present slow pace, they flew for nearly an hour before seas were sighted again. Rivers and mountains broke the even surface; there was little evidence of plan or pattern in the artifacts.

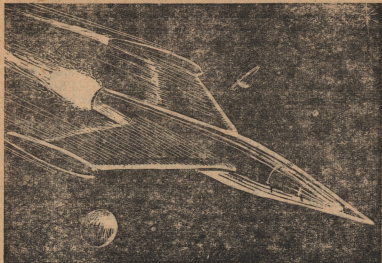
"About here?" asked Elt, pointing to a green plain.

"About here," agreed Cron, and Galm said, "Yes."

The cargo carrier settled so gently that not a blade of grass was crushed as it hovered on idling repellers less than a foot above the ground. There was nothing to be seen that Elt and Cron had not seen innumerable times before, if not on a single planet or in the same relation, just as no novel elements showed in the spectrum-analysis taken from the ferry. Even Galm in his brief experience had visited systems exhibiting nearly all the physical features evident here.

Elt was the first to descend; Cron followed, and finally Galm. Their scanners detected movement not far off; in unspoken agreement they moved toward it. "Looks like I was wrong about mathematically negligible probability," Elt confessed after a few steps. "Those certainly seem to be androids standing over there, waiting for us."

"Then there must be robots, too, to do all the things the androids can't—Cron's 'symbiotic relationship'."



"They're odd-looking," said Cron. "Shorter, less standardized than any I've ever seen. And so far as I understand esthetics," he added hesitantly, "below the usual norm of handsomeness."

"We're a long way from home," remarked Elt; "esthetics seem to be relative; these androids may have a different standard of beauty."

They were near the androids now. One of them, a step or two in advance of his massed companions, shouted something loudly.

"I don't understand him," said Elt.

"Nor I," acknowledged Cron. "Do you suppose they have a speech other than Basic?"

"That would be . . ." began Galm, and then stopped, evidently at a loss to express his thought.

The android wore a bright scrap of metal on his chest. He pointed to it and shouted still more loudly. "We don't understand you," explained Elt. "Does one of you know how to speak Basic?"

THE ANDROID shouted once more, though the robots were not too far away to hear ordinary tones. Then he drew a small metal mechanism from his hip and held it out toward Elt. "Some kind of communicating device," he guessed aloud, advancing to examine it.

The mechanism made a sharp noise. Something struck Elt with force, just below and to the left of his coordinator, spinning him halfway around before he regained his balance. There was a deep, glancing dent in his outer metal.

"This is most unusual," muttered Elt, halting.

The androids retreated a few steps, continuing to shout. The mechanism barked again; this time Elt moved slightly and heard the whine of a metallic object whirling swiftly through the air beside him. "I can't understand what they're trying to convey," he admitted.

"Is it possible they're not trying to convey anything?" asked Galm. "Can there be something disarranged in their makeup that might cause them to act irrationally? I have heard of androids affected so occasionally, and we know there are robots who have lost coordination through no apparent mechanical failure."

"It is possible," conceded Cron, "but unlikely. Such a theory would suppose the entire group in front of us was afflicted."

The androids were indeed behaving queerly. At least half their number produced mechanisms similar to that in the hand of the one with the badge. Others had clumsy lever-like instruments which they also pointed at the three robots. The volley was scattered and irregular; precise and instant reflexes made movements of the three lightning-swift—nevertheless all were nicked and battered in several spots.

"Can they be meaning to injure us deliberately?" wondered Galm.

"Improbable," said Elt; "there has to be a reasonable explanation."

Suddenly the androids ceased their activity and began moving quickly away. "Well," said Galm; "maybe they've gone after some more intelligible means of communication."

"More intelligible and less dangerous," murmured Cron. "I'm going to need half a dozen welds."

The androids had completely disappeared. The robots made no attempt to follow, but surveyed the now-peaceful scene with their scanners. The field on which they stood was of green grass, low, even and young. Edging it a row of trees bent slightly in a gentle wind.

A rumbling buzz came from beyond the trees—an even, rhythmic sound. High up, a collection of clumsy-looking vessels moved slowly through the air. "This must be the other means of communication," ventured Elt. "Such awkward things could hardly be meant for travel."

All three looked upward, watching the approach. When the craft was almost overhead, black objects began to descend.

"Ah," said Galm; "cylinders. They must contain written material; now we'll understand everything."

The first cylinder fell a hundred yards or so away. There was a tremendous explosion, and a mass of the field rose into the air as pulverized dust and clods of earth. The shock of the impact knocked all the robots flat.

"I—" began Elt. Then the other cylinders fell all around them.

They were battered as though by a hammer used to break up scrap; they were buried under loose soil. Elt's right arm was twisted into a useless hook. One of Cron's scanners was cracked, Galm's midsection was broken so that he lost control of his sound box. Yet none of the cylinders had come very close.

They dug themselves out, helping each other. The vessels had disappeared, but the buzzing hum was still audible. Then the craft became visible again, lower now and heading back.

"Run," shouted Cron. "Run for your existence. These are not androids; these are the real thing!"



STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF
Science Fiction Stories published bi-monthly at Holyoke, Mass. for October 1, 1954.

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

LOUIS H. SILBERKLEIT
(Signature of Publisher)

Sworn to and subscribed before me this 15th day of October, 1954. Maurice Coyne. (My commission expires March 30th, 1956).



Charles simply could not arouse this girl...

NOVELET

THE EAR - FRIEND

Without his ear-friend, Charles Kelvin faced not only reality, but silence. And as the silence tugged at his nerves, he wondered if this were only a variance—a new illusion sponsored by the all-pervading ear-friend.

by R. E. BANKS

Illustrated by ED EMSH

CHARLES KELVIN came down the stairs to the breakfast table. His wife stared at him, the color leaving her cheeks. She half-rose from the table. "Charles! Where's your ear-friend?"

"In my pocket," he growled, sitting and jabbing at his grapefruit. "What's more it's going to stay in my pocket until I find out—"

"Oh, no. That's insanity! That's—" she shuddered at the unthinkable. The device she wore, that looked like a hearing aid, trembled when she shuddered. The little bug in the right ear, the wire looping gracefully down to the battery set in the pocket of her robe.

Suddenly she smiled. "It's only a Variance," she said. "You've been talking so much about what it would be like to go around without your ear-friend that I'm thrilling myself with an illusion about it. It's not really morning; you're not really sitting across from me eating grapefruit; we're probably still in bed."

Charles looked at the sun streaming in the window, warming the white breakfast linen. He was pretty sure it wasn't a Variance, but then you never knew. Of course, without the ear-friend on he *should* be living in reality; but then it was the general belief that if you took your ear-friend off, you'd go insane from stark reality, and he *might* have lost his senses already.

That was the hell of this ear-friend business. Rebellion against it had been growing in him for years. Last night at the Club he'd been arguing that matter hotly. He'd jerked off his ear-friend to prove a point to his friends. He'd done it so vigorously that it had bounced on the marble floor of the Club and broken. On the way home he'd stopped in an all-night repair shop, frightened of the dark, frightened of the streets, frightened of the shadows. Horrible things were said to happen to a man without his ear-friend.

But when it was repaired and he stood outside the shop again, he realized that he had gone almost two hours without his ear-friend snuggling in his ear. Suddenly he knew that if he was ever going to fulfill his desire of freedom from the ear-friend, this was the moment. Instead of putting it back on, he had stuffed it in his pocket.

He went home, trembling, through the dark streets.

At home Ruth was in bed, her sleep-friend Variance at work. She slept in deep unconsciousness, and he had taken his own ear-friend to bed with him, fearful of the waving trees outside, fearful of the moon, fearful of the suggestive wind.

His heart beat fast in his chest. Three hours now without wearing the ear-friend! Most people carried an extra. Some of them had gone a half-hour, an hour, even two hours without wearing it—he'd never heard of anyone going three hours without one, except in lonely places like a camping trip when there'd been an accident. And you didn't brag about it; people would think you insane.

He counted the hours on his fingers. If he could last the night out that would be seven more hours. Ten hours without the ear-friend!

His ear felt naked, cold without the snuggling warmth of the ear-plug. There was no reassuring pressure. Trembling, he closed his eyes and began to count. One-two-three-four—

It had been a minor nightmare. He had had crazy dreams of horri-

ble unguessable happenings. About three AM he had awakened with a start, smiled to think that his ear-friend must've failed, and then jerked fully awake to realize that he didn't wear it.

He clutched for it frantically and it was there. He lifted it to his ear and then his eye fell on the clock. Six hours now without the ear-friend. Never in his whole life had he gone so long without it; never again in his whole life would he dare to go so far.

He forced himself to lay the ear-friend aside. This was his moment; this was his rebellion. If he dared to put the ear-friend on, he would never take it off again—like everybody else. There was only one great moment of rebellion in any man's life. . .

Morning. He had done it. Ten hours without the ear-friend, and he still felt shaky with terror; yet he seemed sane enough to himself. He passed up the morning news-friend broadcast with a sense of pleasure. Now he was having breakfast, and now he was approaching the twelfth hour—

Unless, of course, he really had the ear-friend on and the Variance was that he didn't have it on.

Damn that little gadget! he thought. *It steals your senses away completely. It feeds you sight, sound, taste, smell and feel right inside the brain. Stimuli from the outside world can't get in at all.*

How tenuous man's hold on reality! The ear-friend could make a starving man feel full, and turn up his nose at life-giving food. The ear-friend could make a soldier walk into machine gun fire, shooting his own rifle and thinking he was out in the fall woods, hunting rabbits with his best dogs at his heels. The soldier would smell the woods, hear the dogs barking, see the tall pine trees, taste the breakfast open-air coffee in his throat and feel the rough tweed of his hunting jacket. All would be Variance, of course. As the enemy machine gun bullets cut his body up, he wouldn't realize what hit him, that he wore a uniform, that he had been fighting a long, grueling campaign.

Ah, the ear-friend had many fine realities for you when it took over your senses—all of them pleasant! The doctors would pull a dying man out of a car-wreck and plug him up; and his senses would tell him that he was between warm sheets, and his hands would reach out and feel the ripe body of some sexy movie star—

All while he died on the dirty, grimy streets.

CHARLES lifted his head to stare at Rush. She was having a Variance now, eating slowly, head lifted, eyes glazed. "Won't you

have some more tea, Mrs. Claine?" she said aloud to a person who existed in the room only for her. He knew that Variance; whenever Ruth was troubled, she invited a mythical next door neighbor in—an old and wise person, derivative of her mother and laid her problems at the feet of the non-existent Mrs. Claine.

The children were silent as always. Young John toyed with his cereal, having Lord knew what Variance. Eddie ate with furious rapidity, his older brain demanding a more purposeful Variance from his ear-friend.

The eggs tasted bad. Charles knew he only had to plug in and he would be eating the most terrific breakfast he could imagine. He could make the eggs taste like pheasant in his mind, or a thick morning steak—

No. There'd been altogether too many exotic meals in his life. With the ear-friend, you demanded fine foods every meal you ate; finally they all blended together—

Silence. Breakfast table silence.

Charles got up, kissed his wife, patted the kids on the shoulder. They were lost in their Variances and didn't feel his touch. He paused a moment at the door, looking at them, each a private island of sensation sitting at the breakfast table. The sun touched his wife's lips and made them gleam as she mumbled to the figure that her senses put before her. Her face was lined, but she didn't know her face was lined; she would never know it. Whenever she looked in the mirror with her ear-friend on, she saw the Variance from reality, her beauty as it was in her early youth.

He could tell her that her face was lined, perhaps in the heat of an argument; but afterwards, she would look in the mirror and project her youthful beauty; then, reassured by the testimony of her senses, she would shrug off his cutting remark as a Variance.

Maybe it was better that way; perhaps the human race had decided wisely against too much reality.

He looked in the hall mirror. His face was lined, too. Not badly. He was in his late thirties. *At least*, he thought, *I think I'm in my late thirties*. Last night, with his ear-friend on he had washed a handsome, youthful face of twenty-two before he set out for his Club.

Or was there any Club? Maybe that was a Variance.

Now, wait, goddamit—there had to be *some* reality! You can fool your senses—even make yourself think you're eating a meal when there's nothing in your hand but an empty fork and nothing in your mouth but air. Still you couldn't kid your stomach. Your stomach

didn't operate on sensation; it was mechanical. It operated only on real, existing matter. You might starve to death in contentment, thinking by the ear-friend-controlled senses that you had just eaten until you were stuffed. You might starve to death spurning real food because your senses ignored that food. But, brother, starve you would—and die! That's how they killed murderers in this easy age.

Therefore there had to be enough reality for the mechanical world to operate. People might eat beans while their senses told them it was steak. But the beans—something—had to be there. People still had to work, to keep mechanical life going, even if they fooled themselves as to what their work was, and how much they did.

CHARLES grinned to himself in the mirror. Okay, brother, that's a point—point number one on our side. Namely, no matter which is the Variance and which is reality, there has to be a mechanically existing universe around both. He had something solid now that would work in both worlds, the world of Variance and the outside-of-him world of reality.

He went back to the dining room. He picked up his fork and ate some of his now-cold egg. It still tasted bad.

He exulted inside. Point number two, brother! If the sensation is bad, disappointing, negative, it's probably reality and not a Variance. For why have Variances if not to make a rich thing out of poor reality?

He patted the ear-friend lump in his pocket. "Stay there, friend," he said. He was sure now that his experiences since he'd removed his ear-friend last night were real, not a Variance. A sleepless night, a newsless morning, a lousy egg, a lined face—these were the things of reality that were said to drive men insane if they removed the ear-friend.

He wasn't insane yet.

They kidded him on the way to work; the four men that he rode with in the car all jeered at his loss of his ear-friend. When he took it out of his pocket and showed them it was intact, they laughed at him.

"Drunk or crazy," said Pi Newton.

"Probably both," said Milt Hammer.

"Did I ever tell you the drunken Variance I had with this blonde dame?" asked Welbourne. He had; quite often. To be drunk and lose one reality and to have a Variance on top of that. Oh, brother!

But this time Charles didn't respond to the tale. The point was that none of the experience was *real*! Why be proud of it?

Charles looked at his friends as if they were strangers from another planet. Couldn't they see the difference?

"Tell me," said Pi Newton. "You've been yakking about going without your ear-friend for a long time. Why? What can you gain by doing that, Charley?"

"I want to know one thing," said Charles. "I want to know who's behind the ear-friend."

They looked at him as if he were mad.

"What do you mean 'who', Charley?"

He spread out his hands. "Don't you see? Somebody's taken reality away from us. Somebody has decided we can't have it any more. Instead they've created a pleasant world of illusion for us."

"Why, that's easy," said Pi. "Silence, Incorporated." He pulled his battery set out of his pocket and pointed to the trademark. "Silence, Ink, my boy, that's who."

"Yes, but *who is Silence, Incorporated?*"

They drew back from him. They didn't want to know, he realized. They were *afraid* to know.

After that they wouldn't talk about it any more. They went drifting off into their private Variances, the car moving silently down the silent street where thousands of people walked and mingled in total silence, each wearing his ear-friend, each going in haste to work but split off from one another by tons of private dreams.

CHARLES was a Production Scheduler in an auto factory. He sat at his desk writing up the orders for the cars to be made. This one was green, this one trimmed in custom, this one blue, this one with all the extras, that one stripped down with no extras. . .

It was hard, unpleasant work. All of his yesterdays with his ear-friend he had sat to work and done it mechanically while his ear-friend blanked out the silent office and the other workers and took him to far-off places. To distant planets to witness strange adventures. To feel and see and touch and smell far-off things, exotic things. This was the work-friend that made work easy—just as the sleep-friend made sleep easy; and the play-friend made you think you were an exciting part of the latest novel; and the news-friend took you right into the President's conference room at the White House and you thought you heard his very own voice and could reach out and touch the flesh.

Today there was only the reality of the work papers he shuffled, and the ache in his buttocks from sitting in the weirdly silent office.

The silence was beginning to get on his nerves.

Oh, brother, he thought. This is the sensation that sends the ear-friend rebels screaming back to mother. The awful silence!

He gritted his teeth and worked on. Far past twelve hours now.

A hand touched his shoulder. Mr. Perkins, his boss. "Please come into my office."

He sat across the desk from the Planning Superintendent.

"We require all employees to wear the ear-friend at all times, Mr. Kelvin," said Perkins. "You are not wearing yours."

"I'm still doing my work."

Under the lights, the glasses the man wore gleamed and so did the ear-friend in his ear. He looked hard and competent, and Charles wondered what Variances passed under that wide brow. But for the moment Perkins was right there in reality with him. Some people didn't travel as much in Variance land as others—managers and bosses, for instance; they had to be closer, he figured, to the mechanically operating world.

"Each man is highly trained in his job through the work-friend," said Mr. Perkins. "When we employed you, we placed a core in your ear-friend which would direct your muscles and a part of your mind to do your job without any error whatsoever—to do the proper amount of work each day. Without the ear-friend in action, you will make mistakes; you will vary your quota of work and throw things off schedule. If you feel bad, you won't do enough; if you feel good, you'll do too much."

"My job," said Charles pointedly, "isn't a hard job. A child could do it; I realized that this morning."

Perkins waved a hand. "You've missed the point, Kelvin. You're a part of the team here; you have to keep in step. Either put on your ear-friend and get to work or—out!"

So this was to be the end of his rebellion! He stood up, feeling panicky. If he were fired, he'd have to put the ear-friend back on when applying for another job; his rebellion was doomed.

"I—I—"

Perkins stood up. "Another point you've missed, Kelvin. Not wearing your ear-friend is the first sign of insanity," he said. "You'll undoubtedly lose your mind if you go long without it; this is a well-established fact."

Up until that point Charles was ready to back down. But here was

that damned insanity threat again! "Listen," he said heatedly, "mankind hasn't had the ear-friend all of its history. People lived with reality for years; they couldn't have all been crazy."

Perkins smiled a maddening, undefeated smile. "They were pioneers," he said. "Today we're civilized, Kelvin. Our minds don't have the ruggedness theirs had."

The smile added fuel to the flame. Charles jerked his ear-friend out of his pocket and threw it on the floor. He stamped on the battery part, feeling it crunch under his heels. A good feeling, and no Variance either. "That's what I think of your goddam ear-friend," he said.

Perkins bobbed his head solemnly. "Go get your coat, clean out your desk," he said. "Your check will be ready in fifteen minutes."

BREATHING heavily, Charles went. The other workers in the big office didn't look up; they wouldn't even realize he was gone until they came out of their Variances for lunch.

"Keep on working, you stupid cattle!" he called aloud across the room. Nobody answered. Even Perkins in his office didn't look up, lost in some managerial Variance.

Charles felt his nerves tighten. *The silence will get you*, he thought in a moment of terror. *That awful silence!*

He was saved from doing something more foolish by the appearance of a uniformed guard from Plant Security. Whenever a man was fired, a plant guard always appeared to be sure he didn't destroy company property before he left. The guard wore an ear-friend, but just at the moment his Variance was in seeing Charles did no harm.

Charles cleaned out his desk and put on his coat and got his check. "Just a minute."

The guard who escorted him to the door jammed his broken ear-friend into his pocket. "You'd better get this fixed, son."

Charles reached up and tweaked the man's nose. The man gave no sign that he felt it. Variance. On one level, his conscious mind was light-years away; his automatic nervous system performed its mundane duties without his being conscious of it.

Interesting technical point, thought Charles. *I wonder if—* He started to kick the man; then he saw the trap. When actual physical danger threatened in the real world, the subconscious fed up danger signals to the conscious. The conscious mind broadcast to the electronic ear-plug and the ear-friend corrected the situation.

Now the man rushed at him with his fist raised. "Rape my daughter, will you!" cried the guard. He hit Charles. Charles beat down his

own anger and retreated; conscious of the humiliation and pain, experiences totally new in his life after all these years of working the ego-building ear-friend.

The man didn't pursue him. Danger over, the servo-mechanism loop of ear-friend to conscious mind to subconscious corrected itself again and sent the guard on about his business.

Whoever runs Silence, Inc. sure has it worked out fine, thought Charles bitterly. Suddenly a thought hit him.

Now was the time to find out.

His wife, his children, his friends—they wouldn't notice his absence; they would create a Variance, an illusion that he was still there. His wife would keep the house going on their ample savings, thinking he brought home the paycheck. His wife would see him in bed, feel him in bed, watch him fix the broken closet door-knob. The kids would bring their lessons to him—

A week, a month—they would *never* know he'd left.

And when the savings were gone?

Charles smiled grimly. His wife or son, Eddie—or both—would get a job. They would support themselves; they would *enjoy* doing it. No person was ever really missed any more. The real, mechanical world would demand that they work and the ear-friend would make them happy about it. Just as it handled the dead, for instance. In ear-friend land you could call back the dead and walk with them, see them, feel them, hear them (Yes, taste and smell them, too) any time you wanted, even though their real bodies had long ago decayed in the ground. No, he'd never be missed even by those dearest to him.

He was free! Charles stood in the thick sunlight and drew great gulps of air into his lungs. Air that stank with industrial heaviness, not the pure mountain air that the ear-friend usually told him he breathed. His shoulder ached with the blow the guard had given him; this was reality, and if he could just lick that silence—he could go all the way.

All the way to the headquarters and find the people who had built this fantastic reality for men that turned them into silent, self-satiating nonentities.

And then—

Charles walked down the street, swinging his shoulders. There would be trouble in the real, mechanical world where no ear-friend could alleviate the failure or add to the glory of the victory!

PEOPLE stared at him; people moved aside for him. A policeman looked up, started to follow him.

Danger.

This must've happened before. *They*, the owners of Silence, Inc. were too clever to allow a man to go long without his ear-friend.

He saw the policeman speak into his radio-pack, and knew instantly that a squad car had been summoned. He wouldn't be arrested for not wearing the ear-friend; that would be too forthright. Some other charge—an accusation of a crime he hadn't committed, for there were rumors of such people, though there was almost no crime any more. They would arrest him and put him in jail. They would scare him plenty. They would insist he had committed some offense; then they would hang an ear-friend on him and send him home, safe in the knowledge that he would keep the device on for good.

Or if he still refused to wear it they would put him in an institution for insanity. He had to by-pass this low-level, efficient, unquestioning authority system.

For a panicky moment, he thought of slugging the cop and running—but realized that the officer was big and well-muscled, trained for his job like everyone was and could easily handle him. He couldn't escape that way.

The officer was almost upon him. "Just a moment, you!" called the officer.

Charles' hands flashed. He slapped on his useless ear-friend and grinned foolishly at the cop. "Yes, Mr. Richman, I will accept your million dollar check," he said, holding out his hand to the officer. He hoped his pretended Variance would work.

The officer glared at him. If the man reached into Charles' pocket and felt the smashed battery set, he was done. He widened his foolish grin, pretended to fold a check and put it in his pocket. "I sure needed that million dollars," he said, turning slowly and beginning to walk away.

"Hey!"

The cop came after him. The cop jerked the plug out of Charles' ear.

"Who—what—" spluttered Charles, pretending to recover from his Variance.

"We don't like misfits in this city," said the cop. "We don't like trouble-makers; you keep that plug on, Mister!"

"Sure," said Charles. "Sure. I had an earache this morning and I was just resting my ear for a moment."

"Well, go to a doctor, buddy, and freeze it with dope. But keep

that plug on; you can go crazy walking around without your ear-friend."

"Sure," said Charles agreeably.

The cop shoved the plug back in his ear and gave him a push down the street. As Charles walked away he could hear the cop cancelling the call for the squad car.

Perfect. The broken ear-friend served as a dummy plug. Nobody could tell the difference. No more trouble from the police. Damn! Why didn't he think of that before? He could've kept his job, and—

No. He had given himself a different assignment. To find the headquarters of Silence, Inc.

They would be clever enough to know that they'd lost a customer. The dummy plug gag must've been used before by many who'd rebelled; they would be prepared for him. He probably had less time than he thought.

He jerked his broken battery set out of his pocket and looked at it.

Silence, Inc.

Main Plant: Somerset, N.J.

Branches all over the world

He was in Detroit. He could be in New Jersey by nightfall if he acted fast—caught a plane and acted with great care. Pack a bag, get some money—No! No time for that. He had been well over fifteen hours free of the ear-friend. By now the people in Somerset, N. J. must know about him.

THERE WAS a well-dressed, affluent-looking man standing on the corner. Trying to hail a cab. Charles stood beside him, looking up and down the street. The people moved silently by, each lost in his favorite Variance while performing the dull errands of their day.

"Nice day," said Charles to the man.

Silence.

"Do you think the Dodgers will make the World Series this year?" he asked.

Silence.

The old man was lost in a Variance, even while his subconscious mind made him hail a cab and took him about his business.

Charles calmly reached in the man's back pocket and lifted his wallet. This time the ear-friend was working for him; the Variance that cut off the man's senses forbade him to feel the theft.

Charles found a hundred and twenty dollars; he took the hundred and restored the wallet. A cab pulled to the curb, and the man got in

as Charles replaced the wallet, almost falling into the cab with the man. The cab-driver stared at him in suspicion. People didn't spend *all* their time in Variance; they dipped in and out of reality as the need demanded. The taxi-driver was not in Variance.

"Hey, what's the big idea?"

"I'm his secretary," smiled Charles, thinking fast. "The old boy always forgets his wallet; I have to chase him for blocks sometimes."

The cabby grinned and winked. "I hate these old duffers that get ear-friending the hell around and leave their money at home," he said. "Thanks, brother."

"It's all right, brother—"

The cabby's eyes glazed as he went back into Variance, and Charles stepped off down the street elated. He would travel fast now, living, figuratively, off the countryside like a barbarian army. Look out, Silence, Inc!

IT WAS NIGHT. Charles stood before the shape of the great building while the neon lights sprang to life up and down the streets of Somerset. The trip had not been easy, but it had not been especially difficult. Wearing his broken ear-friend protected him from the curiosity of the people and the attention of the authorities. Yet there was a growing, nagging fear at the back of his mind.

There should have been more opposition. The people who ran Silence, Inc., who had such complete control, should not have let him come this far without trying to stop him. Or if they did let him come this far, they must be so powerful, so sure of themselves—

He shuddered. How would they take care of him? Maybe it was as simple as making him think his whole escapade was a Variance. Maybe they'd lure him into a dark room and shoot him. It was hard to trace a missing person in the ear-friend world—friends, relatives, the police all insisted on a pleasant, orderly state of things where nobody mysteriously disappeared; it was easier to recreate his image in a Variance than to trace the real person...

Silence, Inc. had quite a staff. He stood apart from the skyscraper and watched the workers pour out at the end of the day. They all wore ear-friends; they called cheery "goodnights" to each other like ordinary office workers and adjusted their plugs to new sensations for the long ride home, to enjoy the newsbroadcast, or a play, or even a quick nap on the bus or in the car. It was easiest of all to drive a car while enjoying a Variance. The people of America had spent so many hours of so many centuries behind steering wheels, that even in the

days before the ear-friend they could drive without thinking, without remembering this point or that along the way.

The last of them were gone.

Charles moved into the silent lobby. There was a marble floor, a Company mural on the walls, a shining information desk.

There was one human being left behind, a girl who worked furiously at her desk. She wore an ear-friend, of course. From the looks of her lonely lighted desk in the vast gloom she was either making up work missed due to an absence or working for a friend. Since there was no one behind the Information desk, he went to her desk and looked down on her.

She kept on working. Her desk light fell on her features, and he saw that she was pretty, one of those office young things with the high-breasted, narrow-hipped girlish figure. Sharp and svelte in a white blouse and shaping navy blue skirt. She had a pouting red gash of a mouth and an ultra-fine complexion.

"Excuse me," he said, controlling his knee tremble. "I want to see—"

Who did he want to see?

She kept on working; she, too, was lost in a work Variance, her senses cut off from reality. He touched her carefully-curved head. She kept on working. In anger he seized her curls and forced her head back. The youth-fresh eyes stared through him. He shook her head roughly.

"I want to see the Manager," he demanded, belligerently foolish. There was no response. In her Variance, whatever it was, she did not see him, feel him or hear him. He turned away in disgust.

HE WALKED across the lobby, heels echoing in its silence. He stared at the building directory. "Manufactory, 1st, 2nd, 3rd floors". "Work-friend, 5th & 6th". "Play-friend, 7th & 8th". "Sleep-friend, 9th".

He explored the building, half-frightened, half curious. No elevator operators. In the upper floors there were workrooms where the wiring and mica and bakelite and transistors were manufactured into ear-friends. There were boxes and bins of tiny cores for the battery sets; each set took a core for each ear-friend operation, the work-friend, the play-friend, the news-friend.

There was no mystery here. The cores simply acted as a part of the servo-loop, powered by the battery to broadcast waves to the brain which cut it off from outside sensory impulses. The rest of the Var-

iance was formed by the wearer's own imagination, helped out by certain basic pleasure stimuli engraved on the cores. Only the news-friend was different, and it acted simply as a radio receiver, mingling the wearer's sensations with the directed thoughts of the newscaster in whatever city the wearer lived. The newsmen themselves wore ear-plugs and enjoyed Variances even as they collected the news and rewrote it and broadcast it.

Charles realized he didn't have to come to Somerset to find this out; any child knew this. What child hadn't spent hours of pleasure taking apart Dad's old ear-friend and trying to put it back together again?

But who made the cores?

There was a scattering of people, all wearing ear-friends, at work throughout the building; the night staff. Evidently the work here never stopped. They glowered at him like any office-worker at an outsider but didn't bother him. There were no guards.

He watched two workers, both lost in work-Variances, search for cores and finally go to the wall and push a button. Presently a dumb-waiter opened in the wall and a steel basket filled with cores slid out.

One man emptied the fresh batch of cores onto a table and threw the steel basket back into the dumb-waiter. He punched the button marked *Basement*.

The cores, then, came from the basement.

Charles turned downstairs with lagging feet. Silence, Inc. was just an ordinary business above the ground level. Down there—

The answer had to be down there.

He went past the young girl silently at work in the lobby and smiled grimly. It was the aloneness. That was the complete irony of the situation; it was the loneliness that would finally drive any rebel back to his ear-friend. But loneliness was the human condition in the ear-friend world. You spent ninety percent of your time in Variance, enjoying your own sensations, only ten percent in reality, in the company of others and in true life.

Mankind had strived for centuries to better communication from mind to mind. Mankind had hoped and dreamed for closer mind-understanding among the millions, for telepathy; its idealized love was the complete fusion of two minds...

And in the end, the full life, happiness, lay after all in a near-complete break with human communication. With being alone in your own world, rich, ego-building, never disappointing. In your Variances, people always did what you demanded; in your Variances there were

friends or enemies, and you always defeated your enemies. In the nearly-complete breakdown of communication men at last could live peaceably side-by-side...

THE BASEMENT was different. The throb and hum of great machinery beat upon him. The feel of surging, vast forces around him. The grey walls were warm and charged with machine activity.

Charles walked down a corridor that ended in double doors. He stood before the doors.

Here we are, he thought.

The secret of Silence, Inc. had to be inside this room. This was the main plant. He had investigated the rest of the building and found no answers; it had to be here.

He tried the door. It was open. He stepped in.

He cried out in awe. A great throbbing network of machinery lay before him, an unbelievably sparkling, shining, complicated, precision-working device. It was sunk in the floor, occupying most of the whole square block basement under the Silence, Inc. skyscraper. The warmth from its workings blasted at his face. He could see, far-off in one corner, retorts of raw chemicals and tubs of raw metal. He could follow the chemical lines and see the furnaces where the raw metal was alloyed and melted. He could see precision lathes turning out crude cores and peeling the surfaces smooth. He could see delicate metal fingers turning tiny threads on the cores under streams of water. He could see the conveyor belt of cores moving down the room to the dumb-waiters, the piles growing higher as the tiny magnetic records were produced as work-friend cores or play-friend cores, or whatever was needed. Anyone who had ever been in a factory could read the operation at a glance.

The bushels of cores were fed into the steel baskets which returned empty from the floors above and were sent out again, full of new cores.

There were control panels galore. It was all automatic. His eye separated the mechanical working machinery from the electronic control devices. The whole works was run by a giant computer!

Reading the orders, summarizing the amount of rough metal needed, smelting it, mixing the alloys, cooling it, lathing it, cutting hollow yard-long rods into tiny cores, recording on the cores polishing them and delivering them—all directed by the computer.

There was no human then—

"Hello!"

He turned. A man stood behind him. The man did not wear an ear-friend. The man had a gun in his hand which he pointed at Charles' chest. He was an old man with stringy white hair and hard blue eyes.

"Oh," said Charles.

"I've been expecting you," said the man.

Charles had made contact with the non-Variant humans who ran things.

AT AN IMPERATIVE gesture, Charles preceded the man to a glass-paneled office which overlooked the whole machinery, his heart thumping. What would he do now? He realized that the question was a foolish one. He should really ask what the man was going to do with him.

The man waved him to a chair, warily holding the gun on him. "Tell me about it."

"About what?"

"Why you came here. I know your ear-friend is a fake; I've watched you explore upstairs."

"I wanted to find out who did this to us. Who runs Silence, Inc."

"You've found him," said the man. "I'm him. I'm all the 'him' there is."

"You are the King of America," said Charles bitterly.

"I'm the King of the World," said the man. Charles looked in surprise at the man's face. He looked like an ordinary chap, an older man, like anybody's grandfather. "My name's Tom Malone."

Charles gave his name. Malone nodded, still holding the gun on him. Suddenly Charles realized that he was comparatively young and strong compared to this man. He had expected a dictator, guards, opposition—perhaps a whole hierarchy fortified in a mighty palace. This man was dressed in a plain gray suit that had a couple of oil-stains on it. He was sitting in what looked like a foreman's office—and it had a tiny Army-style cot in it, as if the man slept here right in the basement with the machine.

Charles took off his decoy ear-plug. "I guess I won't be needing this any more," he said.

"No, you won't."

Charles tossed it aside rather quickly. The old man's eyes followed the instrument for a brief second. By the time he was through looking, Charles had wrested the gun from his hand and stood in triumph, his back to the safety of the wall, pointing the weapon down at Malone. "Now it's different," he said.

"Please don't shoot."

"I didn't plan to; not until I find out the truth about Silence, Inc."

The old man smiled. "Any child knows that answer. A clever engineer who had trouble with his studies in college believed that mental concentration was the answer to poor study habits. He invented the first ear-friend which he called the 'school-friend'. It simply blocked out all sensation during the learning process, so that any moron could concentrate on his lessons. He formed a company, just like any other company, and sold his device. He later made the work-friend, which made jobs easier for people—especially dull jobs with which, God knows, the world is crowded. Then he made the play-friend and the sleep-friend and the news-friend.

"At first people only used the ear-friend for those specific purposes. Then the ear-friend was refined to total living. Now we have the Variance; that's all."

"I know all that," said Charles. "I want to know how *you* took charge of the operation."

"I got tired of wearing the ear-friend," said Malone. "I lived in Los Angeles. I came all the way to Somerset, New Jersey, to find out who was behind Silence, Inc."

"You're lying! Where are the other directors of the company? The politicians behind the scenes? The policy-makers?"

Malone got up. "I'll show you," he said, "if you'll be careful with the gun."

CHARLES followed him out of the office and down, surprisingly, onto the machine level. Malone stopped before a unit which resembled a teletypewriter. "Here's where I make policy," he said. He sat at the machine. There was a great stack of papers on a spindle. He took the top one off. He showed it to Charles.

Problem: Drouth Area, North Dakota. People and livestock starving. 50,000 humans affected. The paper gave latitude and longitude.

Malone's fingers sped over the keys: *Re Policy Problem 2154 AD 1006. Make Variance to affect 50,000. "I'm tired of living here in North Dakota. I want to live elsewhere."* Signed "G".

Malone pasted the problem onto his teletyped answer. He fed the continuous roll of paper from the typewriter into a computer slot marked *Input*. He swung a lever and the paper disappeared into the machine.

"I have just changed fifty thousand lives," he said, rising.

"How does it work?"

Malone pointed silently to the section of the machine which traced out the Variances on the blank cores. Charles watched fascinated while a small model machine off the main line shaped a new, tiny core.

The new mother core traveled to the mass production core-making machine. The conveyor belt stopped for long moments while the new core gave its pattern to thousands of daughter cores being cut in the machine. The daughter cores dropped to a special conveyor belt at the bottom of the machine. It traveled much faster than the larger ordinary conveyor above. The new daughter cores raced across the room to the wall. Soft warning lights flashed. The cores emptied into a red-painted basket. They disappeared into the dumb-waiter, several baskets of them.

"They'll be in North Dakota tomorrow morning," said Malone. "Replacement cores for the news-friend." He passed a hand over his face and yawned. "I'm slightly behind on my work—glad we got that problem done."

"But how—"

"The news-friend," said Malone. "We pick up our problems via the newscasts and return the solution via the same route. This new core will plant the migration idea in fifty thousand minds. In a few days thousands will migrate from the distressed area, relieving the pressure. Just because I wrote a few lines on paper and they got translated into electrical impulses and engraved on some small pieces of metal—"

Charles stared, fascinated. "All done by machinery and one man," he breathed. "Power, complete and everlasting. You could start a war or stop it. You could make or break the governor of the state, or a President; you could throw up great businesses, form powerful unions, create cities, turn a wilderness into gardens—simply by writing a few words on that paper. By planting a dream that demands action in somebody's mind."

Malone nodded.

Charles forgot the gun, lost in the contemplation of the ruling machine. Total power, total control. He thought of his own drab life and all of the things he'd wished for in the real world. The machine could give him all in the real world. What was power that was exercised far away on dim projects like the North Dakota famine? Where was the pleasure of power unless it was personal? "Getting practical," he said with a shy grin. "Suppose you wanted a new car. A great house. Servants. Even—perhaps—an attractive young lady to pass the time with?"

"So few come," said Malone, "so few come and ask about Silence, Inc. that I usually grant their wishes." He smiled. "Fairy godmother stuff. Are those your wishes?"

It had been a hard twenty-four hours. Charles was tired and hungry and disappointed at the simplicity of the answer he'd found. Let Silence, Inc. pay him for his troubles. "Sure," he said. "That's what I want."

"It'll take a couple of hours," said Malone. "Here, sit down and write out your wishes."

Charles sat at the teletypewriter in wonder. He wrote: *I want a big car. I want a big house. I want servants.* He hesitated and then finished: *I want a woman.*

"Just put in your name and then sign it 'G'," said Malone. "Feed it to the machine."

"'G'? I don't understand?"

"The machine takes orders from 'G'. Then it will make a core. The next news-friend broadcast will be in a half-hour. The machine will search its memory of the millions and set up a series of special Variations. You will suddenly exist in the minds of a number of people as a wealthy man whom they serve. The machine will pick a feasible rich man to invite you to take over his home—feasible persons to come here in a big car, thinking they are your servants. Even a feasible girl—"

"From the real world?" insisted Charles.

"All in the real, mechanical world," nodded Malone.

Charles fed his wants into the machine.

"Your car is waiting, Mr. Kelvin."

Charles stared at Malone who shrugged. The chauffeur was dressed in a uniform. He stood at the top of the basement stairs above the machine looking down on Charles. A real human, ready to serve him.

"I—I suppose I should want finer, better things," said Charles.

"You're young," said Malone; "you have appetites."

There came the sound of high-heels tapping. Out of the gloom of the double-doors appeared a woman—a girl. Charles recognized her as the one who had been working in the lobby. She looked down at him, her complexion gleaming in the harsh machine light, her trim beauty enhanced by the incongruity of the basement machinery ugliness.

Her eyes glittered; desire was in them.

If it's a trap, thought Charles, *it's a good one*. Without looking at Malone, he went up the stairs, his heart thumping...

HE WAS BACK the next night.

He had enjoyed real luxuries for the first time in his life. The knowledge that they were real, not Variance, made them doubly sweet. He was dressed now in evening dress, ready to be driven up to New York to see a play, to see some of the fantastic night-life of the City. The girl waited for him in the car. A chauffeur and a chauffeur's assistant stood at respectful distance near the double doors, lost in their Variances, as they waited for him.

But the machine pounded in his mind. To see a contrived, invented drama when this real drama was possible to witness. To drink intoxicating drinks in a plush bar when you could soak up the throbbing wine of power in this harsh basement? To feel a woman's body under sliding silk compared to the cold metal feel of this great body-and-mind master of mankind?

He sighed. The machine fulfilled the greater desire; he didn't want just a car, or a house or pleasures of the body. The wild thrill that he felt when he first walked into the basement with its machine was the ultimate thrill.

Malone sat in his office eating his lunch from a paper bag. He smiled. "Back already? Very few ever come back, Charles Kelvin."

Charles looked at the rumpled Army cot. "You must've come back—once," he said.

"My mistake," said Malone, "was that I got interested in the problems the machine had. The ones that keep coming in on the news-friend transceivers. I couldn't keep my attention on fine clothes, or blondes or the latest play in New York."

"Nor I."

Suddenly Charles knew that he wanted the old man's job. Badly. And yet the old man had been so kind—

"Do—any others ever come here like I did? Without wearing the ear-friend?"

"In my time," said Malone, "in almost forty years that I've been here, many have come. Some every week. It's a big country with two hundred million people in it. There're always a few rebels. Come, let's go down to the machine; the problems have to be answered..."

"I'm ready to go, Charles," she called.

THEY WENT down the steps to the teletypewriter. Charles tried to stem the growing, whirling desire inside of him. "What—happens to the dissenters?"

"Some of them never leave home, give up rebellion after a few hours. Some truly go insane in the silence. Some come here. I watch 'em on the building closed-circuit TV. If they're obviously fools, I let DuWark handle them; if they're not fools, I let them find me in the basement. I explain things to them, and then I grant their wishes as I did yours; they seldom return."

"Who's this DuWark? And how did I miss him?"

"He's a psychologist, a good one. He's the only other man beside you and me who understands about Silence, Inc. He makes the rebels a special core just as I did for you—sends them off. He gives them a new position in the real world, then they're glad to accept the ear-friend. Once they get a better position in reality they all go back to it, the foolish and the wise one. You missed him because he always leaves at five; very few dare come here at night."

"Then he's your partner."

"No. He likes his Variances too much to help run things—just another assistant, a super-employee. A Variance would be fatal on this job, of course. It's been a long, long time since I've had a Variance." Malone sighed. "But what do *you* want, Charles Kelvin? I've tried to satisfy you once. What further thing do you want?"

Charles dropped his head. "I didn't really want all those things last night; it was just nice to know that I could have them *if* I wanted."

"We all have appetites," murmured Malone. He turned to the machine and began to write on his problems, taking the first one from the stack.

"I want to work with the machine," said Charles.

Malone stopped writing. "Why?"

Charles remembered the silence of his own breakfast table, the car-ride to work with his friends and the silent office. "There's too damn much nonsense," he snapped. "Silence, Inc. should be run differently. We ought to bring people back to reality; we ought to wake 'em up. They have a great destiny to fulfill in the real world. We could start with the cores, trying to overcome this debilitating hunger for Variance. We could make them decent, alert realists again in spite of themselves. The old pioneer thing—"

He surprised himself with his vehemence.

Malone wasn't surprised. "Forty years ago," he said, "I came here

to say that, and they tried to put me off with big cars and blondes, and I didn't want to be bought. And you know what they did to me?"

Charles felt a throbbing vein of excitement in his throat. He broke loose his stiff evening dress collar and sat with carelessness on an oily surface in the tidy, rich suit. "What?"

"They gave me the machine to run," said Malone. "With all of its problems." He sighed. He wrote on a piece of paper. He handed the paper to Charles. "Feed that to the machine when I leave," he said.

CHARLES read it. *Goodbye from.....'G'. Address all future problems to.....'H'.*

"But I just meant that maybe I could assist you," cried Charles, "not take over."

"There can never be two kings," said Malone.

"But I don't have the know-how—"

"You have all you'll ever need," said Malone.

"But it's not fair to take your job—"

"Fair?" Malone laughed. "That is what I said to Bixby, who was 'F', forty years ago. Has it ever occurred to you that maybe I want to leave? After forty years of responsibility for the whole damn country?"

Charles felt opening-out wonder and delight.

"Good luck, 'H'," said Malone. He held out his hand.

Charles, stunned, clasped it. The old man turned and went up the metal steps. He went into the office for a minute and got something and then came back and paused at the head of the stairs.

"Don't take this business of waking them up too seriously," he said. "The human world is built on illusion. They love illusion. They want the circus, the superman, the eternal mother-blonde, the dangerous enemy, the warm friend, the final goal, the perfect life. The ear-friend gives them that. Like you, I wanted to change things at first; I tried to wake 'em for years, but they wouldn't stand for it."

"We'll see," said Charles, rejecting the advice, feeling the tingling excitement of complete, final power. Ideas were already shooting inside of his head at ten thousand miles a second, piling one over another, rushing him along—"Send those chauffeurs away, will you? And the girl. I've got work to do."

Malone smiled and nodded. "By the way, I left the gun on the desk," he said. "So that someday—years from now—you can properly preserve the illusion of menace for your successor until you can sell him on the job. I've already left a note to DuWark to see you tomorrow."

row about the rebels, and how to handle them. I knew you'd return; I'm glad you returned. Goodbye, Charles Kelvin!"

Malone's shoulders seemed to sag into relaxed happiness. He reached in his pocket. He pulled out a sparkling new ear-friend, fitted the plug to his ear and this time his smile was not sad. He turned and went, his steps bouncing for an old man.

Charles started to call after him and then realized the old man couldn't hear him anymore, lost as he was in the wonder of his first Variance in almost forty years.

Malone and the servants went out, and the double doors closed on the new Master.



Here's A Thrilling Book-Length Novel

Two men and a woman return to Earth to find everything familiar gone, except for a strange and totally unheard of



CITY OF GLASS

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Across the sea of dust stood the radio beacons; if Stanley Alston could reach one, he could contact a rescue party. But could he steel himself to go down to the depths of this dust-sea and walk along its dark floor in his spacesuit?

PATH OF DARKNESS

by M. C. PEASE

illustrated by W. LUTON

THROUGH the black void, the little space ship streaked downward, angling steeply over the forbidding surface of Io, inmost major moon of Jupiter. Around and ahead of it flared only the blue-white flame of its emergency rockets, not the needles of

The ship hit and knives of rock sheered through its shell.



the nuclear ion beams that should have showed. Lower it came, stopping its downward plunge with desperate energy, reaching for distance, trying to get at least to the same side of the moon as the base that had been its goal. Missing a towering ring of peaks by barely its own length, it angled over the flat plain beyond.

There was a master hand at the controls, a hand that felt the very substance of the wounded ship, understanding and guiding it in its last effort. But the rockets sputtered and the long tongues of fiery gases wavered. Control was lost for a moment, and, in the instant, there was disaster. The flames steadied and flared out, but it was too late; the ship hit. It hit a small spire, a little island in the middle of the plain, a rock dwarfed by the massive peaks that circled it, but no less savage for its smallness. The ship hit and the knives of rock sheered through its shell. It reeled and twisted under the pain of its mutilation, and finally lay exhausted on its side.

Inside, in the cubicle that had been the control room, baggage room and living quarters, Stanley Alston sat for a minute, stunned. Looking around from the crash chair in which he was strapped, he saw that the room bore little semblance to what it had been; the very room itself was twisted and crumpled. One entire wall had been laid open and through it he could see only the blackness of space. The control panel was a jumbled mess, its sleek functionalism twisted and destroyed by gear from the back of the room.

Stanley's hands were clumsy in the gauntlets of his spacesuit, and they were clumsier still in the shock of the disaster. His voice trembled as he spoke over the intercom radio: "You did it, Mike. You really brought it down for a nice smooth landing, didn't you? You really proved you're the hot-shot jockey you think you are, didn't you?"

His voice rose to a high pitch. "You stupid jerk! Can't you even hit the middle of a plain five miles square without hitting the only rock there is in it?" There was no answer, but he did not really expect one.

With wrenching bitterness, Alston remembered the day he had first climbed aboard the little shuttle-ship at Calla on Callisto. This was an experience to him. It was not often that a professor can take his sabbatical leave on the moons of Jupiter; he had not expected it. But when the government had offered him a fellowship at the inner base so that he, as a geologist, could help in studying Jupiter, he had bubbled with joy. And as he came aboard the ship that was to take

him there, he was filled with the strangeness of it and, yes too, with the fear of the unknown and unexperienced. And because he was afraid, and because it was his way, he had strutted as he came on board. His voice was a bit too loudly cheerful.

"Well," he had said, rubbing his hands and letting his eyes dart around the little cabin, "so this is the yacht that will take me there. And you are the pilot? I hope you are a good one. I am a geologist but I don't care to study the red spot from the inside out." He laughed to cover up his nervousness.

The pilot, a huge man with a space-blackened face and eyes that looked used to solitude, had stared up from where he sat at the controls. For a moment, he said nothing. Then he drawled: "Yeah," making the sound somehow an insult, and turned back to the dials and levers.

"I'm Doctor Alston," Stanley said. "The government is sending me to Io, you know; there are some problems there they think I can help on, very interesting problems." He looked hopefully at the pilot.

The pilot looked back up at him with a sardonic expression. "So you're a bright boy," he shrugged. "Strap yourself in the chair there or you'll have some different problems. I'm Mike." It was a rebuke to the scientist, and Stanley felt himself go red. He stared at the pilot's back and slowly walked to the chair.

Strapped in the crash seat braced for the take-off, there was suddenly a moment when, with nothing more to do, he found himself without defense against his thoughts. He had not felt this way on the hop up to Earth Satellite, nor over to the Moon—not even on the long flight out to Callisto. But suddenly he felt so terribly alone. This little bubble was so small, and he was so far away from home. Outside there was only the blackness and the pressing emptiness of space, and the alien orb of Jupiter hanging ponderously in the void. Desperately he sought some word to link himself to this other human here. But he looked at the broad back of the pilot as Mike watched the chronometer dial, his hand poised over a switch. And in the intentness of that back, Alston read indifference and contempt, and he hated it.

This oaf! This uncultured, stupid brute! This ignorant moron! In a sudden spasm of hatred, he forgot his fear.

IN THE LONG days of the trip, there was a routine. Stanley did the cooking and in between times, worked over his notes. Mostly Mike just sat in his pilot's chair, lazing back, idly staring out into

space, or dozing briefly. Twice he jumped into action, pushing buttons and making the little ship jump. But why he had done this—whether he had actually seen some danger, or was just playing a game—Stanley did not know, and did not care to ask. Finally, as they approached the end of the trip, Mike did get up. Grunting something about a lot of rocks, he climbed into a spacesuit and motioned Alston to the other one. Wondering if he might be being taken for a ride, Stanley complied nonetheless, and put on the awkward costume.

The accident, when it happened, did not seem like much. There was a sharp sound, like a rifle, but a very small one. A slight jar. And then there was nothing. Alston opened his mouth to ask what that was. But, before he could ask, Mike barked: "Close up!" and slammed his own face-plate shut.

With wondering thoughts, Stanley followed suit, and then sat there looking puzzled. Finally he realized Mike was making angry motions at him and he pressed down the switch on the intercom radio of his suit. "What happened?" he asked.

"Pebble went through us," Mike answered. "We got trouble. Hit the ion generator control. Pile's going out of action. Goin' to land on emergency. Providing we don't miss and drop into that red spot you mentioned back there. And providing we don't come in nose first at two miles a second. Strap yourself good and start praying. And don't start yammering at me 'cause I'm going to be busy."

Stanley opened his mouth to answer, but ended by just glaring. He felt impotent, and frustrated, and, as the ship dove towards the satellite's surface, he brooded on what he would like to say to the pilot. Though part of him did admit that there was a beautiful air of competence in the way the pilot's hands flicked over the controls as they fought for the edge of mastery.

THE MOMENT of crash was a darkness and an oblivion. It was a torment without name and without instant. And when it was over and he was fumbling with the straps, Stanley Alston could not have said how long it had lasted. He could not have repeated one word of what he had said to the pilot in those first moments of outburst. He was tired and weak, drained of all energy, all hope. There was only the awareness of the blackness outside, the sense of being stranded on an alien chip of rock 400 million miles from home.

Clumsily, he got the buckles open and stood up. Promptly, he pitched over and slid to one wall; he had not realized the cabin was

so far from level. Pushing himself up, he stood with one foot on the floor and the other on the wall, and swore. Then he looked up the sloping floor at the pilot's chair. "Dammit," he asked, "are you going to sit there all day and think?"

When there was no answer, he frowned. He noticed that the pilot's chair did not seem to be where he remembered it. And then he realized that the radio rack had come adrift and slammed into the back of the chair. The double force of this, and of its own inertia during the crash, must have sheered the bolts of the chair and thrown it against the control panel. With a sudden sense of urgency, he worked along the wall and then clawed his way up the controls.

Mike seemed to be still alive. The impossibility of administering first aid through a spacesuit struck Stanley, but he set to work at least to get the pilot out. At one point, the pilot's body almost went sliding down the floor with the chair, the radio rack and Stanley on top until he managed to grab a lever and hold on. Finally with much cursing, he got Mike down to the angle of the floor. Lying the body straight, he stood up with a sigh and wondered what to do next.

While he was looking around, he heard Mike groan. Stanley bent over the pilot. Mike's eyes were open though he looked not more than half conscious. "How badly hurt are you?" Stanley asked.

Mike squirmed to get the feel of his body. His face went white and his eyes started to roll back but he did not quite lose consciousness. "My chest," he gasped. "Maybe caved in; hurts to talk."

"Anything I can do?" the scientist asked.

"No. Get help." The words were blurred with pain.

Stanley stood up, his face angry. "Get help, he says," he muttered to himself. He turned back to the pilot and shouted: "How do you expect me to get help? I don't even know where the telephone is."

The pilot looked sick and said: "Radio."

"Oh, the radio," Stanley mimicked. "Unfortunately the radio is what did you in; it's now a nice little pile of broken tubes and messed up wires. What's left of it would take a master physicist to unscramble. And geology is my field. You'll have to think better than that."

The pilot's face was grey and he concentrated for a minute on simply breathing. Finally his eyes focused again on the scientist and he said: "Beacon. Radio. Only..." The effort was too much for him. He fainted.

BEACON? Stanley puzzled over it. What beacon? He looked around wildly. His eyes glanced over the control panel and then

came back in a double-take. He could see a map of Io's surface and on it sectors indicated in bright colors. Climbing up to look more closely at the map, he saw that the sectors indicated radio beacons. These, he realized were established to help bring the shuttle in to the base. If he could only get to one, he could get help.

Pulling the map out from its slot, he climbed out through a hole in the shell and sat down to puzzle out where he was. Around him stretched the incredibly flat surface of the plain that he had seen before they crashed. Even from this low altitude, it still looked perfectly flat. Briefly he wondered in a professional way how this could be. How could such a perfect plain be formed? But he shrugged the question aside as irrelevant and returned to studying the map.

The plain, he saw, was surrounded by a ring of jagged crags. Beyond them, in the far distance, several even higher spires were visible. By studying them, and by going over the map inch by inch, Alston finally fitted them to the map. Putting his finger on a little peak that the map showed, he nodded to himself. That was where he was. There was a beacon close at hand, he saw. The map showed a red sector converging to a point on the outer edge of the plain, almost dead ahead in the direction they had been going. Mike must have been heading for it, he realized, giving a mental nod to the pilot. The ape must have some intelligence at that.

He studied with minute care the crags that lay ahead, and finally saw the structure. It stood at the head of a slope leading up to a saddle between two of the taller crags. An easy landmark—and according to the map, only a bit over one mile away. An easy hike, even on Earth. In the one-twelfth gravity of this moon, there should be no trouble at all to it. With suddenly lightened spirit, he crawled back inside to make his preparations.

Mike was in a bad way as he got ready for his trip. The pilot was unconscious, stirring only into incoherent mumbling. Stanley wished the pilot would come to; there was one thought that bothered him. He kept wondering what Mike had been about to say when he got as far as "Beacon. Radio. Only. . . ." What came after the "Only"? What could come after it? It annoyed him that the pilot had not finished.

After making sure that Mike had oxygen, and that his suit was connected to the ship's batteries—and using the atomic hydrogen torch to weld a sling for spare oxygen bottles and portable batteries for himself—Stanley slipped out.

The rocks on which the ship had gutted itself, he noted, were like frozen waves; thrown up in the molten state, they had hardened be-

fore collapsing. And in the absence of any weather at all, they were as they had hardened. While the walking was hard in consequence, and the footing treacherous, it did have the advantage of making every slope a mass of foot and hand-holds. There was hard work but no trouble scaling down to the edge of the plain. When after some effort he finally found himself on a ledge about eight feet above the plain, he stood for a moment to recover his strength and to savor the fact that the hard work was over. Then he jumped out and, in the light gravity, floated down to the plain.

Instinctively he bent his knees as he was about to hit. He was not going fast enough to make it really necessary, but he did it anyway. It was an appreciable moment before he realized that he should have hit and had not; and it was another moment before he was swallowed up in blackness.

THE SHOCK of the unexpected was overwhelming. Stanley Alston was stunned. For a moment he did not move but seemed to hang there, immobile, frozen. And then he panicked; wildly he kicked out, letting go of everything, thrashing his arms. A voice screamed that he dimly recognized was his own. His eyes felt as if they were popping out with the effort of straining through the blackness.

His feet hit something and slipped off. Desperately scrambling with his hands, he found a projection he could hold onto. With blind effort, he pulled himself up, scaling the cliff on which he seemed to be perched. His hands reached blindly for holds, desperately clawing across the rock face. His feet scraped the surface as, encased in heavy boots, they could not easily feel the rock formations. Twice he slipped and felt himself for a moment falling into the unknown deeps that seemed to lie beneath him. And each time the panic that rose in him was something new and with fresh violence. But each time, he was lucky, and found a hold or step to stop himself.

As he finally pushed up through the surface, seeing once more the dim and distant sun and the giant orb of Jupiter, it was with a sense of homecoming. With the unreal rocks about him and the flat grey plain before him, with the stars glowing brightly in the black sky, there was nothing in sight of more than a few hours familiarity. And yet, the mere sight of anything, the relief from nothingness, was warm and friendly. Weakly he pulled himself onto a rock and sat down to still his trembling muscles and the nightmare shadows in his mind.

It was, perhaps, fifteen minutes before he raised his head to stare

at the grey plain. What was it? How could it exist on this airless moon? It was inconceivable, and he stared at it in wonder.

Cautiously moving down to the edge of the plain, he put his hand into it. It was a fluid, certainly. His hand disappeared into it, and he could feel the viscosity of it. From where his hand had entered, little circles of waves moved away, rapidly dying off with distance. Cupping his hand, he picked up a little. It did not wet his glove, he saw, but neither did it form into drops. No surface tension. A most peculiar fluid.

Pulling a magnifying glass out of his pocket, he examined the stuff in his hand. It showed nothing. Nothing more than could be seen by eye. Holding his hand above his head, he let the stuff trickle out while he watched the falling fluid through the glass. It did not fall in a stream; instead, against the sunlight, it looked like a stream of falling sparks, glittering against the blackness of space.

Dust! Nothing but dust! An ocean of dust. Around him, the rocks of congealed lava told him of the violence of this world—no doubt the result of the high gradient of Jupiter's gravity. He could visualize what must be common here. The tremendous explosion, throwing maybe millions of tons of liquid rock miles into the void. Some of it, the larger masses, would come down still liquid, to splash over the landscape. But that which was torn into small droplets of lava by the turbulence of the explosion would radiate its heat away, letting it congeal into a small spheroid—a particle of dust. And, in falling, it would add its bit to the substance of this sea. Electric charge? Perhaps. It might well be that each microscopic particle that was the sea would carry its own charge to make it shun its neighbors. Probably, in fact, or else the fluid of dust would have a viscosity so high as to make it look like rock as each particle found a place in a close-packed arrangement. But with a charge to hold them apart, it could become a very loose fluid indeed. Particularly in the low gravity of this moon. This, Stanley decided, was probably the reason for the strange anomaly of a sea of dust on an airless moon.

CAREFULLY, Alston picked himself up and climbed back to the wrecked ship. Whatever he might do, first he must return there, for he had lost his supplies of oxygen and tools in the panic of his fall into the sea. Climbing in through the hole in the hull, he went first to examine Mike. The big pilot was still unconscious, though moaning weakly where he lay. He looked rather worse; his face was flushed and his breathing looked fast and shallow.

Stanley, watching him, felt strange. He remembered his hatred of the pilot and still writhed under the remembered sneers. But there was something more here. Perhaps it was that the pilot was no longer the master; perhaps Stanley could not hate a man so hurt, and so dependent on him. Or, perhaps, facing the cold reality of this world of space, he knew better now what man the pilot was.

Turning away and moving to the control panel, Alston pulled himself up it to look again at the radio equipment. If only they had had time to get out a signal during the emergency. Or had they? Had Mike been able to push some switch to send out an SOS? Was that what he had meant by "Radio"? And "Beacon." Radio. Only. . .? Had he meant that a beacon on the ship had been started? A radio beacon? Only, maybe, that he was afraid it might not have been heard? Or perhaps that they only need wait and help would come? Was that what Mike had meant? Stanley hoped so. He found himself desperately hoping so. Somewhere in his mind there was an idea of what he must do if it were not so, but he did not dare ask what it was. He only hoped he need do nothing.

As he stared at the radio, thinking that there would be no problem if he could only make it work, he knew it was hopeless. The chassis was twisted and broken; the tubes were smashed, and the wires pulled apart. Perhaps a man who knew about such things could have put something together that would do; he did not know. But Alston himself did not have the knowledge; and, since space and weight in a spaceship are expensive, there were no books to help him. No, the radio was hopeless.

In desperation he wandered through the wreck of the ship, climbing over the pipes and cables, pushing under the tanks, looking for something that might give him inspiration. Finally, he returned to the cabin, feeling hope wash out of him.

Leaning tiredly against the control board, his mind was a dull thing, permeated with fear, but vacant, uncontrolled. For himself, he need do nothing, he knew. There was food on the ship that he could bring in through the spacesuit. And oxygen. And power from the batteries. He could live for months until they found him. But Mike could not. Mike needed help; a hospital—surgery, perhaps. Mike could not live for very long, and Alston could not sit and watch Mike die.

Thinking about it, he started to pull himself up the control panel, opening cabinets and drawers as he went. His motions were slow and

awkward, as if he were weary beyond endurance. And once he slipped and lost his balance, sliding down against the wall, but he went back.

IN A DRAWER in the center of the panel Alston found what he was looking for, though he had not told himself what it might be. But when he opened the drawer and saw the maps, he knew that they were what he sought. There in the drawer lay detailed topological maps of Io; the detail on them was complete even to the contours of the bottoms of the seas of dust.

Thumbing through the stack, he found the one that showed the basin where they were. Leaving the others there, he slid down the floor to the wall and crouched there looking at the map. But his brain would not work, or his eyes register what they saw; he could not bring himself to think what he must do with it. Almost without knowing what he did, he put the map aside and, stretching out in the V of the floor and wall, he fell asleep.

When he awoke some several hours later, he felt better. He was almost cheerful as he munched some food, and drank some water. And there was no hesitation as he picked up the map and began to examine it with care.

To a person used to Earth geology, where time is slow and every rock and mountain corroded by weather till only its core is left, this world was incredible. The whole bottom of the sea was pocked with holes and ridden with crevices and cliffs. He had thought the world on top was rough, but down below it was much rougher. Why?

The world on top, he thought, would catch the globs of molten lava that would be spewed forth in the explosions. The molten rock would flow down, filling up the rougher spots, settling into the holes and piling beneath the cliffs. But the globs that landed in the sea of dust would be quenched by the dust, gathering it in, in a hard casing, as it fell through it. And finally, reaching the bottom, the rock that had been a glob would rest there, not filling in the holes but adding its own roughness to the bottom. He could almost see the bottom in his mind—a maze of towering rocks and overhanging cliffs, and great towering piles of misshapen boulders. He shuddered; there was something terrifying at the thought.

And deep. There was one place marked at a mile deep. And in the middle of that, there was a hole with only a question mark to indicate its depth.

But the basin was not really a bowl. Across its middle there ran a ridge, only the middle of which rose up above the surface to form

the spire on which the ship hung. Along that ridge the depth was nowhere more than 120 feet.

A spacesuit, Alston thought, is a diving suit; it is designed for diving into space. It will hold within it the atmosphere that man must have to live, and it will hold it against whatever there may be or not be outside. It will not stand pressure. It is not built for pressure, but for the absence of pressure. But if a man were to walk upon that ridge, there would be no great pressure.

What was the density of the dust? This he would have to check, but he doubted if it would be much heavier than water. And if it was not—and since the gravity of this moon was only about one-twelfth that of Earth—then 120 feet of dust would not be worse than ten feet of water on Earth. Ten feet, with no atmospheric pressure over it; one-third of an atmosphere of pressure. The pressure inside his suit was only one-half atmosphere, being rich in oxygen, but this left a margin for safety. It was, he considered, quite possible that he could use his suit as a diving rig to let him walk that ridge.

THE THOUGHT, now that Alston had finally faced it, made him cold. The dust would press about him, if he took that walk. It would press in with all its blackness, blotting out everything except the sense of touch. He would have to feel his way along that ridge, wondering blindly what lay ahead. There was a compass in his helmet that would give him the path, providing there were no magnetic rocks, or pockets of dust, down there. If there were...

Well, if there were, it would be too bad. He would have to trust the compass because there would be no other choice. He would have to trust it as he threaded his way along the ridge, feeling each step before him, groping in the blindness to find the way around or over or under whatever he might meet. Stanley closed his eyes, for he felt faint; but he knew he had to do it.

With a quick trip to the edge of the sea of dust, he got a pail full of it. Getting a rod from the machinery of the ship he put the pail handle over one end and hung an oxygen bottle on the other. By finding the point of balance, and since the Earth-weight of the bottle was marked on it he soon was able to calculate that the density of the dust was in fact no greater than that of water; in fact it seemed to be rather less. The pressure at 120 feet down, would be less than a third of an atmosphere; he would be able to walk the ridge. He wondered if he were glad or sorry.

As he started to leave his figures, he stopped. His figures, he real-

ized with a shock, were right only if the dust were incompressible. If it could be compressed—and if the particles were held apart by electric forces it undoubtedly could be—then the density would increase with depth and the pressure would rise faster than he had figured.

He glanced at Mike and shrugged. That was a chance he had to take.

Making himself a new frame to carry oxygen bottles and batteries he got himself ready. Cutting out from the frame a hooked piece of alloy, he welded it with the atomic torch to one of the control cables. It was crude but it would serve as a grappling hook. Cutting out a six-foot rod, he had a lance to feel ahead with. And finally he made sure that he had food and water. He tried to eat some food but it tasted dry and powdery and he could not swallow it. So he shouldered his pack, put the map in a pouch—he would be able to read it by his helmet light if he held it against the helmet window—and, with a last look around, he strode out.

WHEN HE reached the edge of the sea of dust again, there was one more moment of panic and Alston had to sit for a moment until he had control again of his legs. Then, taking a deep breath, he plunged in. As the blackness closed around him, a kind of calm settled over him—an icy discipline that would not let him think of fear. The job became a problem, one to be computed in tens, and hundreds; and, finally, thousands of steps taken one at a time, slowly, with utmost care. A problem of boulders felt in the void and to be maneuvered around. Of slopes to be inched down, exploring each step before him. Of holes probed by the lance to be skirted around with infinite caution. A problem so tricky, so beset with possible disaster, as to leave no room for fear.

There was, once, when the rock beneath him broke; unknowing, he had walked out onto the thin shell of a huge bubble, and it broke under even his light weight. Only his lance saved him, bridging the hole that he had made. The thought that it, too, might break through paralyzed him so that he dared not do anything but hang there. How far would he fall if it did break through? Perhaps two inches or perhaps two miles; he could not know. Finally, hardly breathing, Alston lifted himself onto the pole. His pack caught on the crust of rock and he started to twist in panic; but it came free and he managed to squirm onto solid rock. For a time that was without measure, he lay there, letting the panic fade and strength return.

Somewhat later as he was skirting what seemed to be a cliff, he

felt the rocks shake under him. Remembering without thought what had happened before, he threw himself down, spread-eagle style, to maximize the area which bore his weight. But then he realized that this was different—an earthquake-symbol of the world's violence.

Through the dust, Stanley heard the roaring thunder of boulders crashing from the cliff, and some sounded close and large. The thought came to him that maximizing his area was only making his exposure to the boulders as large as possible; but there was nothing he could do except be lucky. And, after that, he tried to keep away from cliffs.

As, with each step down, the pressure built up around him, he began to realize that he had little margin of safety. The suit began to touch his legs—the inside pressure was no longer able to hold it off. Where was he? Was he at the bottom? Or maybe he had wandered off the path and would only keep on going deeper. Studying the map against his helmet, he could not tell how far he was.

Carefully he went on further; still the rocks led downward. The hoses connecting to the helmet partially collapsed; the valves wheezed and the air got stale. Alston stopped and thought, but knew he must go on.

When the path did turn upwards, and fresh air came rushing in through the opened hose, he felt weak with relief, and had to sit down to rest. Actually, he dozed a bit, sitting there under a hundred feet of dust. When, sometime later, he felt awake again, he was hungry and he ate. Then, getting up, he pushed on against the dust of blackness.

It was a mile he had to go. On the tortuous path he had to follow, perhaps two or even three miles. But it was many hours, maybe days, from when he started, that he reached the end. When suddenly his head did push above the surface, Alston could not for a moment imagine what had happened. The shock was sudden, and it seemed as if he were entering a new world—one that he could not quite remember having seen before. He stood for a moment, still, with his helmet just above the surface, and looked about in wonder. When it finally did dawn on him that he had reached the end, he scrambled out with sudden desperation and collapsed, trembling, on the "beach".

It was some while later that he managed to get weakly to his feet and stumble up the slope to the tower that was his goal.

BENEATH the tower was a maze of machinery. Over the equipment was a roof to protect it from the dust and at least the

smaller rocks. Otherwise it was open. One panel was painted a brilliant red and labelled for *Emergency*. Going over to it, Stanley found a switch labelled as an *Emergency Signal*. With a sense of profound relief, he pushed it home and saw machinery wake to life in response. It was but a minute later that a panel above the switch lighted up to show a sign "*Your signal has been received. Help is on its way. Stay where you are and do nothing.*" It was, he realized, activated by the main base to tell him he had done the job. He had summoned help, and could sit down to wait.

Alston slept briefly and woke to search the sky for some first sign of an approaching rocket. But he did not see his rescuers until one of them touched him lightly on the helmet. He jumped up and stared at the three men who stood there. One of the three men who had come smiled and said, "Doctor Alston? I'm Simms. And this is Werner and McLeish," he added waving at the other two. "Where's Mike? And where's the ship? What happened?"

"The ship? It's out there." Stanley pointed to the pinnacle in the middle of the plain. "Mike's still on board, badly hurt. How did you get here? I was watching for you."

"We landed on the other side of the boulder, here," Simms answered. "Are you all right? You look so. You say Mike is badly hurt? Then we'd better get out there before we do anything else. Where's your boat?"

"Boat?" Stanley did not understand. "What boat? What do you mean, boat?"

Simms was quiet for a moment. "Well, how did you get here, then?" he finally asked.

"Get here?" Stanley said. "Why, I walked. There's a ridge under the dust. See?" He pulled out the map and showed them.

"You walked here under the dust?" Simms asked incredulously. "But my God, man... Look, this dust is a perfectly good fluid. It obeys all the laws of hydrodynamics. A bit more viscous than water; to be sure. But still... You could have taken one of the tanks in the ship, cut it in half to make yourself a rowboat, and patched up some kind of oars. Certainly easier than walking here."

"You mean I could have..." Stanley stared at him.

"Yes," Simms said. "Archimedes' principle works with a fluid that is dust as well as water. A thing will sink in it only until the weight of dust that it displaces matches the weight of the body itself. A boat will float, and even the lighter gravity makes no difference."

Stanley shook his head. "I never thought. Of course that's true. How could I be so dumb?"

Simms laughed. "Well don't let it get you down. I guess you just didn't expect to find an ocean on an airless moon. Can't say that I blame you—and, anyway, the important thing is that you made it. So, let's go get Mike. You wait here and rest while we go get our boat. Okay?"

Still dazed with the thought that he need not have gone through the nightmare trip, Stanley could only nod and sit down. His face was still stricken as he watched the three men turn with a wave and back over the slope. Even when the three returned, carrying the boat easily in the light gravity, when it had been launched and the four of them were being pushed over the surface of the sea by the ion-rocket in the stern, Stanley Alston still could not quite believe it. The mental picture of four spacesuited figures whisking over an opaque grey sea with Jupiter and the stars hanging brilliant against the void, was fantastic. He stared at the grey waves from the bow and stern and felt that it could not be. And when they finally reached the pinnacle and were climbing up to the wrecked space-ship, he still felt unbelieving as he looked back and saw the boat floating serenely there, tied to a rock on the shore.

TWO DAYS later, when Stanley was finally allowed to see Mike, he felt tongue-tied. "Hi, Mike," he said; "Doctor Robinson says you'll be all right in a few weeks."

Mike looked at him from the bed without smiling. "Yeah," he said. He was silent a moment. "Guess I owe you thanks."

Alston shrugged. "Well, it was an interesting experience. One that I shall long remember. And one that has taught me a good deal, too. So it was not entirely wasted."

The pilot looked at him with eyes that flared briefly. "Me, I got to lie here and take what you dish out. I got too many ribs broken to do anything else. I guess I'd have to, anyway, seeing as you saved my life. But what do you get out of standing there needling me? Does it make you feel like a man, huh?"

Alston's eyes went wide, and he quivered slightly. "What do you mean 'needling' you? I wasn't needling you."

"No?" Mike's lip curled. "Then what was that crack about wasting your effort? So you could have sat there and waited and saved your own skin without bother. So what? Why come around and tell me that it wasn't worth the effort?"

"Oh." Stanley slumped, half chuckling. "I didn't mean that; no—I was just thinking of my own stupidity in not thinking of making a boat, that's all."

"Huh?" Mike half raised himself, his eyes going wide. He winced and fell back. Lying there looking at the ceiling, his voice was almost low and wondering. "You didn't think of making a boat? The only other way is to walk out—under the dust. That what you did?"

"Yes," Stanley said, his face going red. "It was really quite stupid of me, too. I was figuring on the dust as a fluid, too, wondering if my suit would hold off its pressure; I just never thought of a boat."

Mike's eyes traveled down from the ceiling and slowly measured Stanley. "You got more guts than I figured," he said softly. And then he smiled. "Yeah, you sure must have. And I guess I owe you a glass or two of beer. Will you let me pay off when I get out of here, Shorty?"

Alston, looking at the pilot, felt a sudden rush of warmth and smiled in return. He groped for words and finally found the right ones. "It's a date, Lunkhead. And I'll let you buy, too."



A. Hyatt Verrill

Oldtime readers of science fiction will be saddened, as we were, to hear of the passing of A. Hyatt Verrill, whose short stories, novelets, and novels appeared regularly in the original *Amazing Stories* between 1926 and 1935.

Widely known as an explorer, archaeologist, ethnologist and author, Mr. Verrill will be best remembered by lovers of science fiction for such novels as "The Bridge of Light" and "The World of Giant Ants", and such novelets as "The Non-Gravitational Vortex" and "Death From the Skies".

His most recently published book appeared in 1954, and has received favorable reviews. The title is "The Real Americans", a thorough and fascinating survey of the American Indian.

*Better be careful what you say
in the presence of a pencil,
friend!*



PLAYBACK

by WINSTON K. MARKS

*The Quikrite Pencil Co.
Writeville, Ohio*

Gentlemen,

Now I understand why you can sell your pencils for a dollar per gross less than your competitors. Unfortunately, even at this reduced price we are experiencing difficulty selling your pencils to our retail accounts.

It develops that out here on the coast the consumer insists that his lead pencils have lead in them; yours do not.

Please advise what disposition we should make of the five hundred gross lead-less pencils you shipped us last month.

Sincerely,

PUGET WHOLESALE STATIONER SUPPLIES
by: Jackson Rupp, Mgr.

*Puget Wholesale Stationer Supplies Co.
Seattle, Washington*

Dear Mr. Rupp,

We have the signed order of your buyer, Miss Lois Blue, for the pencils we shipped to you. We do not appreciate such an outrageous subterfuge, as your recent complaint, in order to escape the responsibilities of accepting and paying for merchandise ordered and shipped in good faith.

Had you admitted an over-buying error on the part of your Miss Blue, I might have been disposed to accept back the pencils. However, your damaging insinuation that we have no lead in our pencils indicates an immature lack of principles.

On receipt of your complaint, we checked on the lot number of your shipment. We have no samples of this lot on hand, since the whole run was sent to you. However, a careful examination of our records shows that these pencils were subjected to our standard x-ray examination to detect broken or defective leads.

My production manager, Mr. Glass, assures me there is no possibility that your shipment escaped our unfailing scrutiny. Therefore, I must ask you to send your check for \$1500 which is now overdue on our invoice covering the pencils in question.

If you are short of cash, I suggest you go peddle your pencils.

Sincerely,

QUIKRITE PENCIL CO.

by: Winleigh Scroggins, Pres.

Dear Mr. Scroggins,

Enclosed are a dozen of the Quikrite pencils taken at random from your shipment of 500 gross received six weeks ago.

Upon receipt of your kind advice to "peddle our pencils," Miss Blue and I discussed at length the possibilities of disposing of our defective lot to blind men who work the street corners. Entirely lacking in principles, this suggestion seemed a clever way out—until Miss

Blue estimated that it might take some ninety-nine years to dispose of the whole shipment in this manner, what with the unlikelihood of much repeat business.

I regret, therefore, that I must reject your solution, but in the spirit of cooperation would like to offer the tentative suggestion that your x-ray machine needs glasses. And you, Mr. Scroggins, need a punch on the nose.

Very sincerely,
Jackson Rupp

My Dear Mr. Rupp,

No one here can explain to me how the pencils we shipped to you happened to be supplied with leads which are about one inch shorter than the length of wood which encases them. This does, indeed, give the appearance of being lead-less when one looks into the hole. I assure you, however, that our x-ray indisputably shows a good, long length of lead beginning just an inch back from the tip to be sharp-

Although this is a shortage of only about 10% of the lead normally supplied with our pencils, I will make you a proposition which should not only meet with your approval, but also should convince you of our generosity, namely: we will issue a credit memo for, not 10% of the amount owed, but 50%! This will enable you to offer your customers a superbargain in Quikrite pencils, which I am sure they will appreciate. Explain, of course, the deficiency of this lot of pencils before selling them.

May we now have your check for \$750?

Apologetically,
Winleigh Scroggins

My Dear Mr. Scroggins,

I should sue you right now, but I am so intrigued by your remarkable pencil that I seek merely a credit memo to cover the full \$1500 cost of these pencils and an explanation by wire as to just what in hell you are up to.

To test the veracity of your latest x-ray report, our Miss Blue inserted one of your bewitched, short-leaded pencils into our automatic sharpener. Sure enough, a fine point finally appeared. And then faintly, but very definitely, the strains of the most weird music I have ever heard began emitting from the exposed pencil lead.

Our Miss Blue, a brilliant but overwrought maiden of 55, there-upon swooned against the watercooler, breaking her upper denture and her wrist-watch, to say nothing of the five-gallon water bottle which should also be replaced at your expense.

By the time Miss Blue was revived the music had stopped. So experimentally I sharpened another. This time I heard the whole thing myself. Another strange thing that occurred—at the end of about two minutes, when the music stopped, the pencil lead had increased its length almost an inch.

If this was all an advertising gimmick, why didn't your salesman explain it to Miss Blue when he was here, instead of scaring the poor lady into hysterics? Such cheap sensationalism has no place in the stationery business, Mr. Scroggins. If I were certain that you knew what the score was when you shipped us those pencils I'd fly back there and demand personal satisfaction out of this.

However, I am giving you an opportunity to explain. Please issue credit for these worthless, exasperating and dangerous office-wreckers which you fraudulently sell for pencils.

Challengingly yours,
Jackson Rupp

MR. JACKSON RUPP

PLEASE RETURN ALL QUESTIONABLE PENCILS TO US AIR-EXPRESS COLLECT. WE WILL SETTLE OUT OF COURT IF YOU WILL. LETTER FOLLOWS.

FAITHFULLY,
WINLEIGH SCROGGINS

Dear Mr. Rupp,

I personally verified your unfortunate experience with one of the sample pencils you returned to us recently. At this moment I have a staff of physicists and chemists working day and night to discover the cause for this unprecedented phenomenon.

For the benefit of your justifiable curiosity, I must admit that your particular lot of pencils were produced, packed and shipped under conditions different from any other pencils we have manufactured previously.

This was the first run of pencils from our new annex which was recently completed. In our never-ceasing effort to improve working conditions for our employees, we had installed in this plant a number

of ultra-high frequency radiation lamps of a new type, which purported to sterilize the air and thus reduce the incidence of colds and other infectious diseases among our workers. Immediately following this run of pencils, complaints of headaches among the workers caused us to remove these lamps, and the symptoms disappeared. Possibly the lead shrinkage which occurred *after* x-ray testing of the pencils was the result of this new irradiation.

Another morale builder which we installed in this plant was a public address system over which we played recorded music to ease the monotony of the workers who inspect and pack our pencils eight hours a day. This, then, might suggest the source of the music, except that the weird tone you described hearing from these pencils seems to have nothing in common with the conventional music we played during the production and packing operation.

According to a preliminary report from my staff of investigators, they suspect a condensing effect of sound upon the pencil graphite while under the peculiar radiation of the sterilizing lamps.

As I stated in my wire to you, we shall be willing, not only to take back the pencils for full credit, but I will also cover any damage suffered by your office and personnel through the unfortunate effects of this hybrid lot of pencils.

I shall report any further explanations to you as they are discovered by my researchers.

Earnestly yours,
Winleigh Scroggins

Dear Mr. Scroggins,

In the event you have not yet stumbled upon it, let me tip you off that the reason the music comes out of the pencil with such a strange quality is that it is coming out backward—just the reverse of the way it went in.

In her own way, our Miss Blue is quite scientifically minded. Arriving at this deduction, she proceeded to break off the eraser end of one of these pencils, and sure enough, out came music like we know it. The particular selection recorded on 500 gross of your pencils, Mr. Scroggins, happens to be "Hearts and Flowers."

What might interest you further, sir, is the fact that when "played" forward like this, the unusual sound track also contains fragmentary but very audible vocal remarks in several female voices. These remarks seem to be disgruntled statements directed at the Quikrite Pen-

cil Co. in general—and you, Mr. Scroggins, in particular. It appears that your personal approach to morale-building—like your approach to settling complaints from customers—leaves something to be desired.

If you will snap the eraser end off one of your samples (which I suggest you do privately), you will hear some choice remarks about the appropriateness of "Hearts and Flowers," the dubiousness of both your ancestors and the quality of your product. Much of the muttering seems to be about a 10-cent an hour cut in wage scale at your plant. Could it be that your competitive advantage in pricing your pencils is being wrung from the take-home pay of your employees?

Inquisitively yours,

Jackson Rupp

My Dear Mr. Rupp,

My research staff wishes me to thank you for the helpful suggestion you made about the reversed music. Although slightly embarrassing to me, I am glad to martyr my feelings, since the scientists have been sworn to secrecy as to the content of the "sound track" of these particular pencil samples.

It would appear that a whole new atomic theory has been precipitated by this freakish accident of production. My own plant consultant tells me confidentially that they are talking about a new field of molecular influences which they term, "sub-atomic ligatures," or "audio-radiative compressibility."

So it would appear that even out of this cloud will come a silver lining. I am regretful that the cloud had to appear on your particular horizon.

Incidentally, my shipping department notifies me that they have not yet received your shipment of defective pencils.

Sincerely,

Winleigh Scroggins

Dear Mr. Scroggins,

Naturally, I have become very interested in the manufacture of pencils, since this singing pencil with the shrunken lead came into my life. By a strange coincidence, that defies explanation almost, your three largest competitors have sent their representatives out to meet with me.

They have explained to me that since you cut the price of your pencils you have been selling more than all three of them combined. I

wish to apologize for writing such demanding letters to the president of such an important manufacturing firm; I realize now that you are doing everything in your power to recover my good will.

Wishing to meet you halfway, I am accepting your first offer. Enclosed is my check for \$750 as payment in full for the 500 gross of defective number 2 Quikrite pencils shipped under your invoice number 22168.

Fraternally yours,
Jackson Rupp

MR. JACKSON RUPP,
WOULDN'T THINK OF ACCEPTING THIS CHECK. JUST DESTROY PENCILS AND BILL ME FOR DOUBLE DAMAGES. WIRE AMOUNT INVOLVED. I WILL PAY BY RETURN WIRE.
WINLEIGH SCROGGINS

WINLEIGH SCROGGINS,
TOO LATE. THREE MANUFACTURER'S REPRESENTATIVES JUST PURCHASED WHOLE LOT AMONG THEM. PLACE SOME CURIOUS VALUE ON THE DEFECTIVE PENCILS AS SOUVENIRS FOR RETAIL STATIONERY BUYERS.
JACKSON RUPP

JACKSON RUPP,
ON MY BEHALF OFFER THEM 50 CENTS PER PENCIL. BONUS TO YOU IF YOU GET THEM BACK.
SCROGGINS

WINLEIGH SCROGGINS,
NO DEAL. HOWEVER, THEY AGREE NOT TO DISTRIBUTE SOUVENIRS ON CONDITION THAT WAGE SCALE OF QUIKRITE FACTORY EMPLOYEES ADVANCES 15 CENTS PER HOUR AT ONCE.
RUPP

JACKSON RUPP,
I ACCEPT. PRICE OF QUIKRITE PENCILS JUST ADVANCED ONE DOLLAR PER GROSS. LETTER FOLLOWS.
SCROGGINS

Dear Mr. Rupp,

Through your reprehensible conniving, you have destroyed the price advantage I have carefully built for my product over several years of the most delicate labor relation manipulation. I want to thank you, however, for showing me the error of my way.

When I went out to the plant and announced the wage raise, I got a thrill I'd forgotten existed. They *cheered me*. Not only that, but their production immediately stepped up to a point where, in spite of the large overhead increase, I can still sell my pencils and make money.

Whatever you may have on your conscience for your part in this comedy of bad manners, I forgive you. I know that ridicule still hangs over my head if those other people ever distribute those cursed pencils, but somehow I feel they will keep faith with me.

Sincerely,

Winleigh Scroggins

Dear Mr. Scroggins,

Enclosed is the other half (\$750.00) of the money we owe on your invoice for 500 gross of your pencils. I have taken the liberty of destroying the defective shipment of pencils with the assumption that, without delay, you will replace them with pencils of good quality.

Contentedly yours,

Jackson Rupp



The signs were apparent that this galactic-wide civilization was in its decline. But must its fall be as bloody as the fall of empires in the past?



REPEAT PERFORMANCE

by IRVING COX, Jr.

illustrated by ORBAN

KERR WAS an earthman only in a biological sense. That, of course, made no difference in the Place of the Universe. The city was enlightened and thoroughly cosmopolitan; a man was judged by his loyalty to The Exalted. Kerr shared equality with the Progons, the Zylphs, the Greggi—all the myriad rational species in the Place of the Universe.

Kerr submitted his report, and the Council of the Enlightened accepted it indulgently. "But, gentlemen," he protested, "you must understand! The earth people have violated the Eugenic Code. They have—"



"I am shocked and ashamed, Leader Kerr," lisped the Defence Coordinator.

"Their quota arrives on time," the D. C. interrupted.

"But they're calling Walton their President!"

The Defense Co-ordinator spread his soft, pink, well-combed tentacles on the Council table. "The time of crisis has long since passed. We must begin to grant more local freedom on the Outer Fringe, or the quotas cannot be maintained."

"Sir, Walton gave me a book which—"

"My congratulations, Leader Kerr! You have another rarity for your collection." The Council was appropriately amused. "That will be all, Leader Kerr; you have permission to leave us."

Kerr gave the salute and stalked stiffly out of the hall, the green cloak of rank swirling loose from his shoulders. Quotas! The Council thought of nothing else—unless it was their never-ending jockeying for position of influence before The Exalted.

Kerr had given them warning; it should be no concern of his if they ignored it. Yet he was a Leader, old enough to have seen six month's service in the last uprising on the Outer Fringe. Kerr had seen planetary war, and he had lived ever since in the shadow of its nightmare.

But he had made his report; he had no authority to do anything else.

Angrily Kerr took a jet-car to the Dream Palace. He was disappointed and vaguely afraid; the Dream Palace was the prescribed antidote. In the circular, marble-walled receiving hall he threw off his green cloak and stood naked, except for emerald-studded trunks and the plastic boots worn by all D. C. men.

Kerr was a large man, physically rock-hard, a smoothly coordinated body machine trained to split-second action. He had been evenly tanned by the dormitory vitarays and his brown hair was cut brush-short, in the current military fashion. Emblazoned on his trunks was the triangular symbol of rank; the same device was tattooed in fluorescent red on his shoulder. When he earned the rating of Assistant Co-ordinator—which he expected as a reward for his mission to the earth—a yellow triangle would be added around the perimeter of the triangle.

The women who served the Dream Palace swarmed around him, sensuous goddesses from a score of species. The Progons touched him softly with their gentle, pink tentacles; the Zylphs shook their sensory antenna in the sex-dance of their kind; and the earthwomen ran their hands, alive with invitation, over the smooth muscles of his arms.

They led Kerr toward the wing set aside for his species. The opiate

mist swirled around him; he heard the tinkling of the hypno-music and he saw the abstract of color dancing on the walls.

Then, suddenly, he flung the women aside. The dream was not enough. Kerr did not want to forget; he knew the Union was in danger, and he knew that defensive measures had to be taken. The book Walton had given him: that was the key to understanding. He must make the Council of the Enlightened hear such a summary.

"You are dissatisfied with our service, Leader Kerr?" One of the women had followed him back into the receiving hall.

"No, but I have things I must finish—"

"All matters of living can wait upon our dreams." She was quoting from the Code of the Dream Palace. She took him into her arms, running her fingers through his hair. "I am Selena, Leader Kerr; I give satisfaction and soul-greatness to all earthmen."

With an effort he pushed her away. "I will come again, Selena; now I must ask an audience with The Exalted."

"It is forbidden! A Leader must first have permission of his Co-ordinator."

"I know the law. This is a crisis issue."

"The Union is at peace!"

"For how long? There is a book, Selena—an earth-book. A man called Walton gave it to me before I left."

"Only as a rarity, Leader Kerr; an oddity!" She seemed frightened. "You—you have not read it?"

"I ran it through the synthesizer and psychéd a summary."

"And this Walton, he—he expected—" Selena took Kerr's hand; her fingers were cold and trembling. "It is a mistake, Leader Kerr. They do not understand our society here in the Place of the Universe."

"I don't know what Walton expected. He seemed to think that I—" Kerr shook his head. "It's hard to explain, Selena. I had a feeling they wanted me to join them. Something's wrong—very wrong; I don't understand why."

She smiled and moved close to him again, pressing the exciting warmth of her body against his. "If you leave the Dream Palace now, Leader Kerr, I shall be forever ashamed."

"I must go, Selena."

"Will you allow me to restore my vow of service? May I come and remain for a time with you, in Single Union?"

"Selena, I am only a Leader!"

"I know that."

He choked; the flattery was overwhelming. "Then—yes. Come when you will."

"By nightfall, Leader Kerr; as soon as we elect my successor."

FROM A FILE she took a decal of the Leader insignia and fixed the temporary triangle to her shoulder. Kerr completed the ceremony by selecting decal symbols for his name and sealing them under the rank mark. As he left the Dream Palace, his soul sang with the triumph of possession. Only because of his physical attraction could a man below the rank of Assistant hope to win a woman to Single Union. Kerr had neither wealth nor privilege with which to buy her, and Selena was the most sought after of all earthwomen in the Dream Palace. He wasn't altogether sure how it had happened; but no man seriously questions his own appeal.

Kerr went through the formality of applying to the office of the Defense Co-ordinator for an audience with The Exalted. The request was denied, as he knew it would be; he sought the help of the Co-ordinator of Cultural Affairs.

To Kerr, the scheming and the corruption of the ruling cliques were immensely distasteful—yet it was the way the government was conducted. Kerr had grown up in the Place of the Universe; in his experience, it had never been any different. At the moment the two strongest rivals for the favor of The Exalted were the Co-ordinator of Cultural Affairs and the Defense Co-ordinator, Kerr's ultimate superior officer.

He felt a remote sense of disloyalty, but only because he had always held aloof from politics. While Kerr had still been a cadet, his father—who had risen to the rank of Co-ordinator—had been condemned to the Decontaminator as a result of an unsuccessful palace coup. Kerr had tried to earn a place for himself without siding with any of the factions; he would not have stooped to it now if the threat to the Union had not made it necessary.

As a matter of policy, the office of Cultural Affairs would help him simply because the Defense Co-ordinator had not. Kerr tabbed his explanation into one of the public synthesizers in the reception room and waited while the machine weighed his request against the current co-efficients of political expediency. Apparently he was considered to represent top-level potentialities, for he was routed at once to an Associate Secretary, second in Authority to the Co-ordinator himself.

Kerr had unexpected luck. The Secretary was Glin Zrah, who had

been Kerr's roommate for a year at the General School. Glin was a Venusian, a frail, transparent-skinned species which had to wear special breathing masks in order to endure the atmospheric chemistry of the Place of the Universe.

Glin wrapped four ribbon-tentacles around Kerr's arm, in an enthusiastic Venusian greeting. "It's good to see you again, Kerr!" the Venusian intoned in his faint, shrill whisper. "You're still in the military, I see—but only a Leader! With your family name, I would have thought—"

"The name means nothing; they Decontaminated my father. However, I expect to make Assistant out of my last mission."

"Don't tell me you're trying to earn rank the hard way?" The Venusian flapped his tentacles in a species gesture of amusement.

"Glin, there's a book—an earth-book—"

"I know; I psychéd your statement from the synthesizer. We will use your situation to imply negligence on the part of the Defense Co-ordinator. We should be able to prove—"

"I'm not interested in politics; I want to save the Union."

"My friend, the Union *is* politics."

"I simply want to tell The Exalted what I saw. The earth is violating the codes; that's rebellion, Glin. If we stop it now—"

"Oh, just a little trouble on the Outer Fringe. The fleet can handle it when the time comes. Or we'll buy them off—reduce their quota; give them full relief for a year or so."

"What happens then? The Venusians will try it next, and the Zylphs. If the whole Outer Fringe catches the infection, the Union is lost; we keep the peace only so long as we maintain uniform regulations everywhere."

Glin dismissed the nightmare with a twist of his body. "The important thing, Kerr, is the removal of the Defense Co-ordinator. With your help, we can build this up enough to destroy his party."

Kerr clenched his fists. "Can't you understand—"

"There's a lot in this for you. I can promise you Fleet Command under the new Co-ordinator, when we put our man into the Defense Office."

Kerr gasped. "Fleet command? I would be in charge of—"

"The air defense of the Union; you could handle the Outer Fringe any way you liked."

"Glin, you're asking me to betray my commanding officer!"

"Not betrayal, Kerr; just common sense."

"There's no other way for me to see The Exalted?"

"None."

After a long hesitation, Kerr whispered, "All right; I'll do it."
"Good. We'll send for you when we're ready for you to give formal testimony before The Exalted."

KERR WAS cold with self-disgust; his soul felt spattered with a stinking slime, a fetid filth of indecency that nothing would ever wash away. He had no particular respect for the D. C.—as soft and as corrupt as any of the others. Yet, Kerr would not willingly have condemned any rational mind to Decontamination.

The citizens of the Place of the Universe would praise Kerr for his political acumen; by his own standards, he was dishonored. But it seemed necessary, to save the Union.

Kerr took the Common Slidewalk to the military dormitory. Beyond the white-marble canyons of the government center, the Place of the Universe was like any other city of the Union. Larger and richer, its multi-leveled strata crowded with twenty million citizens and Decontams—but otherwise no different. The landscaped villas of the very rich were on the upper level; the living warrens, the shops, the Dream Palaces for the ordinary people cluttered the lower levels, in a descending grade of luxury. In the bowels of the city were the Decontams—fully half of every metropolitan population. They were the condemned, the political outcasts, the criminals; living robots that did the manual labor of the Union—blank-faced men and women, robbed of their souls by the Decontaminator.

On the Common Slidewalk Kerr was carried past the Germination Hall, where chosen women were scientifically mated to meet the Anticipated Future Needs of the Eugenic Code. Only the very rich could afford to pay the parenthood tax for the privilege of rearing children of their own; Kerr was one of a microscopic minority who knew their own parents.

In a way, it made him different from all the others. He had feelings which the mass of citizens never experienced; he worried about small details which annoyed no one else. But he also felt a greater independence, a deeper confidence in his own judgment; he was willing to make decisions and to accept responsibility for them.

He looked now on the Place of the Universe and the disgust he felt for himself was transferred to the city. This was the Union that he wanted to save: these mobs swarming into the Dream Palaces, this glitter of luxury maintained by the labor of Decontams. The citizens of the Union would be no more concerned over the threatened revolution of earthmen than the Council of the Enlightened had been. If

Kerr could ask them to read the book Walton had given him, they would hoot their derision. Reading had long ago been left to a handful of scholars and scientists; the average man managed quite adequately without placing the burden of symbol interpretation on his mind.

This was the Union; for this Kerr risked dishonor. He wondered why.



KERR'S DORMITORY panel-door shut behind him. He threw off his cloak and dropped on the lounge. He was puzzled at the quiet emptiness of the room. He had forgotten Selena until she came and sat beside him, her body wrapped in a filmy, white veil.

Of course! That was why Kerr's bunk-mates were gone. Selena had used her privilege of Single Union to pre-empt the suite for Kerr and herself; she dialed a meal and set it out dutifully on the table that slid from the wall slot. "You haven't gone ahead with your foolishness?" she asked.

"An audience with The Exalted? Yes. It will be arranged through the Co-ordinator of Cultural Affairs."

"But you are violating the code. You are in danger of Decontamination!" She pressed her lips against his cheek. "Give it up. I have taken you in Single Union; I don't want to lose you now."

"For the safety of the Union—" His voice trailed off. In what way was the Union worth saving? "I have been to the earth, Selena."

"Your home, my dear; home for both of us. We are earth people."

"No, citizens of the Union. The D. C. sent me on a mission to the earth command, to discuss a quota revision. Our form of government on the earth is the same as it is in the other Outer Fringe colonies: the authority of The Exalted is delegated to local leaders. On earth the Chief is a man called Walton. I have never been—" Kerr's lip curled with distaste. "I have never been home before. I thought the earth would be like the other colonies; but it's different, Selena—terribly different."

"It only seems so, because they are our own people."

"Do you know, they've rebuilt all their cities? I saw no debris of the conquest anywhere."

"We encourage that, don't we?"

"But the other Outer Fringe planets are still clearing away the wreckage. There's a vitality among the earth people, Selena—a frightening kind of independence, and a faith in themselves. Quite openly Walton calls himself President, and that's forbidden in the treaty. They're ignoring the Eugenic Code; they're rearing their own children again, in family units; and they have no Decontams! The earth people do even the lowest kind of work themselves; and they seem proud of it!"

"All this you would report to The Exalted?"

"The Council ignored me. Even the book—"

"Yes, the book; will you show it to me?"

Kerr went to the wall case where he kept the relics of his various flights to the Outer Fringe. He took the book out very carefully, for it was old and frayed, yellowed by age. He turned toward her.

SHE STOOD facing him with a Raynel S-type gun in her hand. The dial was cocked at full charge. At five hundred feet the needle ray of radiant heat could blast through two feet of steel. "Give me the book, Leader Kerr."

"Why, Selena? In the name of The Exalted—"

"President Walton made a mistake; if you cry wolf long enough, you may persuade some of the others to read it."

"That's what we want to do!"

"Walton thought you'd join us, because you're an earthman—one of us. The Union can't be saved; it's rotten to the core."

"Only a handful of politicians are corrupt, here in the Place of the Universe. New leadership will correct all that."

She shook her head. "The Union can't even defend itself, Leader Kerr! All our billions of full-rank citizens—that soft, rich heart of

the Union—neither work nor fight. We live on the robot labor of Decontams and the spoils of colonial quotas. And our military service! Look at yourself, Kerr. Our fighting men come from the Outer Fringe; we buy you with bribes of citizenship."

Kerr answered with a semblance of assurance, "Every large organization has a certain degree of internal corruption, Selena. The idea symbolized by the Union: that's the important thing. The Union stands for stability, a uniform code of justice. We keep the peace.

"I fought through one uprising, Selena. I've seen whole cities die in the agony of fire from our sky guns. If we let the Union fall apart, we will be destroying each other." It was Kerr's familiar self-argument, but now the words seemed hollow, and doubt was strong in his mind. The thing he had seen on earth, the spirit of the people, seemed fresh, clean, vital with strength.

"You're wrong," she said, "but I've no time to cure your blindness. History is not a cycle, Leader Kerr, but an evolution. It will not all happen again as it has before. There's a new technique we've learned on earth, as a result of the conquest; we know how to live with each other, without the force of military power to bind us together. We've a strength, Kerr, that can defeat the Union. In time—" Her eyes widened suddenly. "But you're a Kerr! Your grandmother was the aunt of The Exalted!"

He laughed. "You've just realized that? There's nothing sacred in the family name. My father was Decontaminated because he thought he could seize the—"

"But we can use you, my friend. Walton gave the book to the proper man, after all." She gestured toward the door with her gun. "Open it, Kerr; I'm going to deliver you to the underground."

"An underground—here? In the Place of the Universe?"

"That surprised you? It shouldn't. We can spy on the factions just as easily as they spy on each other. And don't try to make a break for it when we're outside; I'll shoot if I have to—but I'd rather take you alive."

They went down the dormitory tube. Selena was wrapped in Kerr's green cloak, but beneath the folds he saw the Raynel aimed steadily at his back. He still carried the book; she seemed to have lost interest in it.

As they left the building, six men in the scarlet uniform of the D. C. security guard came toward them at a jog-trot. "Leader Kerr?"

"Yes."

"Silence custody is ordered by the Defense Co-ordinator."

Selena laughed delightedly. "I wondered how long it would be." She turned and ran toward the Common Slidewalk.

"Stop her!" Kerr cried. "She's an underground—"

A brass-knuckled fist slashed his jaw. His lip was cut and blood spilled saltily into his mouth. "Silence custody," one of the men repeated. "You know the code, Kerr."

They manacled his arms behind his back, with his elbow binding the earth-book against his ribs. The guard flung him into a waiting jet-car. In three minutes the machine slid into the roof-slot on the Defense building. Kerr was shoved into a tube and taken to the office of the Co-ordinator.

HE HAD BEEN there only once before, when he took his cadet oath to The Exalted. It was a luxury suite, paneled in flourescent metals and carpeted with billions of the tiny, soft, Ponzi pelts contributed by the Zylphs as a part of their regular quota. Beyond the office was the state corridor to the audience room and the Palace of The Exalted. Traditionally, the Defense Co-ordinator served as door-guard on the private living quarters of the ruler.

The D. C. sat on a silk-draped lounge behind the desk. He was a Progon, a Sirian species, the hardest, most robust people of the Outer Fringe. But a lifetime of soft living in the Place of the Universe had made him a simpering, effeminate parody of his kind. His squat body bulged over the casing of a concealed, metal corseting. His face-bulb was a shapeless, pink pulp, like an over-ripe melon. His eyes were shot with yellow bloodstreaks. "I am shocked and ashamed, Leader Kerr," he lisped. "Because of you, I have been dragged away from a party banquet."

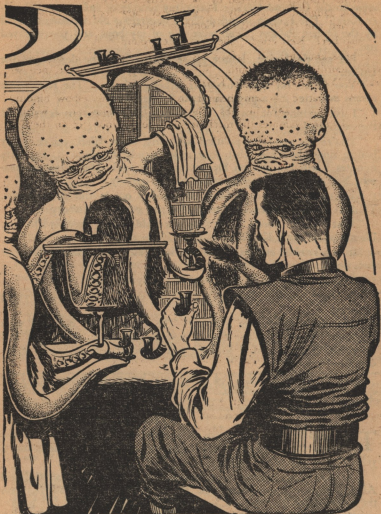
"Sir, it is imperative—"

The guard's fist shot into Kerr's jaw again, but the Co-ordinator waved a pink tentacle imperiously. "Let him speak," he said. "The silence custody is temporarily suspended."

The scarlet-clad guards released Kerr's manacles. They backed away, forming a semi-circle before the outer door.

"I must see The Exalted," Kerr explained as he rubbed the dead numbness out of his wrists. "I made proper application to your office, sir, and—"

"And it was denied. There your responsibility should have ended; but you chose, instead, to defy the code. I'm quite aware that you



All kinds of beings lived peacefully within the Federation—but if Chaos came...

went to the Cultural Office; I have my sources of information, Leader Kerr!" The Progon sounded like a querulous old woman, rejected by the Dream Palaces. "You were one of my boys, and you betrayed me."

"But not the Union; I have pledged my life in the defense of the Union."

"You suffer, my boy, from your father's delusions. The Kerr name means nothing; it's a pity you never learned that."

"I ask nothing for myself, sir! Merely an honest consideration of the earth-book—"

"You're too naive for political scheming, Kerr. Well, you're in my hands, now; let's see what your new friends do about it. In thirty minutes I will put you on Decontamination trial. The charge is treason. You will face the jury under silence custody."

Kerr still had the earth-book. He held it out to the Co-ordinator. "The evidence is here; I ask only that you psych a summary—"

"That infernal book!" The Progon's flabby body shook with fury. "It means nothing, Kerr!"

"It is a symbol of their defiance; it predicts our disaster! Sir, you dare not let your blindness—"

"You thought The Exalted would actually read it?"

"In three minutes, the psych machines could give him a working summary."

"The Exalted—reading a book!" The Co-ordinator quivered with laughter. "You're greener than a raw recruit, Kerr. After you had convinced The Exalted, I suppose you expected him to issue the orders to—"

"The decree of The Exalted is the final law of the Universe." Kerr quoted the cadet code stiffly.

"But we, Leader Kerr—we make the law!"

THE OUTER door slid open. A courier, in the white livery of the Cultural Office, entered the room. He saluted and held out a yellow glow-disc of authority.

"A writ," the courier explained. "The Co-ordinator of Cultural Affairs requires the surrender of Leader Kerr to his jurisdiction, on the authority of The Exalted."

"Kerr is my prisoner," the D. C. said. He gestured to the guard. "Take him away. The trial will procede as I have—"

One guard protested, "Sir, the writ is authorized by The Exalted!" "Before the trial, I'll have a red priority of my own."

The guards closed on Kerr reluctantly as the courier fled back to his master. Kerr took advantage of their hesitation; he flung himself at the closest guard, jerking the scarlet-handled Raynel from its holster. The man sprawled against the feet of the others as the needle ray of Kerr's gun knifed into the metal wall.

The Co-ordinator frantically punched desk dials, and alarm bells shrilled. But Kerr saw the wires hanging loose where the Raynel had pierced the office wall; he had cut the automatic ray-guard in the Palace corridors.

Moving cat-like in the confusion, he pulled open the door and plunged into the Palace hallway. He was committing the ultimate codal violation, invading the presence of The Exalted. But Kerr had already gone too far to turn back. Unless he could persuade The Exalted to intervene, the blind competition between rival Co-ordinators would destroy the Union.

Kerr heard the boots of the security guard echoing behind him, and the shrill voice of the Progon screaming threats and orders. He gave himself ten minutes before they would take him. The Palace was a maze of corridors and lofty rooms of state; the guard would waste time searching out his probable hiding place, seating the empty shadows with the needle fire of their Raynels.

Kerr went directly to the inner sleeping chamber. He pinned his faith on The Exalted, and it was Kerr's last shred of faith in the Union itself. The exalted would be above petty party quarrels, above the corruption and the incompetence; serene, wise, just in the unas-

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He pulled open the chamber door. The room was softly lighted, shimmering in the multi-colored, Dream Palace radiance of a glittering chandelier which hung from the ceiling by a single, metal chain. Stubbornly Kerr shook off the spell of the soft, hypno-music as he strode toward the gilded bed.

THE EXALTED was a distant relative of Kerr's, a man his senior by three years—small, fragile, pale-skinned, his face wasted by dissipation. He sat on the bed, against a mass of cushions, with a bed-table open on his lap. Ingenious mechanical toys, duplicating the machines and the personnel of a miniature space field, covered the tabletop. The Exalted frowned at Kerr with glazed, myopic eyes. "You found my rocket?"

Kerr saluted. "I am Leader Kerr, your Eminence; I have come to—"

"But I sent you after my rocket. You promised to find it!" Great tears came into the pale eyes. "It's right outside on the terrace, where we were playing this afternoon."

Kerr found the proper switch behind the bed and shut off the dream music. The kaleidoscopic radiance left the chandelier. It threw a crude, white glare on the metal walls, the silk hangings. The room changed subtly, like a theatre setting seen suddenly in the brutal clarity of daylight. The beauty became garish, gaudy, nauseating.

"Now you've spoiled it all!" The Exalted cried. "You've ruined everything!" Pettishly he swept the table from his lap; the toys spilled over the floor.

"I beg your indulgence. I am Leader Kerr. I have just returned from a mission to the earth and I have brought back a book—"

"Mission reports are made to the Council, not to me."

"Sir, you must read the book." Kerr gestured toward the headpiece of the psych machine which stood by the bed.

"I won't. Give it to the D. C. That's what he's for."

Kerr put the book on the bed. "You can psych a summary, your Eminence, in—"

"I don't have to; you can't make me!"

Kerr wrung his hands in agony. "Please, please listen to me! The Union is in danger. Only if you act now—"

"Give me my toys!" The Exalted pounded his soft fists on the bed.

Kerr was seized by a violent, heedless fury. He sprang at The Exalted. The little man screamed in terror.

"All right, Kerr; you're through."

Kerr saw the Defense Co-ordinator at the door, the full force of his security guard massed behind him. They advanced toward the bed, their Raynels naked in their hands. "Send him to the Decontaminator!" The Exalted gasped.

The Co-ordinator bowed mockingly. "Your Eminence has spoken."

The scarlet-clad guard eddied against the foot of the bed. And at that moment a corps of armed, white-coated officials of the Cultural Office flooded into the room. A deep voice boomed from the shadows, "Kerr is my prisoner!"

"Your authority is superceded," the D. C. answered.

A Raynel flashed; one of the security guards collapsed across the bed. The chaos that followed was quick and decisive. Flame licked over the red-robed guard; they fell like threshed wheat. The Co-ordinator died, pleading for mercy, as he tried to escape.

During the conflict a blade of fire had momentarily danced across the bed. The Exalted lay in a pool of blood, the earth-book clutched in his hand.

The booming voice came again from the shadows. "We seem to have aimed poorly. The Exalted is dead; most unfortunate, but there will be no question of the succession. Kerr will inherit, and Kerr is one of our men."

"No!" Kerr whispered with revulsion.

"Your claim is legitimate. We'll simply present the Council with an accomplished fact; there'll be no reason for a ballot. I've had a change in mind for some time. The D. C., of course, will be guilty of the assassination, and as soon as I appoint his successor—"

Kerr tried to speak, but his voice was choked. All his faith in the Union was gone. This smooth manipulation of disaster left him nothing to idealize. The Exalted had been an idiot, and the men who ruled through him were fools; the Union was not worth saving.

Kerr would not allow himself to be transformed into a puppet, dancing the measure for a plundering clique. He had the vitality and the individuality of an earthman, and for the first time he was proud of the heritage. Kerr wanted to be a part of the revolution, to help the earth people pull down this sham that masqueraded as law.

Selena! She had the answer. If he could find her now—

HE STOOPED and snatched a Raynel from the hand of a dead guard. In the same smoothly co-ordinated motion, he aimed the beam at the chain which held the glittering chandelier. The room was

plunged into darkness. In a shower of shattering crystal, the chandelier crashed to the floor.

Kerr ran. From the roof he took a jet-car to the Dream Palace. He had no idea where he might find Selena, but it was a reasonable guess that she had returned to the Palace. However, the ladies who met him in the receiving hall said they had not seen her. "She has left the service to join a Leader in Single Union."

"No," Kerr answered. "Selena left me, too."

The ladies tittered. "In that case, perhaps one of us—"

"Where else would she go?"

"Selena sometimes took a special assignment in the Palace of Perversion."

Kerr turned toward the door. A Progon wrapped pink tentacles around his arm. "But you cannot look for her there! The Palace of Perversion is on the upper level; only our richest citizens may enter there. You would be sentenced to Decontamination."

Kerr's bitter laugh trembled with hysteria.

"Let us send couriers; we can find Selena for you."

He shook off the tentacles rudely. As he returned to the Common Slidewalk, the city levels blazed with the guard lights, and the throb of the warning siren rocked the air. The Co-ordinator of Cultural Affairs, temporarily in command of the Place of the Universe, had proclaimed a civil emergency. It would simplify the search for Kerr; but it brought terror to the citizens swarming the streets.

For a generation there had been no civil emergency in the Place of the Union; the city had not even practiced precautionary drills during the last uprising on the Outer Fringe. The people had no idea why the sirens were screaming, but the sound brought disturbing, half-forgotten memories of a terrible fear. They crowded into the shelters, and found them inadequate, musty with filth, unventilated, unprovisioned.

Kerr pushed to the top level of the city. The guards on the door of the Palace of Perversion had panicked and fled, but the patrons had not. Kerr entered the Hall of Joy.

His soul sickened at what he saw. This was his final disillusionment, for the citizens in the Palace were the great and the near-great, the aristocracy of the Union. He knew, then, that he could hope for nothing; a thousand miracles could not wipe out such degradation of the rational mind. If Selena took part in this, then she was a sham, too.

He returned to the street. He would surrender to the nearest guard. He would welcome the eternal oblivion of Decontamination.

SELENA stepped out of the shadows of the Palace garden, sliding her hand into his. "They sent a messenger from the Dream Palace," she whispered. "I have been so afraid! These sirens—"

"The Exalted is dead." In agonized sentences he poured out the story of the assassination. "I must get away, Selena. You said you were a part of an underground of earthmen; if I can join my own people—"

"So you understand the truth, Leader Kerr."

"Yes! The Union has lived too long. The chaos of planetary war is clean and pure compared to—" He waved his hand toward the Palace of Perversion. "—compared to this."

"But there might be an alternative, Leader Kerr. We could build on the skeleton of the Union—something better and finer, without bloodshed."

"The earth-book is right. The Union has to be destroyed; can you help me go back to my own people?"

"You are entirely certain you want to help us?"

"Yes, Selena; yes! The spirit I found on the earth—their defiance,

SCIENCE-FICTION

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their ability to work with each other—it's like a breath of clean air in a Venusian swamp."

"And you will take our orders without question?"

His shoulders stiffened. "I learned obedience in the Fleet Service, Selena."

"Then come in thirty minutes to the Dream Palace. I must go and make certain—certain preparations." She squeezed his hand and slid away into the shadows.

For half an hour Kerr hid in the Palace garden, while the search sirens shrilled around him. When he entered the Dream Palace at the appointed time, the women expected him. They took him to a room at the back of the building. As the silk-padded door closed, white-uniformed officials of the Cultural Office surrounded him, chaining his arms behind his back.

And Kerr knew, then, that even Selena had betrayed him. The corruption had consumed the soul of everything in the Union, even of the revolution that could have overthrown it.

For a day Kerr lived in a nightmare. The chain on his wrists was not removed. His captors were afraid, of course, that he might take his own life.

At dawn he was proclaimed The New Exalted. With his chains hidden by the glittering robe of state, he was carried through the Place of the Universe in the ceremony of installation. For hours Kerr listened to the adoration of the multitude—millions of sense-drugged sheep, crying allegiance to an imprisoned man.

Afterwards Kerr was left, still chained, in the bedroom of The Exalted. The body of his kinsman had been removed, but the blood-spattered coverings still lay twisted on the bed. Among them Kerr saw the book—the earth-book which President Walton had given him, the blueprint of approaching disaster. Had they known when it happened before, Kerr wondered, and had those others, too, chosen comfort to survival?

THE DOOR opened. Selena came in and with her the Co-ordinator of Cultural Affairs—an earthman. Kerr had never met him, and he was surprised by the intelligence, the clear-eyed firmness of the man's face. Smiling, the Co-ordinator unlocked Kerr's chains.

"Sorry," he said in his deep booming voice. "We had no time for explanations before; I had to jam through the ceremony before the opposition could organize against us."

"Explanation?" Kerr repeated. "You control The Exalted. It's ob-

vious, isn't it? What else—"

"Then you don't understand!" Selena tried to put her arm around Kerr's waist. He threw her aside. "You told me, Leader Kerr, that you wanted to work with us."

"The revolution of earthmen, yes. Not this!"

The Co-ordinator took the book from the bed. "We have read this too, Kerr; but history is not an inevitable repetition of disaster. We can learn from our mistakes if we will."

"Violence is not the way to peace," Selena broke in. "Today the Union is a sham, granted; but it is a symbol for law and stability. We can make the symbol real again. Slowly earthmen are moving into control of the Union. We will make it ours, Kerr. That is our revolution; we will preserve all that is good, and burn away the evil."

Kerr took the earth-book and turned the yellow pages. He saw it, then, for what it was: neither a threat nor a blueprint of chaos, but a lesson in politics.

"It is customary," the Co-ordinator said, "for The Exalted to proclaim a popular dispensation in honor of his succession. You, Kerr, can—"

"Prohibit Decontamination?" Kerr suggested.

"Far too drastic. For a while, we can simply ignore Decontamination as a legal technique. As the city slaves die off, the citizens will have to begin to work again. Your dispensation, Kerr, can be the cancellation of the tax on parenthood. The people will start to live in family units again; it's a natural instinct of every species. In ten years the Germination Halls will be abandoned, as they are on the earth."

Selena looked into Kerr's eyes. "We thought we could work through the last Exalted," she said, "but the power went to his head. He chose to live permanently in the hypno-sleep of a Dream Palace; I don't want you to fail us."

Kerr smiled and took her in his arms. "Not if I live in Single Union with a woman who will keep my nose to the grindstone."

"That, I think, can be arranged."

She kissed him.

"And then I have a reminder that my predecessor didn't have." Kerr stood the earth-book on a table and read the title aloud, softly and reverently. "*The Decline and Fall of the Roman Empire*. You're right, Selena; history doesn't have to play a repeat performance if we read it carefully enough."



How I foxed the Navy

by Arthur Godfrey

The Navy almost scuttled me. I shudder to think of it. My crazy career could have ended right there.

To be scuttled by the Navy you've either got to do something wrong or neglect to do something right. They've got you both ways. For my part, I neglected to finish high school.

Ordinarily, a man can get along without a high school diploma. Plenty of men have. But not in the Navy. At least not in the U. S. Navy Materiel School at Bellevue, D. C., back in 1929. In those days a bluejacket had to have a mind like Einstein's. And I didn't.

"Godfrey," said the Lieutenant a few days after I'd checked in, "either you learn mathematics and learn it fast or out you go. I'll give you six weeks." This, I figured, was it. For a guy who had to take off his shoes to count



above ten, it was an impossible assignment.

I was ready to turn in my bell-bottoms. But an ad in a magazine stopped me. Here, it said, is your chance to get special training in almost any subject—mathematics included. I hopped on it. Within a week I was enrolled with the International Correspondence Schools studying algebra, geometry and trig for all I was worth.

Came week-end liberty, I studied. Came a holiday, I studied. Came the end of the six weeks, I was top man in the class. Within six weeks I had mastered two years of high school math, thanks to the training I'd gotten.

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