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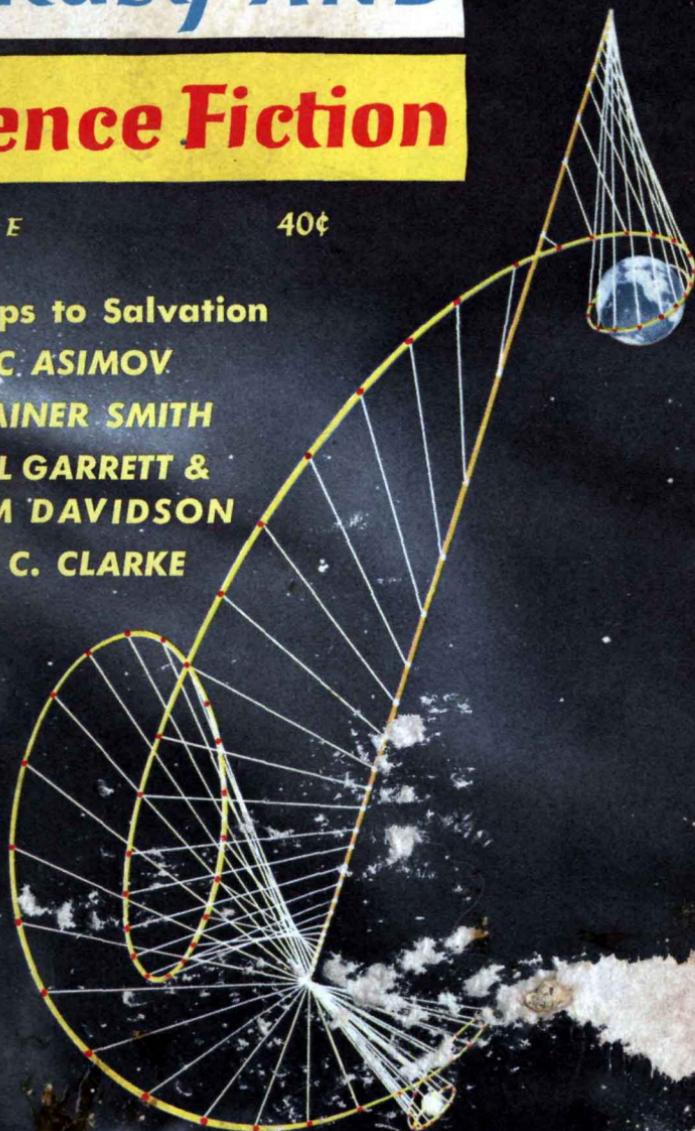
Four Steps to Salvation

by **ISAAC ASIMOV**

CORDWAINER SMITH

**RANDALL GARRETT &
AVRAM DAVIDSON**

ARTHUR C. CLARKE



MEL HUNTER

Fantasy and Science Fiction

JUNE

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Those who in good weather have searched the horizon for distant specks which might be ships or planes are familiar with the curious fact that such specks are more easily seen from the corner of the eye than looked at straight on. A phenomenon Cordwainer Smith here exploits, in the literary sense, in seeking a glimpse of a future world, and certain enduring human values

ALPHA RALPHA BOULEVARD

by Cordwainer Smith

WE WERE DRUNK WITH HAPPINESS in those early years. Everybody was, especially the young people. These were the first years of the Rediscovery of Man, when the Instrumentality dug deep in the treasury, reconstructing the old cultures, the old languages, and even the old troubles. The nightmare of perfection had taken our forefathers to the edge of suicide. Now under the leadership of the Lord Jestocost and the Lady Alice More, the ancient civilizations were rising like great land masses out of the sea of the past.

I myself was the first man to put a postage stamp on a letter, after sixteen thousand years. I took Virginia to hear the first piano recital. We watched at the eye-machine when cholera was released in Tasmania, and we saw

the Tasmanians dancing in the streets, now that they did not have to be protected any more. Everywhere, things became exciting. Everywhere, men and women worked with a wild will to build a more imperfect world.

I myself went into a hospital and came out French. Of course I remembered my early life; I remembered it, but it did not matter. Virginia was French, too, and we had the years of our future lying ahead of us like ripe fruit hanging in an orchard of perpetual summers. We had no idea when we would die. Formerly, I would be able to go to bed and think, "The government has given me four hundred years. Three hundred and seventy-four years from now, they will stop the stroon injections and I will then die." Now I knew any-

thing could happen. The safety devices had been turned off. The diseases ran free. With luck, and hope, and love, I might live a thousand years. Or I might die tomorrow. I was free.

We revelled in every moment of the day.

Virginia and I bought the first French newspaper to appear since the Most Ancient World fell. We found delight in the news, even in the advertisements. Some parts of the culture were hard to reconstruct. It was difficult to talk about foods of which only the names survived, but the homunculi and the machines, working tirelessly in Downdeep-downdeep, kept the surface of the world filled with enough novelties to fill anyone's heart with hope. We knew that all of this was make-believe, and yet it was not. We knew that when the diseases had killed the statistically correct number of people, they would be turned off; when the accident rate rose too high, it would stop without our knowing why. We knew that over us all, the Instrumentality watched. We had confidence that the Lord Jestocost and the Lady Alice More would play with us as friends and not use us as victims of a game.

Take, for example, Virginia. She had been called Menerima, which represented the coded sounds of her birth number. She was small, verging on chubby; she was compact; her head was cov-

ered with tight brown curls; her eyes were a brown so deep and so rich that it took sunlight, with her squinting against it, to bring forth the treasures of her irises. I had known her well, but never known her. I had seen her often, but never seen her with my heart, until we met just outside the hospital, after becoming French.

I was pleased to see an old friend and started to speak in the Old Common Tongue, but the words jammed, and as I tried to speak it was not Menerima any longer, but someone of ancient beauty, rare and strange—someone who had wandered into these latter days from the treasure worlds of time past. All I could do was to stammer:

"What do you call yourself now?" And I said it in ancient French.

She answered in the same language, "Je m'appelle Virginie."

Looking at her and falling in love was a single process. There was something strong, something wild in her, wrapped and hidden by the tenderness and youth of her girlish body. It was as though destiny spoke to me out of the certain brown eyes, eyes which questioned me surely and wonderingly, just as we both questioned the fresh new world which lay about us.

"May I?" said I, offering her my arm, as I had learned in the hours of hypnopedia. She took my

arm and we walked away from the hospital.

I hummed a tune which had come into my mind, along with the ancient French language.

She tugged gently on my arm, and smiled up at me.

"What is it," she asked, "or don't you know?"

The words came soft and unbidden to my lips and I sang it very quietly, muting my voice in her curly hair, half-singing half-whispering the popular song which had poured into my mind with all the other things which the Rediscovery of Man had given me:

She wasn't the woman I went to seek.

*I met her by the merest chance.
She did not speak the French of France,
But the surded French of Martinique.*

*She wasn't rich. She wasn't chic.
She had a most entrancing glance,
And that was all. . . .*

Suddenly I ran out of words, "I seem to have forgotten the rest of it. It's called 'Macouba' and it has something to do with a wonderful island which the ancient French called Martinique."

"I know where that is," she cried. She had been given the same memories that I had. "You can see it from Earthport!"

This was a sudden return to the world we had known. Earthport stood on its single pedestal, twelve miles high, at the eastern edge of the small continent. At the top of it, the Lords worked amid machines which had no meaning any more. There the ships whispered their way in from the stars. I had seen pictures of it, but I had never been there. As a matter of fact, I had never known anyone who had actually been up Earthport. Why should we have gone? We might not have been welcome, and we could always see it just as well through the pictures on the eyemachine. For Menerima—familiar, dully pleasant, dear little Menerima—to have gone there was uncanny. It made me think that in the Old Perfect World things had not been as plain or forthright as they seemed.

Virginia, the new Menerima, tried to speak in the old common tongue, but she gave up and used French instead:

"My aunt," she said, meaning a kindred lady, since no one had had aunts for thousands of years, "was a Believer. She took me to the Abba-dingo. To get holiness and luck."

The old me was a little shocked; the French me was disquieted by the fact that this girl had done something unusual even before mankind itself turned to the unusual. The Abba-dingo was a long-obsolete computer set part

way up the column of Earthport. The homunculi treated it as a god, and occasionally people went to it. To do so was tedious and vulgar.

Or had been. Till all things became new again.

Keeping the annoyance out of my voice, I asked her:

"What was it like?"

She laughed lightly, yet there was a trill to her laughter which gave me a shiver. If the old Menerima had had secrets, what might the new Virginia do? I almost hated the fate which made me love her, which made me feel that the touch of her hand on my arm was a link between me and time-forever.

She smiled at me instead of answering my question. The surface-way was under repair; we followed a ramp down to the level of the top underground, where it was legal for true persons and hominids and homunculi to walk.

I did not like the feeling; I had never gone more than twenty minutes' trip from my birthplace. This ramp looked safe enough. There were few hominids around these days, men from the stars who (though of true human stock) had been changed to fit the conditions of a thousand worlds. The homunculi were morally repulsive, though many of them looked like very handsome people; bred from animals into the shape of men, they took over the tedious chores of working with machines where no real man would wish to

go. It was whispered that some of them had even bred with actual people, and I would not want my Virginia to be exposed to the presence of such a creature.

She had been holding my arm. When we walked down the ramp to the busy passage, I slipped my arm free and put it over her shoulders, drawing her closer to me. It was light enough, bright enough to be clearer than the daylight which we had left behind, but it was strange and full of danger. In the old days, I would have turned around and gone home rather than to expose myself to the presence of such dreadful beings. At this time, in this moment, I could not bear to part from my new-found love, and I was afraid that if I went back to my own apartment in the tower, she might go to hers. Anyhow, being French gave a spice to danger.

Actually, the people in the traffic looked commonplace enough. There were many busy machines, some in human form and some not. I did not see a single hominid. Other people, whom I knew to be homunculi because they yielded the right of way to us, looked no different from the real human beings on the surface. A brilliantly beautiful girl gave me a look which I did not like—saucy, intelligent, provocative beyond all limits of flirtation. I suspected her of being a dog by origin. Among the hominids, d'persons are the

ones most apt to take liberties. They even have a dog-man philosopher who once produced a tape arguing that since dogs are the most ancient of men's allies, they have the right to be closer to man than any other form of life. When I saw the tape, I thought it amusing that a dog should be bred into the form of a Socrates; here, in the top underground, I was not so sure at all. What would I do if one of them became insolent? Kill him? That meant a brush with the law and a talk with the Subcommittee of the Instrumentality.

Virginia noticed none of this.

She had not answered my question, but was asking me questions about the top underground instead. I had been there only once before, when I was small, but it was flattering to have her wondering, husky voice murmuring in my ear.

Then it happened.

At first I thought he was a man, foreshortened by some trick of the underground light. When he came closer, I saw that it was not. He must have been five feet across the shoulders. Ugly red scars on his forehead showed where the horns had been dug out of his skull. He was a homunculus, obviously derived from cattle stock. Frankly, I had never known that they left them that ill-formed.

And he was drunk.

As he came closer I could pick up the buzz of his mind. ". . .

they're not people, they're not hominids, and they're not Us—what are they doing here? The words they think confuse me." He had never telepathed French before.

This was bad. For him to talk was common enough, but only a few of the homunculi were telepathic—those with special jobs, such as in the Downdeep-down-deep, where only telepathy could relay instructions.

Virginia clung to me.

Thought I, in clear Common Tongue: "True men are we. You must let us pass."

There was no answer but a roar. I do not know where he got drunk, or on what, but he did not get my message.

I could see his thoughts forming up into panic, helplessness, hate. Then he charged, almost dancing toward us, as though he could crush our bodies.

My mind focussed and I threw the stop order at him.

It did not work.

Horror-stricken, I realized that I had thought French at him.

Virginia screamed.

The bull-man was upon us.

At the last moment he swerved, passed us blindly, and let out a roar which filled the enormous passage. He had raced beyond us.

Still holding Virginia, I turned around to see what had made him pass us.

What I beheld was odd in the extreme.

Our figures ran down the corridor away from us—my black-purple cloak flying in the still air as my image ran, Virginia's golden dress swimming out behind her as she ran with me. The images were perfect and the bull-man pursued them.

I stared around in bewilderment. We had been told that the safeguards no longer protected us.

A girl stood quietly next to the wall. I had almost mistaken her for a statue. Then she spoke,

"Come no closer. I am a cat. It was easy enough to fool him. You had better get back to the surface."

"Thank you," I said, "thank you. What is your name?"

"Does it matter?" said the girl. "I'm not a person."

A little offended, I insisted, "I just wanted to thank you." As I spoke to her I saw that she was as beautiful and as bright as a flame. Her skin was clear, the color of cream, and her hair—finer than any human hair could possibly be—was the wild golden orange of a Persian cat.

"I'm C'mell," said the girl, "and I work at Earthport."

That stopped both Virginia and me. Cat-people were below us, and should be shunned, but Earthport was above us, and had to be respected. Which was C'mell?

She smiled, and her smile was better suited for my eyes than for Virginia's. It spoke a whole world

of voluptuous knowledge. I knew she wasn't trying to do anything to me; the rest of her manner showed that. Perhaps it was the only smile she knew.

"Don't worry," she said, "about the formalities. You'd better take these steps here. I hear him coming back."

I spun around, looking for the drunken bull-man. He was not to be seen.

"Go up here," urged C'mell, "They are emergency steps and you will be back on the surface. I can keep him from following. Was that French you were speaking?"

"Yes," said I. "How did you—?"

"Get along," she said. "Sorry I asked. Hurry!"

I entered the small door. A spiral staircase went to the surface. It was below our dignity as true people to use steps, but with C'mell urging me, there was nothing else I could do. I nodded goodbye to C'mell and drew Virginia after me up the stairs.

At the surface we stopped.

Virginia gasped, "Wasn't it horrible?"

"We're safe now," said I.

"It's not safety," she said. "It's the dirtiness of it. Imagine having to talk to her!"

Virginia meant that C'mell was worse than the drunken bull-man. She sensed my reserve because she said,

"The sad thing is, you'll see her again . . ."

"What! How do you know that?"

"I don't know it," said Virginia. "I guess it. But I guess good, very good. After all, I went to the Abba-dingo."

"I asked you, darling, to tell me what happened there."

She shook her head mutely and began walking down the streetway. I had no choice but to follow her. It made me a little irritable.

I asked again, more crossly, "What was it like?"

With hurt girlish dignity she said, "Nothing, nothing. It was a long climb. The old woman made me go with her. It turned out that the machine was not talking that day, anyhow, so we got permission to drop down a shaft and to come back on the rolling road. It was just a wasted day."

She had been talking straight ahead, not to me, as though the memory were a little ugly.

Then she turned her face to me. The brown eyes looked into my eyes as though she were searching for my soul. (Soul. There's a word we have in French, and there is nothing quite like it in the Old Common Tongue.) She brightened and pleaded with me:

"Let's not be dull on the new day. Let's be good to the new us, Paul. Let's do something really French, if that's what we are to be."

"A café," I cried. "We need a café. And I know where one is."

"Where?"

"Two undergrounds over. Where the machines come out and where you can see the homunculi peering over the edge." The thought of homunculi peering out struck the new-me as funny, though the old-me had taken them as much for granted as clouds or windows or tables. Of course homunculi had feelings; they weren't exactly people, since they were bred from animals, but they looked just about like people, and they could talk. It took a Frenchman like the new-me to realize that those things were picturesque. More than picturesque: romantic.

Evidently Virginia thought the same, for she said, "But they're *nette*, just adorable. And what is the café called?"

"The Greasy Cat," said I.

The Greasy Cat. How was I to know that this led to a nightmare between high waters, and to the winds which cried? How was I to suppose that this had anything to do with Alpha Ralpa Boulevard?

No force in the world could have taken me there, if I had known.

Other new-French people had gotten to the café before us.

A waiter with a big brown moustache took our order. I looked closely at him to see if he might be a licensed homunculus, allowed to work among people because his

services were indispensable; but he was not. He was pure machine, though his voice rang out with old-Parisian heartiness, and the designers had even built into him the nervous habit of mopping the back of his hand against his big moustache, and had fixed him so that little beads of sweat showed high up on his brow, just below the hairline.

"Mamselle? M'sieu? Beer? Coffee? Red wine next month. The sun will shine in the quarter after the hour and after the half hour. At twenty minutes to the hour it will rain for five minutes so that you can enjoy these umbrellas. I am a native of Alsace. You may speak French or German to me."

"Anything," said Virginia. "You decide, Paul."

"Beer, please," said I. "Blonde beer for both of us."

"But certainly, m'sieu," said the waiter.

He left, waving his cloth wildly over his arm.

Virginia puckered up her eyes against the sun and said, "I wish it would rain now. I've never seen real rain."

"Be patient, honey."

She turned earnestly to me. "What is 'German,' Paul?"

"Another language, another culture. I read they will bring it to life next year. But don't you like being French?"

"I like it fine," she said. "Much better than being a number. But

Paul—"And then she stopped, her eyes blurred with perplexity.

"Yes, darling?"

"Paul," she said, and the statement of my name was a cry of hope from some depth of her mind beyond new-me, beyond old-me, beyond even the contrivances of the Lords who moulded us. I reached for her hand.

Said I, "You can tell me, darling."

"Paul," she said, and it was almost weeping, "Paul, why does it all happen so fast? This is our first day, and we both feel that we may spend the rest of our lives together. There's something about marriage, whatever that is, and we're supposed to find a priest, and I don't understand that, either. Paul, Paul, Paul, why does it happen so fast? I want to love you. I do love you. But I don't want to be *made* to love you. I want it to be to the real me," and as she spoke, tears poured from her eyes though her voice remained steady enough.

Then it was that I said the wrong thing.

"You don't have to worry, honey. I'm sure that the Lords of the Instrumentality have programmed everything well."

At that, she burst into tears, loudly and uncontrollably. I had never seen an adult weep before. It was strange and frightening.

A man from the next table came over and stood beside me,

but I did not so much as glance at him.

"Darling," said I, reasonably, "darling, we can work it out—"

"Paul, let me leave you, so that I may be yours. Let me go away for a few days or a few weeks or a few years. Then, if—if—if I do come back, you'll know it's me and not some program ordered by a machine. For God's sake, Paul—for God's sake!" In a different voice she said, "What is God, Paul? They gave us the words to speak, but I do not know what they mean?"

The man beside me spoke. "I can take you to God," he said.

"Who are you?" said I. "And who asked you to interfere?" This was not the kind of language that we had ever used when speaking the Old Common Tongue—when they had given us a new language they had built in temperament as well.

The stranger kept his politeness—he was as French as we but he kept his temper well.

"My name," he said, "is Maximilien Macht, and I used to be a Believer."

Virginia's eyes lit up. She wiped her face absentmindedly while staring at the man. He was tall, lean, sunburned. (How could he have gotten sunburned so soon?) He had reddish hair and a moustache almost like that of the robot waiter.

"You asked about God, Mam-

selles," said the stranger. "God is where he has always been—around us, near us, in us."

This was strange talk from a man who looked worldly. I rose to my feet to bid him goodbye. Virginia guessed what I was doing and she said:

"That's nice of you, Paul. Give him a chair."

There was warmth in her voice.

The machine waiter came back with two conical beakers made of glass. They had a golden fluid in them with a cap of foam on top. I had never seen or heard of beer before, but I knew exactly how it would taste. I put imaginary money on the tray, received imaginary change, paid the waiter an imaginary tip. The Instrumentality had not yet figured out how to have separate kinds of money for all the new cultures, and of course you could not use real money to pay for food or drink. Food and drink are free.

The machine wiped his moustache, used his serviette (checked red and white) to dab the sweat off his brow, and then looked inquiringly at Monsieur Macht.

"M'sieu, you will sit here?"

"Indeed," said Macht.

"Shall I serve you here?"

"But why not?" said Macht. "If these good people permit."

"Very well," said the machine, wiping his moustache with the back of his hand. He fled to the dark recesses of the bar.

All this time Virginia had not taken her eyes off Macht.

"You are a Believer?" she asked. "You are still a Believer, when you have been made French like us? How do you know you're you? Why do I love Paul? Are the Lords and their machines controlling everything in us? I want to be *me*. Do you know how to be *me*?"

"Not you, Mamselle," said Macht, "that would be too great an honor. But I am learning how to be myself. You see," he added, turning to me, "I have been French for two weeks now, and I know how much of me is myself, and how much has been added by this new process of giving us language and danger again."

The waiter came back with a small beaker. It stood on a stem, so that it looked like an evil little miniature of Earthport. The fluid it contained was milky white.

Macht lifted his glass to us. "Your health!"

Virginia stared at him as if she were going to cry again. When he and I sipped, she blew her nose and put her handkerchief away. It was the first time I had ever seen a person perform that act of blowing the nose, but it seemed to go well with our new culture.

Macht smiled at both of us, as if he were going to begin a speech. The sun came out, right on time. It gave him a halo, and made him look like a devil or a saint.

But it was Virginia who spoke first.

"You have been there?"

Macht raised his eyebrows a little, frowned, and said "Yes," very quietly.

"Did you get a word?" she persisted.

"Yes." He looked glum, and a little troubled.

"What did it say?"

For answer, he shook his head at her, as if there were things which should never be mentioned in public.

I wanted to break in, to find out what this was all about.

Virginia went on, heeding me not at all: "But it did say something!"

"Yes," said Macht.

"Was it important?"

"Mamselle, let us not talk about it."

"We must," she cried. "It's life or death." Her hands were clenched so tightly together that her knuckles showed white. Her beer stood in front of her, untouched, growing warm in the sunlight.

"Very well," said Macht, "you may ask. . . . I cannot guarantee to answer."

I controlled myself no longer. "What's all this about?"

Virginia looked at me with scorn, but even her scorn was the scorn of a lover, not the cold remoteness of the past. "Please, Paul, you wouldn't know. Wait a

while. What did it say to you, M'sieu Macht?"

"That I, Maximilien Macht, would live or die with a brown-haired girl who was already betrothed." He smiled wryly, "And I do not even quite know what 'betrothed' means."

"We'll find out," said Virginia. "When did it say this?"

"Who is 'it'?" I shouted at them. "For God's sake, what is this all about?"

Macht looked at me and dropped his voice when he spoke: "The Abba-dingo." To her he said, "Last week."

Virginia turned white. "So it does work, it does, it does. Paul darling, it said nothing to me. But it said to my aunt something which I can't ever forget!"

I held her arm firmly and tenderly and tried to look into her eyes, but she looked away. Said I, "What did it say?"

"Paul and Virginia."

"So what?" said I.

I scarcely knew her. Her lips were tense and compressed. She was not angry. It was something different, worse. She was in the grip of tension. I suppose we had not seen that for thousands of years, either. "Paul, seize this simple fact, if you can grasp it. The machine gave that woman our names—but it gave them to her twelve years ago."

Macht stood up so suddenly that his chair fell over, and the

waiter began running toward us.

"That settles it," he said.

"We're all going back."

"Going where?" I said.

"To the Abba-dingo."

"But why now?" said I; and, "Will it work?" said Virginia, both at the same time.

"It always works," said Macht, "if you go on the northern side."

"How do you get there?" said Virginia.

Macht frowned sadly, "There's only one way. By Alpha Ralpa Boulevard." Virginia stood up. And so did I.

Then, as I rose, I remembered. Alpha Ralpa Boulevard. It was a ruined street hanging in the sky, faint as a vapor trail. It had been a processional highway once, where conquerors came down and tribute went up. But it was ruined, lost in the clouds, closed to mankind for a hundred centuries.

"I know it," said I. "It's ruined."

Macht said nothing, but he stared at me as if I were an outsider . . .

Virginia, very quiet and white of countenance, said, "Come along."

"But why?" said I. "Why?"

"You fool," she said, "if we don't have a God, at least we have a machine. This is the only thing left on or off the world which the Instrumentality doesn't understand. Maybe it tells the future. Maybe it's an un-machine. It certainly comes from a different time.

Can't you see it, darling? If it says we're us, we're us."

"And if it doesn't?"

"Then we're not." Her face was sullen with grief.

"What do you mean?"

"If we're not us," she said, "we're just toys, dolls, puppets that the Lords have written on. You're not you and I'm not me. But if the Abba-dingo, which knew the names Paul and Virginia twelve years before it happened—if the Abba-dingo says that we are us, I don't care if it's a predicting machine or a god or a devil or a what. I don't care, but I'll have the truth."

What could I have answered to that? Macht led, she followed, and I walked third in single file. We left the sunlight of The Greasy Cat; just as we left, a light rain began to fall. The waiter, looking momentarily like the machine that he was, stared straight ahead. We crossed the lip of the underground and went down to the fast expressway.

When we came out, we were in a region of fine homes. All were in ruins. The trees had thrust their way into the buildings. Flowers rioted across the lawn, through the open doors, and blazed in the roofless rooms. Who needed a house in the open, when the population of Earth had dropped so that the cities were commodious and empty?

Once I thought I saw a family of homunculi, including little ones, peering at me as we trudged along the soft gravel road. Maybe the faces I had seen at the edge of the house were fantasies.

Macht said nothing.

Virginia and I held hands as we walked beside him. I could have been happy at this odd excursion, but her hand was tightly clenched in mine. She bit her lower lip from time to time. I knew it mattered to her—she was on a pilgrimage. (A pilgrimage was an ancient walk to some powerful place, very good for body and soul.) I didn't mind going along. In fact, they could not have kept me from coming, once she and Macht decided to leave the café. But I didn't have to take it seriously. Did I?

What did Macht want?

Who was Macht? What thoughts had that mind learned in two short weeks? How had he preceded us into a new world of danger and adventure? I did not trust him. For the first time in my life I felt alone. Always, always, up to now, I had only to think about the Instrumentality and some protector leaped fully-armed into my mind. Telepathy guarded against all dangers, healed all hurts, carried each of us forward to the one hundred and forty-six thousand and ninety-seven days which had been allotted us. Now it was different. I did not know this man, and it was on him that

I relied, not on the powers which had shielded and protected us.

We turned from the ruined road into an immense boulevard. The pavement was so smooth and unbroken that nothing grew on it, save where the wind and dust had deposited random little pockets of earth.

Macht stopped.

"This is it," he said. "Alpha Ralpa boulevard."

We fell silent and looked at the causeway of forgotten empires.

To our left the boulevard disappeared in a gentle curve. It led far north of the city in which I had been reared. I knew that there was another city to the north, but I had forgotten its name. Why should I have remembered it? It was sure to be just like my own.

But to the right—

To the right the boulevard rose sharply, like a ramp. It disappeared into the clouds. Just at the edge of the cloud-line there was a hint of disaster. I could not see for sure, but it looked to me as though the whole boulevard had been sheared off by unimaginable forces. Somewhere beyond the clouds there stood the Abba-dingo, the place where all questions were answered . . .

Or so they thought.

Virginia cuddled close to me.

"Let's turn back," said I. "We are city people. We don't know anything about ruins."

"You can if you want to," said

Macht. "I was just trying to do you a favor."

We both looked at Virginia.

She looked up at me with those brown eyes. From the eyes there came a plea older than woman or man, older than the human race. I knew what she was going to say before she said it. She was going to say that she *had* to know.

Macht was idly crushing some soft rocks near his foot.

At last Virginia spoke up: "Paul, I don't want danger for its own sake. But I meant what I said back there. Isn't there a chance that we were *told* to love each other? What sort of a life would it be if our happiness, our own selves, depended on a thread in a machine or on a mechanical voice which spoke to us when we were asleep and learning French? It may be fun to go back to the old world. I guess it is. I know that you give me a kind of happiness which I never even suspected before this day. If it's really us, we have something wonderful, and we ought to know it. But if it isn't—" She burst into sobs.

I wanted to say, "If it isn't, it will seem just the same," but the ominous sulky face of Macht looked at me over Virginia's shoulder as I drew her to me. There was nothing to say.

I held her close.

From beneath Macht's foot there flowed a trickle of blood. The dust drank it up.

"Macht," said I, "are you hurt?"
Virginia turned around, too.

Macht raised his eyebrows at me and said with unconcern, "No. Why?"

"The blood. At your feet."

He glanced down. "Oh, those," he said, "they're nothing. Just the eggs of some kind of an un-bird which does not even fly."

"Stop it!" I shouted telepathically, using the Old Common Tongue. I did not even try to think in our new-learned French.

He stepped back a pace in surprise.

Out of nothing there came to me a message: thankyou thankyou goodgreat gohomeplease thankyou goodgreat goaway manbad manbad manbad. . . . Somewhere an animal or bird was warning me against Macht. I thought a casual *thanks* to it and turned my attention to Macht.

He and I stared at each other. Was this what *culture* was? Were we now men? Did freedom always include the freedom to mistrust, to fear, to hate?

I liked him not at all. The words of forgotten crimes came into my mind: assassination, murder, abduction, insanity, rape, robbery . . .

We had known none of these things and yet I felt them all.

He spoke evenly to me. We had both been careful to guard our minds against being read telepathically, so that our only means

of communication were empathy and French. "It's your idea," he said, most untruthfully, "or at least your lady's . . ."

"Has lying already come into the world," said I, "so that we walk into the clouds for no reason at all?"

"There is a reason," said Macht.

I pushed Virginia gently aside and capped my mind so tightly that the anti-telepathy felt like a headache.

"Macht," said I, and I myself could hear the snarl of an animal in my own voice, "tell me why you have brought us here or I will kill you."

He did not retreat. He faced me, ready for a fight. He said, "Kill? You mean, to make me dead?" but his words did not carry conviction. Neither one of us knew how to fight, but he readied for defense and I for attack.

Underneath my thought shield an animal thought crept in: goodman goodman take him by the neck no-air he-aaah no-air he-aaah like broken egg. . . .

I took the advice without worrying where it came from. It was simple. I walked over to Macht, reached my hands around his throat and squeezed. He tried to push my hands away. Then he tried to kick me. All I did was hang on to his throat. If I had been a lord or a go-captain, I might have known about fighting. But I did not, and neither did he.

It ended when a sudden weight dragged at my hands.

Out of surprise, I let go.

Macht had become unconscious. Was that *dead*?

It could not have been, because he sat up. Virginia ran to him. He rubbed his throat and said with a rough voice:

"You should not have done that."

This gave me courage. "Tell me," I spat at him, "tell me why you wanted us to come, or I will do it again."

Macht grinned weakly. He leaned his head against Virginia's arm. "It's fear," he said. "Fear."

"Fear?" I knew the word—*peur*—but not the meaning. Was it some kind of disquiet or animal alarm?

I had been thinking with my mind open; he thought back *yes*.

"But why do you like it?" I asked.

It is delicious, he thought. It makes me sick and thrilly and alive. It is like strong medicine, almost as good as stroon. I went there before. High up, I had much fear. It was wonderful and bad and good, all at the same time. I lived a thousand years in a single hour. I wanted more of it, but I thought it would be even more exciting with other people.

"Now I will kill you," said I in French. "You are very—very . . ." I had to look for the word. "You are very evil."

"No," said Virginia, "let him talk."

He thought at me, not bothering with words. *This is what the Lords of the Instrumentality never let us have. Fear. Reality. We were born in a stupor and we died in a dream. Even the underpeople, the animals, had more life than we did. The machines did not have fear. That's what we were. Machines who thought they were men. And now we are free.*

He saw the edge of raw red anger in my mind, and he changed the subject. *I did not lie to you. This is the way to the Abba-dingo. I have been there. It works. On this side, it always works.*

"It works," cried Virginia. "You see he says so. It works! He is telling the truth. Oh, Paul, do let's go on!"

"All right," said I, "we'll go."

I helped him rise. He looked embarrassed, like a man who has shown something of which he is ashamed.

We walked onto the surface of the indestructible boulevard. It was comfortable to the feet.

At the bottom of my mind the little unseen bird or animal babbled its thoughts at me: *goodman goodman make him dead take water take water. . . .*

I paid no attention as I walked forward with her and him, Virginia between us. I paid no attention.

I wish I had.

We walked for a long time.

The process was new to us. There was something exhilarating in knowing that no one guarded us, that the air was free air, moving without benefit of weather machines. We saw many birds, and when I thought at them I found their minds startled and opaque; they were natural birds, the like of which I had never seen before. Virginia asked me their names, and I outrageously applied all the bird-names which we had learned in French without knowing whether they were historically right or not.

Maximilien Macht cheered up, too, and he even sang us a song, rather off key, to the effect that we would take the high road and he the low one, but that he would be in Scotland before us. It did not make sense, but the lilt was pleasant. Whenever he got a certain distance ahead of Virginia and me, I made up variations on "Macouba" and sang-whispered the phrases into her pretty ear,

*She wasn't the woman I went
to seek.*

*I met her by the merest chance.
She did not speak the French of
France,*

*But the surded French of Mar-
tinique.*

freedom, until we became hungry. Then our troubles began.

Virginia stepped up to a lamp-post, struck it lightly with her fist and said, "Feed me." The post should either have opened, serving us a dinner, or else told us where, within the next few hundred yards, food was to be had. It did neither. It did nothing. It must have been broken.

With that, we began to make a game of hitting every single post.

Alpha Rapha Boulevard had risen about half a kilometer above the surrounding countryside. The wild birds wheeled below us. There was less dust on the pavement, and fewer patches of weeds. The immense road, with no pylons below it, curved like an unsupported ribbon into the clouds.

We wearied of beating posts and there was neither food nor water.

Virginia became fretful: "It won't do any good to go back now. Food is even further the other way. I do wish you'd brought something."

How should I have thought to carry food? Who ever carries food? Why would they carry it, when it is everywhere? My darling was unreasonable, but she was my darling and I loved her all the more for the sweet imperfections of her temper.

Macht kept tapping pillars, partly to keep out of our fight and obtained an unexpected result.

We were happy in adventure and

At one moment I saw him leaning over to give the pillar of a large lamp the usual hearty but guarded *whop*—in the next instant he yelped like a dog and was sliding uphill at a high rate of speed. I heard him shout something, but could not make out the words, before he disappeared into the clouds ahead.

Virginia looked at me. "Do you want to go back now? Macht is gone. We can say that I got tired."

"Are you serious?"

"Of course, darling."

I laughed, a little angrily. She had insisted that we come, and now she was ready to turn around and give it up, just to please me.

"Never mind," said I. "It can't be far now. Let's go on."

"Paul . . ." She stood close to me. Her brown eyes were troubled, as though she were trying to see all the way into my mind through my eyes. I thought to her, *do you want to talk this way?*

"No," said she, in French. "I want to say things one at a time. Paul, I do want to go to the Abbadingo. I need to go. It's the biggest need in my life. But at the same time I don't want to go. There is something wrong up there. I would rather have you on the wrong terms than not have you at all. Something could happen."

Edgily, I demanded, "Are you getting this 'fear' that Macht was talking about?"

"Oh, no, Paul, not at all. This feeling isn't exciting. It feels like something broken in a machine—"

"Listen!" I interrupted her.

From far ahead, from within the clouds, there came a sound like an animal wailing. There were words in it. It must have been Macht. I thought I heard "take care." When I sought him with my mind, the distance made circles and I got dizzy.

"Let's follow, darling," said I.

"Yes, Paul," said she, and in her voice there was an unfathomable mixture of happiness, resignation, and despair . . .

Before we moved on, I looked carefully at her. She *was* my girl. The sky had turned yellow and the lights were not yet on. In the yellow rich sky her brown curls were tinted with gold, her brown eyes approached the black in their irises, her young and fate-haunted face seemed more meaningful than any other human face I had ever seen.

"You *are* mine," I said.

"Yes, Paul." She answered me and then smiled brightly. "You said it! That is doubly nice."

A bird on the railing looked sharply at us and then left. Perhaps he did not approve of human nonsense, so flung himself downward into dark air. I saw him catch himself, far below, and ride lazily on his wings.

"We're not as free as birds,

darling," I told Virginia, "but we are freer than people have been for a hundred centuries."

For answer she hugged my arm and smiled at me.

"And now," I added, "to follow Macht. Put your arms around me and hold me tight. I'll try hitting that post. If we don't get dinner we may get a ride."

I felt her take hold tightly and then I struck the post.

Which post? An instant later the posts were sailing by us in a blur. The ground beneath our feet seemed steady, but we were moving at a fast rate. Even in the service underground I had never seen a roadway as fast as this. Virginia's dress was blowing so hard that it made snapping sounds like the snap of fingers. In no time at all we were in the cloud and out of it again.

A new world surrounded us. The clouds lay below and above. Here and there blue sky shone through. We were steady. The ancient engineers must have devised the walkway cleverly. We rode up, up, up without getting dizzy.

Another cloud.

Then things happened so fast that the telling of them takes longer than the event.

Something dark rushed at me from up ahead. A violent blow hit me in the chest. Only much later did I realize that this was Macht's arm trying to grab me before we went over the edge. Then we went

into another cloud. Before I could even speak to Virginia a second blow struck me. The pain was terrible. I had never felt anything like that in all my life. For some reason, Virginia had fallen over me and beyond me. She was pulling at my hands.

I tried to tell her to stop pulling me, because it hurt, but I had no breath. Rather than argue, I tried to do what she wanted. I struggled toward her. Only then did I realize that there was nothing below my feet—no bridge, no jetway, nothing.

I was on the edge of the boulevard, the broken edge of the upper side. There was nothing below me except for some looped cables, and, far underneath them, a tiny ribbon which was either a river or a road.

We had jumped blindly across the great gap and I had fallen just far enough to catch the upper edge of the roadway on my chest.

It did not matter, the pain.

In a moment the doctor-robot would be there to repair me.

A look at Virginia's face reminded me there was no doctor-robot, no world, no Instrumentality, nothing but wind and pain. She was crying. It took a moment for me to hear what she was saying,

"I did it, I did it, darling, are you dead?"

Neither one of us was sure what "dead" meant, because peo-

ple always went away at their appointed time, but we knew that it meant a cessation of life. I tried to tell her that I was living, but she fluttered over me and kept dragging me further from the edge of the drop.

I used my hands to push myself into a sitting position.

She knelt beside me and covered my face with kisses.

At last I was able to gasp, "Where's Macht?"

She looked back. "I don't see him."

I tried to look too. Rather than have me struggle, she said, "You stay quiet. I'll look again."

Bravely she walked to the edge of the sheared-off boulevard. She looked over toward the lower side of the gap, peering through the clouds which drifted past us as rapidly as smoke sucked by a ventilator. Then she cried out:

"I see him. He looks so funny. Like an insect in the museum. He is crawling across on the cables."

Struggling to my hands and knees, I neared her and looked too. There he was, a dot moving along a thread, with the birds soaring by beneath him. It looked very unsafe. Perhaps he was getting all the "fear" that he needed to keep himself happy. I did not want that "fear," whatever it was. I wanted food, water, and a doctor-robot.

None of these was here.

I struggled to my feet. Virginia

tried to help me but I was standing before she could do more than touch my sleeve.

"Let's go on."

"On?" she said.

"On to the Abba-dingo. There may be friendly machines up there. Here there is nothing but cold and wind, and the lights have not yet gone on."

She frowned. "But Macht . . .?"

"It will be hours before he gets here. We can come back."

She obeyed.

Once again we went to the left of the boulevard. I told her to squeeze my waist while I struck the pillars, one by one. Surely there must have been a reactivating device for the passengers on the road.

The fourth time, it worked.

Once again the wind whipped our clothing as we raced upward on Alpha Ralpa boulevard.

We almost fell as the road veered to the left. I caught my balance, only to have it veer the other way.

And then we stopped.

This was the Abba-dingo.

A walkway littered with white objects—knobs and rods and imperfectly formed balls about the size of my head.

Virginia stood beside me, silent.

About the size of my head? I kicked one of the objects aside and then knew, knew for sure.

what it was. It was people. The inside parts. I had never seen such things before. And that, that on the ground, must once have been a hand. There were hundreds such things along the wall.

"Come, Virginia," said I, keeping my voice even, and my thoughts hidden.

She followed without saying a word. She was curious about the things on the ground, but she did not seem to recognize them.

For my part, I was watching the wall.

At last I found them—the little doors of Abba-dingo.

One said, METEOROLOGICAL. It was not Old Common Tongue, nor was it French, but it was so close that I knew it had something to do with the behavior of air. I put my hand against the panel of the door. The panel became translucent and ancient writing showed through. There were numbers which meant nothing, words which meant nothing, and then:

"Typhoon coming."

My French had not taught me what a "coming" was, but "typhoon" was plainly *typhon*, a major air disturbance. Thought I, let the weather machines take care of the matter. It had nothing to do with us.

"That's no help," said I.

"What does it mean?" she said.

"The air will be disturbed."

"Oh," said she. "That couldn't matter to us, could it?"

"Of course not."

I tried the next panel, which said FOOD. When my hand touched the little door, there was an aching creak inside the wall, as though the whole tower retched. The door opened a little bit and a horrible odor came out of it. Then the door closed again.

The third door said HELP and when I touched it nothing happened. Perhaps it was some kind of tax-collecting device from the ancient days. It yielded nothing to my touch. The fourth door was larger and already partly open at the bottom. At the top, the name of the door was PREDICTIONS. Plain enough, that one was, to anyone who knew Old French. The name at the bottom was more mysterious: PUT PAPER HERE it said, and I could not guess what it meant.

I tried telepathy. Nothing happened. The wind whistled past us. Some of the calcium balls and knobs rolled on the pavement. I tried again, trying my utmost for the imprint of long-departed thoughts. A scream entered my mind, a thin long scream which did not sound much like people. That was all.

Perhaps it did upset me. I did not feel "fear," but I was worried about Virginia.

She was staring at the ground.

"Paul," she said, "isn't that a man's coat on the ground among those funny things?"

Once I had seen an ancient X-ray in the museum, so I knew that the coat still surrounded the material which had provided the inner structure of the man. There was no ball there, so that I was quite sure he was *dead*. How could that have happened in the old days? Why did the Instrumentality let it happen? But then, the Instrumentality had always forbidden this side of the tower. Perhaps the violators had met their own punishment in some way I could not fathom.

"Look, Paul," said Virginia. "I can put my hand in."

Before I could stop her, she had thrust her hand into the flat open slot which said **PUT PAPER HERE**.

She screamed.

Her hand was caught.

I tried to pull at her arm, but it did not move. She began gasping with pain. Suddenly her hand came free.

Clear words were cut into the living skin. I tore my cloak off and wrapped her hand.

As she sobbed beside me I unbandaged her hand. As I did so she saw the words on her skin.

The words said, in clear French, "You will love Paul all your life."

Virginia let me bandage her hand with my cloak and then she lifted her face to be kissed. "It was worth it," she said; "it was worth all the trouble, Paul. Let's

see if we can get down. Now I know."

I kissed her again and said, reassuringly, "You do know, don't you?"

"Of course," she smiled through her tears. "The Instrumentality could not have contrived this. What a clever old machine! Is it a god or a devil, Paul?"

I had not studied those words at that time, so I patted her instead of answering. We turned to leave.

At the last minute I realized that I had not tried **PREDICTIONS** myself.

"Just a moment, darling. Let me tear a little piece off the bandage."

She waited patiently. I tore a piece the size of my hand, and then I picked up one of the ex-person units on the ground. It may have been the front of an arm. I returned to push the cloth into the slot, but when I turned to the door, an enormous bird was sitting there.

I used my hand to push the bird aside, and he cawed at me. He even seemed to threaten me with his cries and his sharp beak. I could not dislodge him.

Then I tried telepathy. *I am a true man. Go away!*

The bird's dim mind flashed back at me nothing but *no-no-no-no-no!*

With that I struck him so hard with my fist that he fluttered to

the ground. He righted himself amid the white litter on the pavement and then, opening his wings, he let the wind carry him away.

I pushed in the scrap of cloth, counted to twenty in my mind, and pulled the scrap out.

The words were plain, but they meant nothing: "You will love Virginia twenty-one more minutes."

Her happy voice, reassured by the prediction but still unsteady from the pain in her written-on hand, came to me as though it were far away. "What does it say, darling?"

Accidentally on purpose, I let the wind take the scrap. It fluttered away like a bird. Virginia saw it go.

"Oh," she cried disappointedly, "We've lost it! What did it say?"

"Just what yours did."

"But what words, Paul? How did it say it?"

With love and heartbreak and perhaps a little "fear," I lied to her and whispered gently,

"It said, 'Paul will always love Virginia.'"

She smiled at me radiantly. Her stocky, full figure stood firmly and happily against the wind. Once again she was the chubby, pretty Menerima whom I had noticed in our block when we both were children. And she was more than that. She was my new-found love in our new-found world. She was my mademoiselle from Mar-

tinique. The message was foolish. We had seen from the food-slot that the machine was broken.

"There's no food or water here," said I. Actually, there was a puddle of water near the railing, but it had been blown over the human structural elements on the ground, and I had no heart to drink it.

Virginia was so happy that, despite her wounded hand, her lack-of-water and her lack-of-food, she walked vigorously and cheerfully.

Thought I to myself, "Twenty-one minutes. About six hours have passed. If we stay here we face unknown dangers."

Vigorously we walked downward, down Alpha Ralpa Boulevard. We had met the Abba-dingo and were still "alive." I did not think that I was "dead," but the words had been meaningless so long that it was hard to think them.

The ramp was so steep going down that we pranced like horses. The wind blew into our faces with incredible force. That's what it was, *wind*, but I looked up the word *vent* only after it was all over.

We never did see the whole tower—just the wall at which the ancient jetway had deposited us. The rest of the tower was hidden by clouds which fluttered like torn rags as they raced past the heavy material.

The sky was red on one side and a dirty yellow on the other.

Big drops of water began to strike at us.

"The weather machines are broken," I shouted to Virginia.

She tried to shout back at me but the wind carried her words away. I repeated what I had said about the weather machines. She nodded happily and warmly, though the wind was by now whipping her hair past her face and the pieces of water which fell from up above were spotting her flame-golden gown. It did not matter. She clung to my arm. Her happy face smiled at me as we stamped downward, bracing ourselves against the decline in the ramp. Her brown eyes were full of confidence and life. She saw me looking at her and she kissed me on the upper arm without losing step. She was my own girl forever, and she knew it.

The water-from-above, which I later knew was actual "rain," came in increasing volume. Suddenly it included birds. A large bird flapped his way vigorously against the whistling air and managed to stand still in front of my face, though his air speed was many leagues per hour. He cawed in my face and then was carried away by the wind. No sooner had that one gone than another bird struck me in the body. I looked down at it but it too was carried away by the racing current of air. All I got was a telepathic echo from its bright blank mind: *no-no-no-no!*

No what? thought I. A bird's advice is not much to go upon.

Virginia grabbed my arm and stopped.

I too stopped.

The broken edge of Alpha Ralpa Boulevard was just ahead. Ugly yellow clouds swam through the break like poisonous fish hastening on an inexplicable errand.

Virginia was shouting.

I could not hear her, so I leaned down. That way her mouth could almost touch my ear.

"Where is Macht?" she shouted.

Carefully I took her to the left side of the road, where the railing gave us some protection against the heavy racing air, and against the water commingled with it. By now neither of us could see very far. I made her drop to her knees. I got down beside her. The falling water pelted our backs. The light around us had turned to a dark dirty yellow.

We could still see, but we could not see much.

I was willing to sit in the shelter of the railing, but she nudged me. She wanted us to do something about Macht. What anyone could do, that was beyond me. If he had found shelter, he was safe, but if he was out on those cables, the wild pushing air would soon carry him off and then there would be no more Maximilien Macht. He would be "dead" and his interior parts would bleach somewhere on the open ground.

Virginia insisted.

We crept to the edge.

A bird swept in, true as a bullet, aiming for my face. I flinched. A wing touched me. It stung against my cheek like fire. I did not know that feathers were so tough. The birds must all have damaged mental mechanisms, thought I, if they hit people on Alpha Ralpa. That is not the right way to behave toward true people.

At last we reached the edge, crawling on our bellies. I tried to dig the fingernails of my left hand into the stone-like material of the railing, but it was flat, and there was nothing much to hold to, save for the ornamental fluting. My right arm was around Virginia. It hurt me badly to crawl forward that way, because my body was still damaged from the blow against the edge of the road, on the way coming up. When I hesitated, Virginia thrust herself forward.

We saw nothing.

The gloom was around us.

The wind and the water beat at us like fists.

Her gown pulled at her like a dog worrying its master. I wanted to get her back into the shelter of the railing, where we could wait for the air-disturbance to end.

Abruptly, light shone all around us. It was wild electricity, which the ancients called *lightning*. Later I found that it occurs quite frequently in the areas be-

yond the reach of the weather machines.

The bright quick light showed us a white face staring at us. He hung on the cables below us. His mouth was open, so he must have been shouting. I shall never know whether the expression on his face showed "fear" or great happiness. It was full of excitement. The bright light went out and I thought that I heard the echo of a call. I reached for his mind telepathically and there was nothing there. Just some dim, obstinate bird thinking at me, *no-no-no-no-no!*

Virginia tightened in my arms. She squirmed around. I shouted at her in French. She could not hear.

Then I called with my mind. Someone else was there.

Virginia's mind blazed at me, full of revulsion, "The cat girl. She is going to *touch* me!"

She twisted. My right arm was suddenly empty. I saw the gleam of a golden gown flash over the edge, even in the dim light. I reached with my mind, and I caught her cry:

"Paul, Paul, I love you. Paul . . . help me!"

The thoughts faded as her body dropped.

The someone else was C'mell, whom we had first met in the corridor.

"I came to get you both," she

thought at me; "not that the birds cared about her."

"What have the birds got to do with it?"

"You saved them. You saved their young, when the red-topped man was killing them all. All of us have been worried about what you true people would do to us when you were free. We found out. Some of you are bad and kill other kinds of life. Others of you are good and protect life."

Thought I, is that all there is to good and bad?

Perhaps I should not have left myself off guard. People did not have to understand fighting, but the homunculi did. They were bred amidst battle and they served through troubles. C'mell, cat-girl that she was, caught me on the chin with a piston-like fist. She had no anesthesia, and the only way—cat or no cat—that she could carry me across the cables in the "typhoon" was to have me unconscious and relaxed.

I awakened in my own room. I felt very well indeed. The robot-doctor was there. Said he:

"You've had a shock. I've already reached a subcommissioner of the Instrumentality, and I can erase the memories of the last full day, if you want me to."

His expression was pleasant.

Where was the racing wind? The air falling like stone around us? The water driving where no weather machines controlled it?

Where was the golden gown and the wild fear-hungry face of Maximilien Macht?

I thought these things, but the robot-doctor, not being telepathic, caught none of it. I stared hard at him.

"Where," I cried, "is my own true love?"

Robots cannot sneer, but this one attempted to do so. "The naked cat-girl with the blazing hair? She left to get some clothing."

I stared at him.

His fuddy-duddy little machine mind cooked up its own nasty little thoughts, "I must say, sir, you 'free people' change very fast indeed . . ."

Who argues with a machine? It wasn't worth answering him.

But that other machine? Twenty-one minutes. How could that work out? How could it have known? I did not want to argue with that other machine either. It must have been a very powerful left-over machine—perhaps something once used in ancient wars. I had no intention of finding out. Some people might call it a god. I call it nothing. I do not need "fear" and I do not propose to go back to Alpha Ralpa Boulevard again.

But hear, oh heart of mine!—how can you ever visit the café again?

C'mell came in and the robot-doctor left.

Here we watch an interplay based on agreement that stealing the Siren Goddess from the Mars museum was rather like stealing the Mona Lisa—hard to do, and where would you sell it . . . ?

CRIME ON MARS

by Arthur C. Clarke

WE DON'T HAVE MUCH CRIME on Mars," said Detective-Inspector Rawlings, a little sadly. "In fact, that's the chief reason I'm going back to the Yard. If I stayed here much longer, I'd get completely out of practice."

We were sitting in the main observation lounge of the Phobos Spaceport, looking out across the jagged sun-drenched crags of the tiny moon. The ferry rocket that had brought us up from Mars had left ten minutes ago and was now beginning the long fall back to the ochre-tinted globe hanging there against the stars. In half an hour we would be boarding the liner for earth—a world on which most of the passengers had never set foot, but still called "home."

"At the same time," continued the Inspector, "now and then there's a case that makes life interesting. You're an art dealer, Mr. Maccar; I'm sure you heard about

that spot of bother at Meridian City a couple of months ago."

"I don't think so," replied the plump, olive-skinned little man I'd taken for just another returning tourist. Presumably the Inspector had already checked through the passenger list; I wondered how much he knew about me, and tried to reassure myself that my conscience was—well, reasonably clear. After all, everybody took *something* out through Martian customs—

"It's been rather well hushed up," said the Inspector, "but you can't keep these things quiet for long. Anyway, a jewel thief from Earth tried to steal Meridian Museum's greatest treasure—the Siren Goddess."

"But that's absurd!" I objected. "It's priceless, of course—but it's only a lump of sandstone. You might just as well steal the Mona Lisa."

The Inspector grinned, rather mirthlessly. "That's happened too," he said. "Maybe the motive was the same. There are collectors who would give a fortune for such an object, even if they could only look at it themselves. Don't you agree, Mr. Maccar?"

"That's perfectly true," said the art dealer. "In my business you meet all sorts of crazy people."

"Well, this chappie—name's Danny Weaver—had been well paid by one of them. And if it hadn't been for a piece of fantastically bad luck, he might have brought it off."

The Spaceport P.A. system apologized for a further slight delay owing to final fuel checks, and asked a number of passengers to report to Information. While we were waiting for the announcement to finish, I recalled what little I knew about the Siren Goddess. Although I'd never seen the original, like most other departing tourists I had a replica in my baggage. It bore the certificate of the Mars Bureau of Antiquities, guaranteeing that "this full-scale reproduction is an exact copy of the so-called Siren Goddess, discovered in the Mare Sirenium by the Third Expedition, A.D. 2012 (A.M. 23)."

It's quite a tiny thing to have caused so much controversy. Only eight or nine inches high—you wouldn't look at it twice if you saw it in a museum on Earth. The

head of a young woman, with slightly oriental features, elongated earlobes, hair curled in tight ringlets close to the scalp, lips half parted in an expression of pleasure or surprise—and that's all.

But it's an enigma so baffling that it has inspired a hundred religious sects, and driven quite a few archeologists out of their minds. For a perfectly human head has no right whatsoever to be found on Mars, whose only intelligent inhabitants were crustaceans—"educated lobsters," as the newspapers are fond of calling them. The aboriginal Martians never came near to achieving space-flight, and in any event their civilization died before men existed on Earth.

No wonder the Goddess is the Solar System's Number One mystery. I don't suppose we'll find the answer in my lifetime—if we ever do.

"Danny's plan was beautifully simple," continued the Inspector. "You know how absolutely dead a Martian city gets on Sunday, when everything closes down and the colonists stay home to watch the TV from Earth. Danny was counting on this when he checked into the hotel in Meridian West, late Friday afternoon. He'd have Saturday for reconnoitering the Museum, an undisturbed Sunday for the job itself, and on Monday morning he'd be just another tourist leaving town . . .

"Early Sturday he strolled through the little park and crossed over into Meridian East, where the Museum stands. In case you don't know, the city gets its name because it's exactly on longitude 180 degrees; there's a big stone slab in the park with the Prime Meridian engraved on it, so that visitors can get themselves photographed standing in two hemispheres at once. Amazing what simple things amuse some people.

"Danny spent the day going over the Museum, exactly like any other tourist determined to get his money's worth. But at closing time he didn't leave; he'd holed up in one of the galleries not open to the public, where the museum had been arranging a Late Canal Period reconstruction but had run out of money before the job could be finished. He stayed there until about midnight, just in case there were any enthusiastic researchers still in the building. Then he emerged and got to work."

"Just a minute, I interrupted. "What about the night watchman?"

"My dear chap! They don't have such luxuries on Mars. There weren't even any burglar alarms, for who would bother to steal lumps of stone? True, the Goddess was sealed up neatly in a strong glass and metal cabinet, just in case some souvenir hunter took a fancy to her. But even if she were stolen, there was nowhere the thief

could hide, and of course all outgoing traffic would be searched as soon as the statue was missed."

That was true enough. I'd been thinking in terms of Earth, forgetting that every city on Mars is a closed little world of its own beneath the force-field that protects it from the freezing near-vacuum. Beyond those electronic shields is the utterly hostile emptiness of the Martian Outback, where a man will die in seconds without protection. That makes law enforcement very easy.

"Danny had a beautiful set of tools, as specialized as a watchmaker's. The main item was a micro-saw no bigger than a soldering iron; it had a wafer-thin blade, driven at a million cycles a second by an ultrasonic power-pack. It would go through glass or metal like butter—and leave a cut only about as thick as a hair. Which was very important for Danny, as he could not leave any traces of his handiwork.

"I suppose you've guessed how he intended to operate. He was going to cut through the base of the cabinet and substitute one of those souvenir replicas for the genuine Goddess. It might be a couple of years before some inquisitive expert discovered the awful truth, and long before then the original would have taken to Earth, perfectly disguised as a copy of itself, with a genuine certificate of authenticity. Pretty neat, eh?"

"It must have been a weird business, working in that darkened gallery with all those million-year-old carvings and unexplainable artifacts around him. A museum on Earth is bad enough at night, but at least it's—well, *human*. And Gallery Three, which houses the Goddess, is particularly unsettling. It's full of bas-reliefs showing quite incredible animals fighting each other; they look rather like giant beetles, and most paleontologists flatly deny that they could ever have existed. But imaginary or not, they belonged to this world, and they didn't disturb Danny as much as the Goddess, staring at him across the ages and defying him to explain her presence here. She gave him the creeps. How do I know? He told me.

"Danny set to work on that cabinet as carefully as any diamond-cutter preparing to cleave a gem. It took most of the night to slice out the trap door, and it was nearly dawn when he relaxed and put down the saw. There was still a lot of work to do, but the hardest part was over. Putting the replica into the case, checking its appearance against the photos he'd thoughtfully brought with him, and covering up his traces might take a good part of Sunday, but that didn't worry him in the least. He had another twenty-four hours, and would welcome Monday's first visitors so that he could mingle with them and make his exit.

"It was a perfectly horrible shock to his nervous system, therefore, when the main doors were noisily unbarred at eight thirty and the museum staff—all six of them—started to open up for the day. Danny bolted for the emergency exit, leaving everything behind—tools, Goddesses, the lot.

"He had another big surprise when he found himself in the street: it should have been completely deserted at this time of day, with everyone at home reading the Sunday papers. But here were the citizens of Meridian East, as large as life, heading for plant or office on what was obviously a normal working day.

"By the time poor Danny got back to his hotel we were waiting for him. We couldn't claim much credit for deducing that only a visitor from Earth—and a very recent one at that—could have overlooked Meridian City's chief claim to fame. And I presume you know what *that* is."

"Frankly, I don't," I answered. "You can't see much of Mars in six weeks, and I never went east of the Syrtis Major."

"Well, it's absurdly simple, but we shouldn't be too hard on Danny—even the locals occasionally fall into the same trap. It's something that doesn't bother us on Earth, where we've been able to dump the problem in the Pacific Ocean. But Mars, of course, is all dry land; and that means that

somebody is forced to live with the International Date Line . . .

"Danny, you see, had planned the job from Meridian West. It was Sunday over there all right—and it was still Sunday there when we picked him up at the hotel. But over in Meridian East, half a mile away, it was only Saturday. That little trip across the park had made all the difference! I told you it was rotten luck."

There was a long moment of silent sympathy, then I asked, "What did he get?"

"Three years," said Inspector Rawlings.

"That doesn't seem very much."

"Mars years—that makes it almost six of ours. And a whopping fine which, by an odd coincidence, came to exactly the refund value of his return ticket to Earth. He isn't in jail, of course—Mars can't afford that kind of nonproductive luxury. Danny has to work for a living, under discreet surveillance. I told you that the Meridian Museum couldn't afford a night watchman. Well, it has one now. Guess who?"

"All passengers prepare to board

in ten minutes! Please collect your hand-baggage!" ordered the loud-speakers.

As we started to move toward the airlock, I couldn't help asking one more question.

"What about the people who put Danny up to it? There must have been a lot of money behind him. Did you get them?"

"Not yet; they'd covered their tracks pretty thoroughly, and I believe Danny was telling the truth when he said he couldn't give us a lead. Still, it's not my case. As I told you, I'm going back to my old job at the Yard. But a policeman always keeps his eyes open—like an art dealer, eh, Mr. Maccar? Why, you look a bit green about the gills. Have one of my space-sickness tablets."

"No thank you," answered Mr. Maccar, "I'm quite all right."

His tone was distinctly unfriendly; the social temperature seemed to have dropped below zero in the last few minutes. I looked at Mr. Maccar, and I looked at the Inspector. And suddenly I realized that we were going to have a very interesting trip.



John Anthony West years ago fled the weather of New York and publishing row to live on Ibiza (an island south of Robert Graves' Majorca), and write. A collection of his short stories, CALL OUT THE MALICIA, will appear here and in England some time this year or next, and included will be this stimulating (P) example of his special satiric talent.

GEORGE

by John Anthony West

GEORGE AND MARJORIE WERE sitting, alternately reaching for peanuts, watching TV—as they did most weekday evenings—when George's foot fell asleep. At least his foot seemed to be asleep though that characteristic tingling sensation was absent. First he tried massaging the foot but when it failed to improve he rose from his chair and began hopping about the living room, thinking that the exercise would restore circulation.

Marjorie watched him with increasing irritation.

"Georgel!" she said, finally, "Cut it out! You're making the image jump."

He stopped and smiled at her apologetically. "Sorry, Dear," he said. "My darn foot's asleep. Must have been sitting in the same position too long," and he began hopping again.

"George! You don't have to make such a fuss about it."

He walked, jiggled and hopped across the room in ungainly strides, shaking his foot vigorously. "I can't help it," he said, with a grimace; still hopping. "Have to wake it up."

Marjorie struck the table between the armchairs with the palm of her hand. "Everybody's foot falls asleep," she said.

George halted and glared at her. "But my foot," he said, a bit breathlessly, "is asleep right now," and he began hopping about the living room again.

"The least you can do," said Marjorie, with chilled sarcasm, "if you must hop, is to hop out in the hall."

"I'll be goddammed if I'll hop out in the hall just to wake up my foot!" he shouted.

"You're being childish again."

"Childish? What childish? What's childish about waking up my foot?"

"It's your attitude that's childish."

"Attitude? I'm trying to wake up my foot. There's no attitude in the whole picture."

"If you'll just *sit down*, Dear, and forget it, it will pass."

From the middle of the living room he stared at his wife. His brow furrowed with leashed insults; his jaws worked; but when he spoke, finally, he said, "You are right, Dear. It will pass." He sat back in the arm chair.

Several minutes later the foot was still asleep. He stood up, took a few tentative hops; but when he saw Marjorie glaring at him with her most baleful glare he sat down sheepishly, took off his shoe and began massaging the foot.

". . . George!"

"What?"

"What do you think you're doing?"

"Can't I take off my shoes?"

"Suppose someone comes?"

"Suppose they do?"

"And you're sitting there with your shoe off?"

"Can't I take off my shoes in my own house?"

"But you only took off *one* shoe."

George put one hand on his knee and with the other ruminatively scratched the balding spot

on his head. "I'm afraid I don't see the difference."

"You're completely insensitive," snapped Marjorie.

"We'll watch the program," he replied, in strained tones.

But a few minutes passed and he could no longer contain himself. He began thumping the foot on the floor and knocking it against the table leg. He felt Marjorie's gimlet glance.

"I know. I know. I'm being silly—but I can't watch the program when my foot's asleep."

"Other men could. You have no intestinal fortitude, George."

"It's easy for you to say. It isn't your foot."

"And if it were I wouldn't make a fuss about it. Men are all big babies."

George let out a long, sighing breath and jammed his back into the foam rubber cushions.

When George spoke again, his voice had a note of alarm in it. He had his foot crossed over his knee and was rubbing it vigorously. "Marjorie!" he said, "my foot isn't asleep . . ."

"Then why make all this . . ."

"Something wrong with it."

"Oh *George*."

"I'm serious. Look! I can't move it. My foot is stiff somehow." He tugged and wrenched at the foot. "See? It won't move."

"You are holding it that way on purpose."

He ripped off his sock. "Will you pay attention to me? Just look!" He wrestled with the foot; tried to flex his toes. "Now do you believe me? My whole foot is rigid."

"You are doing it on purpose. You just want my sympathy."

"Majorie, Darling. Please listen to me." He tugged at the foot. "Sec? I can't move it."

"You're not trying."

"I know when I'm trying and when I'm not. I am trying. Try to move it yourself."

She looked at the foot disdainfully. "I don't want to play games with your sweaty foot."

"My foot isn't sweaty."

"In this weather?"

"All right. My foot is sweaty. But try and move it."

"I believe you. You can't move your foot."

"You don't believe me. I can tell by the tone of your voice."

"Your foot is asleep and you can't move it. I believe you."

"It is *not* asleep; there's something wrong with it. A sleeping foot doesn't just go rigid."

Marjorie threw a peanut on the rug in pique. "You are such a hypochondriac, George. Every little thing. Just like the time you thought you had appendicitis and it was gas pains."

"What was I supposed to think? I was lying on the bed in agony. It might have been appendicitis."

"Well, it wasn't. And you're not

lying in agony right now. Your foot is asleep and you have to make such a *deal* out of it. I just don't know."

"A sleeping foot doesn't get stiff."

"It does when it's very soundly asleep . . . maybe you sprained it walking around."

"How would I do that?"

"I don't know. Where did you walk today?"

"My usual walking; what do you think? I walked from the subway to the office and then I walked to the water cooler twice . . . no, three times."

Marjorie nodded. "You see! Usually you only go to the water cooler twice."

"Yeah," George snarled, "but I only went to the Men's Room once. That makes up for it. You're always talking about things you don't know the first thing about."

"How am I supposed to know? Usually you go twice."

"That's precisely what I mean. Let's forget the whole thing." He plunged back into the cushions but when the commercial began, Marjorie said;

"Still—you can overexert a tendon and not know it. Remember Geraldine Roberts? *She* fell down the subway stairs and broke three ribs and didn't know it for a week."

George laughed mirthlessly. "I didn't fall down the subway stairs.

I didn't over-exert a tendon. And Geraldine Roberts was stewed to the ears when she fell."

"So what," said Marjorie, her eyes glittering. "Your friend, Walter, is a complete *lush*."

"We weren't talking about Walter," he replied tonelessly. He rose from the chair and began limping about the room. Marjorie watched him with scorn.

"Does it hurt?"

"No."

She smiled suddenly. "You walk like a war hero, George . . . 'Only hurts when I lawff,'" she said, with an abysmal British accent.

"I'm not a war hero and I don't want to walk like one."

"Don't be such a milktoast, George. You could have been a war hero."

George stopped limping and spoke at the wall. "How could I be a war hero? I was in New Jersey training recruits the whole time."

"Yes," said Marjorie, enthusiastically. "You are training recruits and a nervous private drops a hand grenade. In another second you see that the whole regiment will be blown to smithereens and you leap on top of it . . ."

"All of which results in a stiffened foot. Besides, I was training them to use a calculating machine. And if someone dropped a hand grenade near me, you can bet that . . ." His sarcastic ex-

pression became one of horror. Tentatively he took several steps. When he spoke his voice approached the breaking point.

"Marjorie! Marjorie! My other foot! My other foot's gone stiff! I can't move it!"

She watched his awkward hobble a moment before she spoke. "Please, George," she said. "You mustn't get this excited. Come and sit down and it will pass in a while. Your other foot's gone asleep, that's all. Don't make such a fuss about every little thing."

George hobbled in great, crooked lurches, shaking with fear and anger. "Don't make such a fuss. Great Christ! You'd think I'm just anybody. Me, George. Your husband. Suddenly I'm paralyzed; I can't walk, and you say . . ."

"Of course you can walk. You were just walking."

"Do you call that walking?" He exaggerated his hobble. "Is that walking?"

"There are millions of people who would give their right arm to walk that well . . ."

"What the hell do I care about them. It's me, George, who can't walk right now. I've got leprosy or something and you sit there . . ."

"You don't have leprosy, George. If you had leprosy your feet wouldn't stiffen; they'd fall off . . ." She stood up suddenly, and in a high, off-key voice began singing; "Lep-ro-sy. My God, I've

got lep-ro-sy. There goes my eyeball, right into my high-ball . . ."

"SHUT UP! SHUT UP!" he cried. "Can't you see I'm frightened?"

Marjorie sat down, chastened. "I was just trying to cheer you up, Dear . . . Now look at it this way. It can't be anything serious. If it were something serious there'd have been symptoms. Right? There is no serious disease without symptoms. I think you should just go off to bed now and put the whole thing out of mind. Your feet will be back to normal in the morning."

But George paid no attention to her. He hobbled in a frantic circle about the room.

"You have no idea how foolish you look," said Marjorie.

"Do you think I care? Do I care about appearances at a time like this?"

"You might at least *try* to behave like a gentleman."

George smashed his fist into his palm with a ringing thwack. "Appearances!" he shouted. "Always appearances with you! All women are the same. Intrinsic value means nothing to you. As long as it looks nice . . ."

"That's not true, George, and you know it."

"Nothing was ever more true. You'd eat horse manure if it came served with parsley."

Marjorie stared him straight in the eye. At length, with delibera-

tion, she said; "I would not."

"You would too," George snapped.

"I wouldn't."

"You would."

"Wouldn't!" she cried.

"Would!"

"Wouldn't! Wouldn't! Wouldn't!"

"WOULD. WOULD. WOULD."

"WOULDN'T. WOULDN'T. WOULDN'T. WOULDN'T!"

They both paused, breathless. George clutched his head. "God!" he cried. "We sit here talking as though nothing's wrong and my feet are paralyzed. What are we going to do, Dear?"

Marjorie sat back in her chair and smoothed her skirt over her knees. "The first thing, George, is to relax. You musn't let yourself get so excited. If you were a professional tennis star or something I could understand. But all you have to do is . . ."

"Yes. Get to the office. As long as I bring home the bacon it doesn't matter how I get there."

"President Roosevelt had to go around in a *wheelchair* and that didn't stop him from becoming . . ."

George slumped back into his chair and buried his face in his hands. "You don't understand," he whispered. "You just don't understand."

Marjorie leaned across and put her hand on the nape of his neck.

"I understand, George. Believe me, I do. In a week you'll get the hang of it. Really, you will . . . Besides, it will be all better in the morning."

"You know it won't," he moaned. "You're just trying to cheer me up. No one's ever had this before. Nobody's feet ever stiffened just like that."

"You always think you're better than everyone else. It happens to lots of people, Dear."

"Name one."

"I don't know any personally . . ."

"That's just it. That's why I'm worried. If we just knew what it was . . ." He cut himself short. "You're right," he said. "No point in getting excited. We'll watch the program." But within a few minutes he was unconsciously jiggling first one foot, then the other. Finally he could contain himself no longer. "First thing wrong with you and go running for the doctor," he mumbled.

"George," she said, wearily. "It's 9:30. Do you want me to call the doctor at *this* hour?"

"I didn't say that."

"You implied it . . . If it's no better in the morning, we'll call him then. All right?"

But George was on his feet again, limping about the room, hoping to spot some improvement. He concentrated, trying to recall his previous impressions, and it seemed that the condition

had become no worse; perhaps it was a shade better. A faint but intent smile curved the corners of his mouth. Then, in one shocking second he was wild with fear.

"MARJORIE!" he bellowed. "Marjorie! My knee. Now it's my knee. I can't move my knee. Will you look? For God's sake, look! My knee is completely stiff."

She jumped from her chair and led him to his seat; solicitous but controlled.

"George, Dear. Relax. Please relax. I'll go and call the doctor. Please relax."

George was past listening. "Relax! Relax! A while ago I was a normal man; a happy man. I went about my business. I didn't bother anyone . . . And now, God, Marjorie, look at me. A cripple."

"I'll call the doctor, George."

She started to leave the room but noticed that George was sitting in his chair with his stiffened leg jutting straight out in the air. She went to fetch a hassock. It took George a long moment to realize what she was about.

"Please, Dear. Not now," he pleaded. "Later. Fix that up later. Go and call the doctor. Please call the doctor."

But Marjorie was busy adjusting the hassock under his legs.

"Stop it! Stop it!" he cried. "It's fine this way. The leg doesn't hurt. Call the doctor."

"Don't be silly," she said, using

a nurse's clipped speech. "Suppose someone comes and you're sitting there with your foot sticking out straight. They'll think we're crazy."

George moaned. Marjorie left the room, and to George, sick with fright, the minutes seemed eternal. "Marjorie! What's taking so long?" he shouted.

Her answer came from afar. "The doctor wasn't in. I'm calling another one."

As he sat, counting seconds, his other knee went rigid. He shrieked for her, beyond all self-control, "MARJORIE! FOR THE LOVE OF GOD, MY OTHER KNEE. MY OTHER KNEE IS PARALYZED. TELL HIM TO HURRY."

Her voice echoed in the hallway. "I can't carry on two conversations at once."

"BUT MARJORIE. MY KNEE."

Marjorie returned, walking with a nurse's swift stride. Her face wore an expression of righteous conviction.

"Well?" George asked.

"Well what?"

"Well what do you think?" he roared. "What is it? What did he say?"

"Just what I told you. Nothing serious." George sank back in relief.

"Did he know what it was?"

"Of course he knew. Did you

think you were the only one? Just as I told you . . ."

George glared at her. "All right. All right. No sermons. Tell me what he said. What is it?"

Marjorie paused. "Atrophy."

"Atrophy?" he asked, puzzled. "Atrophy?"

"Plain, common atrophy."

George ran a hand over a bristly cheek. "Just atrophy," he mused. "So that's it; atrophy. Well," he said, after a pause, "at least we know what it is."

"I told you . . ."

"I told you. It was not knowing that scared me. So . . . what do we do about it?"

Marjorie appeared to search for the proper explanatory terms.

"Nothing," she said, at last.

"NOTHING!" He was wild again. "NOTHING! You mean to tell me that I have a fatal disease. I have a fatal disease and you sit there calmly and tell me there's nothing we can do . . .?"

She took his hands. "George! Get a hold of yourself. There's nothing fatal about the disease. The doctor said not to worry. Nothing can be done about it but there are absolutely *no* dangerous effects."

"Oh . . . Well . . . That's a relief" He thought about it, then eased back in his chair, his taughtened muscles relaxed. "There's nothing we can do, but there are no dangerous effects?" he repeated.

"Right. You can do anything you would do normally except move."

George let this sink in. "That's at least something," he said. "We should be thankful for that." His tensed features eased and let himself become engrossed in the TV program.

"You'll have to have courage, George. We'll have to have courage. We have to fashion a whole new life for ourselves. It won't be easy."

George turned to his wife and his stricken look returned.

"I can't face it; it happened too quickly," he said, tears welling. "This evening I was a man in my prime; I could do everything I wanted. Now . . . now . . ."

"We can start from scratch, George," she said. "We'll start a new life."

"I can't walk any more. I can't go for a simple stroll."

Her voice took on its prim nurse's pitch. "You never went for walks, Dear. When did you ever take a walk?"

"That isn't the question. It's that now I can't even if I want to . . . And I was planning on taking a walk."

"When?" she challenged.

"This Sunday. I was going to walk around the block."

"You have to stop thinking this way, George. You can't give in to self-pity."

"But such a simple thing. A stroll around the block."

"Stop it, George. You know you wouldn't have gone."

"I was planning to."

"There's nothing on the other side of the block, anyhow."

His rejoinder was skeptical and more than a little contemptuous. "How do you know?"

"I've been there."

"And there's nothing?"

"Nothing . . . well, hardly anything."

"That's what I mean! I wanted to see for myself."

"George!" she said; and for the first time there was a note of concern in her voice. "You must take my word for it. There's nothing interesting to be seen."

"I've got to get used to the whole idea," he said, disconsolately.

George twitched convulsively in his chair. His thighs had atrophied. "My thighs, Marjorie. My thighs just went . . . I can't move them."

"Have courage, Darling. Please. For your sake, for mine, have courage."

"Ah well," he said, "things could have been worse. Suppose it happened at home . . ." he laughed with genuine mirth.

"Lord, yes . . ."

"It might have happened in the subway, or tying my shoelace, or painting the ceiling."

"You are wonderful, Darling. Keeping your sense of humor."

"Complaining won't do any good."

"George!"

"Please, Dearest. Keep calm. I don't like this any better than you. I can't go bowling any more, or fishing, or play ball. Nothing."

"George, Darling! You never went bowling. You never did any of those things."

"No," he said, with resignation. "True. But I'm still young. I could have done them . . . I can't play ping-pong."

Her cry was one of anguish. "You never played ping-pong!"

After a long silence, he said; "But I always wanted to."

"We have to make a living," Marjorie said. "You can't work. What will we live on? We have to eat."

"Yes. I hadn't thought of that."

She crushed his limp hand in her tense one. "I'll work, George. I don't care. We'll get along; don't you worry. I'll do anything. I'll take in wash; I'll scrub floors; I'll work in a millinery shop. Don't you worry. I'll keep us going."

"Maybe you can get back that modelling job," he suggested. She was about to speak but he silenced her with a nod. "Let's see now. Money? Will we need money?," he mused aloud. "With our social security, company benefits, disability, and all our policies I figure, we ought to get . . ." his brow creased as he calculated. "Let's see . . . our income ought

to be increased . . . I figure . . . forty dollars a week."

Marjorie smiled briefly but the smile turned to a grimace of pain. "The price we have to pay."

George nodded, as though agreeing with some private inner thought. "Not so bad. That's not bad at all. We'll have more money; you can buy the things you always wanted. My own needs will be less . . ." He stretched out his arm toward the peanut bowl and Marjorie set it violently back on the armrest.

"Don't do that, Darling!"

"Don't do what?"

"Reach for the peanuts. Who knows, any minute now . . . and you'd be reaching for peanuts the rest of your life."

"Oh, Marge."

"I'm serious. If you want something, Dear, ask me for it. Is there anything you want? You can still move from the waist; would you rather lie down, Dear?"

"This is fine."

"Are you sure? Wouldn't you rather lie down. Remember . . ."

"This is better. I'll be able to talk to my friends. I can watch the television."

"How about the program, George? Do you like the program? Would you rather see something else?" She ran to the hall for the TV guide and came back with it opened. "There's boxing, George. Wouldn't you like to watch it?"

"Just leave it the way it is. I like this. And you know you can't stand boxing."

"I'd love to see it. Look! Rocky Florio versus Kid Garver, welterweights. I'd like to see that."

"You know you wouldn't. You hate boxing."

"Because I never understood it. Teach me, George. I'll learn to like it."

He shivered and a quick spasm contorted his features. "My waist," he said. "The atrophy hit my waist."

Marjorie looked deep into his eyes, and tears trickled from hers. "Won't it stop, George? Why won't it stop? Why us? Why not someone else?"

"That's selfish thinking, Dear."

"It's this sitting around that's so awful. This awful sitting, watching it happen. It would be different if I went out to a movie and came back and found you atrophied. But this! This dying by inches."

"You know I'm not dying. Please don't get emotional." George raised his arm unconsciously and Marjorie threw her full weight on it pressing it back to the armrest.

"Don't do that! Tell me what you want, George, and I'll do it for you."

He grinned bashfully. "It's such a small thing."

"Anything, George, no matter how small . . ."

"Would you scratch my nose for me?" She looked at him with deep pity and scratched his nose. "A little higher," George said and then sighed a contented Ahhh.

Marjorie wrung her hands. "A whole life ahead of you," she said in hollow tones, "and you'll never be able to scratch yourself. Oh, George, I'll have to be here, beside you, always, to scratch for you."

George shook his head. "No. Where the atrophy has set in there is no sensation at all. Just for a few minutes . . ."

"That's the worst part of all!" she cried. "A whole life to live and you'll never know what it is to itch." She ran her hands over his face and he kissed her palm gently. They sat in silence until George broke into both their thoughts.

"You know what I *will* miss," he said, wistfully. "I'll miss making myself snacks for the Late Late Show . . ."

"I'll make you marvellous snacks, George."

"No," he said. "No, it won't be the same thing. You don't quite understand. You see, when you go to bed early, I stay up for the Late Show and the Late Late Show. In between the two I get hungry. The house is completely quiet. Sometimes I hear buses down the avenue; once in a while a fire engine or ambulance; the siren screaming. I'm all alone. I

go into the kitchen and switch on the light. It takes a second for the fluorescents to catch and then I'm all alone in the bright, shiny kitchen. Everything is clean and tidy . . ."

"I do my best!"

"There's no food in sight. The only thing you can see are spotless shelves, a gleaming refrigerator, maybe a drainboard with clean dishes and cups in it. It looks like there isn't a bit of food in the place. I go to the refrigerator and open it . . ." His voice grew enthusiastic as he reminisced. "A whole world of midnight snacks lights up before my eyes. Herring in sour cream. Herring in wine sauce. Odds and ends of cheddar. Pimento olives. Velveeta spread. A quarter cantaloupe; half a thing of cream cheese. I go through everything. I look around. I pick one out and then I put it back. There are dishes and dishes with covers on them; little things that were left over and that we've forgotten about. One by one I take off the covers. There is a meatball! Two slices of roastbeef! I look at everything. I don't choose yet. I go to the breadbox. There is half a loaf of rye, three or four kinds of crackers. Still I don't choose. I go to the pantry. There's peanut butter and all kinds of jam. Maybe during the day you bought some sardines, a new brand maybe, or perhaps tuna fish or salmon. Still I don't

choose. I go to the cabinet with the sugar and flour and breakfast cereals. There are cornflakes! They weren't there yesterday. Cornflakes! Cornflakes! Did I see peaches in the refrigerator? No! Yes! I don't remember. I run to the refrigerator. If there are peaches I'll have cornflakes with peaches and cream . . ."

"No! George!" she cried. "There aren't any peaches. But there are strawberries! Nice big ones. You can have cornflakes with strawberries instead."

George sighed. She had missed the whole idea. "Ah well," he said, letting the sentence trail off.

"I never knew it meant so much to you. I never dreamed . . ."

"It was a small thing," he said with a deprecating gesture.

"The small things are the most important."

"Really, Darling, it doesn't . . ." He shuddered as his left arm atrophied. "My arm," he said, matter-of-factly. "The arm just went."

Marjorie said nothing but two bright trickles of tears ran down the two tiny gullies that age was wearing into her face. George darted a sidewise glance at her, saw that her attention was elsewhere, and flicked out his movable arm to the peanut dish.

"George!"

But George was grinning broadly. "I made it," he said.

"You mustn't do that. Do you

want to give me heart failure? George, you know what could happen. One second more . . ."

"But I made it; there's nothing to worry about."

"Promise me you won't do that again."

"Yes. I promise. But I had to reach for my last handful of peanuts."

Marjorie sat upright in her chair and gazed at her husband with deep admiration. Solemnly she said; "You have more courage than most men, George. No one will ever tell me that my husband is a coward."

"It was nothing."

"Don't be modest, George. You know perfectly well that most men would have just sat there. Men with less character would have hesitated . . ."

George quivered as his other arm atrophied.

"You see," she said, her voice rising to an unnatural pitch. "That split second was all. Other men would have been less decisive; and in that time—poof. But you, George, you defied fate." She took a deep breath. "I go all weak inside when I think of it. George . . . I . . . I . . ." But she couldn't get out whatever it was that she wanted to say. George seemed totally absorbed in the program and was unaware that his wife watched him intently; sobbing noiselessly, and flexing her own hands as though she

hoped to grasp the physical essence of the futile situation and bend it to her will. She ended the long silence with a piercing little scream.

"George!"

"What is it now, Dear."

"Our lives, Darling! Our lives are ruined!"

"Please don't start that again."

His voice struck a note of mild admonition.

"You have to stay there, in that chair, the whole long rest of your life."

"We both know that, Marge, Dear," he said gently.

She bolted from the chair, leaned over him and spoke with her mouth scant inches from his. "You don't . . . I don't think you know what that means. You can't ever leave, never, forever you'll always be sitting there . . ."

"Of course I know that. It's perfectly clear."

"You don't understand. You don't see." She searched his eyes for the gleam that would tell her he knew her unspoken meaning; but she saw no light.

"We can't fight City Hall," George said. "We have to face the realities."

"George, George," she moaned. "You don't understand; you don't see. All the time . . . never to leave."

George's pronounced, balding forehead creased and crinkled in thought as he struggled toward

comprehension. "Yes," he said, finally, smiling faintly. "I see. You'll have to bring me my food; that will be a bother. You'll have to vacuum around me . . . I still don't see why you have to get so excited . . ."

"You can't come to bed, George," she blurted.

"Yes," he said, after a pause. "That's so. I hadn't thought of that . . . but with a couple of extra blankets I'll be warm here. It won't be as bad as all . . ."

"And me, George. I have to get between the cold sheets alone . . ."

"Oh now, Marge, a couple of extra blankets and you'll be warm enough."

"We can't make love anymore, George!" she cried. "We aren't husband and wife. We aren't lovers anymore."

"True," George said. "I hadn't thought of that."

"Not another chance! Never again. Oh George!" She was standing erect now, her arms stretched before her in an imploring gesture. Her voice became poetic, nostalgic. "That was the best part, George; I loved you most then; always in your arms; the little light glowing . . . You always said such silly little things; I loved you most then, George." She paused and then continued in anguish. "And it's my fault, George. All my fault. If I had been a little more understanding before; if I had listened to my intuition just a while ago;

when it was just your foot. We would have had one last chance; we would have had time. One last chance; it doesn't seem so much to ask."

"But we didn't think of it," George said, trying to be both consoling and logical. "We didn't think of it, Marge."

"I know, I know. It's all my fault. I didn't think. I didn't dream . . . Oh George, just one last time. It wouldn't have been so much to ask; one last time in your arms."

"We didn't think of it, Marge. I didn't and you didn't. It isn't Wednesday. There's no use crying over spilt . . ."

But Marjorie was talking at him, not to him, rapturously. "All our quarrels were made up there, George. Whatever the day, the nights were all soft and tender; in your arms I was a princess at dawn, George, beside my sleeping prince. It was marvellous; it was perfect; wasn't it?"

"Oh yes," he said.

"We were passionate; how we were passionate; like lovers not like husband and wife. Each day was an experience; wasn't it George? Every night eight hours of paradise. We were happy, so very happy, weren't we, George?"

"Oh yes," he said.

"We did things together. What lives we led! Everyone envied us, we made life so exciting. We never fought, never bickered like

other couples; we were happy, weren't we?"

"I said we were," he replied gently. "We were very happy."

"The nights, George! How will I get through the long nights alone . . . We are so young, George!" Her voice sunk to a keening grief. "Our lives were all before us. So young! I'm thirty-two, George; a girl, a young girl. And you—thirty-four—your life had just begun . . ."

"Marge?" he said, hesitantly.

"Yes, Darling?"

"Are you sure I'm thirty-four?"

"I'm certain . . . Oh, George . . ."

He gave a little snort of surprise. "That's funny," he said. "I always thought of myself as older."

"It's affected your mind, Darling. That too!"

"No." He considered the statement. "No. Not really. Just you know how it is. One day is like the next. A year goes by and you don't notice it. Then five . . ." He winced as his neck atrophied.

"It's all over, George. Our lives are finished; there's nothing left for us."

It took a time before her words penetrated; he shifted his gaze to meet hers. "That's not so, Marge. We can still talk."

"Yes," she said, in a sort of delirium. "We can still talk. That's right, George; we can still talk . . . Talk to me, Darling."

"I can't just talk," he said, in a

tone of forbearing patience. "First I have to have something to say."

She burst into a wild peal of laughter. "Yes. Of course. But when you think of something, you'll talk to me, won't you, George? Promise me?"

She hovered over him, fluttering about, making ineffectual attempts to comfort and soothe him. "You mustn't worry, Darling," she said. "I'll always be beside you. Whenever you need me . . ." She waited for his reply.

"Swell," he said, at last.

"I'll stay by your side. Always. I'll never leave you for another. I'll refuse all invitations; I won't let myself be tempted."

"—"

"George! Look at me!"

He snuffled with faint bemusement. "Funny. I can't. My eyes are focussed straight ahead; atrophied, and I didn't even know it."

She seemed about to fly to new heights of frenzy but at the last moment controlled herself. "Well, it's almost over. Thank God for that . . ." She cut herself short. "But George, are you blind? Can you see?"

"Yes. I can see." A strange smile had settled on his face.

"Aren't you afraid, George?"

"No. No, I'm not afraid."

"GEORGE!" she cried. "That's not your normal voice. Not that too! George! Talk to me! I'm frightened. Say something. Some last thing! Don't leave me like

this . . . tell me what it's like. What do you feel? I've got to know, George."

His benign smile had set firmly on his features. "It's not so bad," he said, speaking slowly, his voice

thickening with each syllable. "Not bad at all. I . . . I . . ."

And he had to summon every reserve of strength for his last words. "I . . . I sort of like it," he said.



In this issue . . .

Mel Hunter delivered this month's cover with the following descriptive note: "This is a drawing of flight paths in space, showing motion of a lunar probe from Earth to the Moon, as related to a second accelerating and decelerating object . . . the whole viewed by an observer who is himself moving on a complex three-dimensional path. Such problems as this will be included in communications and contact between ships in space. . . ." In short, it probably all makes rather more, or—some cases—less, sense than you thought it did. . . .

We are indebted to B. Joyce Deike for suggesting the Mark Twain piece on page 60. And take this occasion to say again that we are always extremely grateful for word from readers on new or old stories they know of that they think might be suitable for reprint in these pages.

Coming next month . . .

. . . a special sort of summer issue, featuring a new, long episode in the Brian W. Aldiss report on the far future, following up "Hothouse" (Feb. F&SF) and "Nomansland" (April F&SF). Also, the new Kingsley Amis story we promised for this month will, with our apologies for the delay, definitely appear, together with a new Poul Anderson tale, and other good things.

Payne's wife hated to watch her husband think without understanding his work in physics. Why, she asked, couldn't he make her see a proton? It was really quite a bore.

BIRTH OF A GARDENER

by Doris Pitkin Buck

PAYNE KNEW THAT WHEN HE got home he would find Lee still spraining her mind over *A Non-Mathematical Approach to Physics*. A woman with Lee's hair didn't have to be intellectual. After all, she had a green thumb. Why couldn't his wife—Payne tried to put it with all charity—reconcile herself to the fact that his interests were off limits?

He turned into his driveway and kicked a pebble. Then he smiled. Here he was—Fermi Researcher at the Droxden Foundation, famous in two hemispheres for his work on anti-matter—acting like a bad-tempered child because he knew no way to manage a beautiful, stupid, absurdly stubborn wife.

His smile grew rather fixed. Why did she have to keep asking questions night after night when he got home tired from his laboratory! Lee never understood the answers when he did give them to her. Why—

He had an obscure, entirely irrational feeling that tonight his fatigue held some sort of menace both to him and to his wife; that barriers melted in his weariness, as they melt away in sleep; that what comes out when they are down is anyone's horrified guess. Payne did not shiver, but for a moment he thought he was going to. Then he told himself that he knew what was wrong. He had not admitted until this evening how dreary his marriage was growing.

He stopped where elms arched over the drive and made a green tunnel of sorts that held its own twilight. Lee's flowerbeds lay beyond the end of the tube, suggesting something on a slide under a microscope, or at least he was sure Lee, if she were around, would see them that way.

Payne looked at drifts of peonies and iris with a few weedy spears of grass reaching upward for light. He stopped by a clump and gathered some flowers. Fagged

though he was, he walked toward the house with a purposeful swing to his stride. He held the bunch behind his back, like a surprise for a child.

When he opened the front door, he found Lee sitting beyond the living room, her dark head bent over the non-mathematical approach. The rooms, as so often happened now, appeared messy out of all proportion to their actual disorder. Payne knew, even though he did not see, where dust had gathered behind furniture in the corners.

"Lee," he walked toward her, speaking more sharply than he meant, "give it up!"

She held out her book with its gaily diagrammatic cover, her dark eyes those of a stricken small-girl. "You mean . . . give up this?"

"Exactly. You aren't going to be an intellectual because you try to read something elementary on physics." Wearing the smile, he sat down near her. "Remember the Chinese saying—"

She shook her head.

"If you would be happy for an hour, get drunk; happy for an evening, roast a pig; happy for three days, get married." She winced and Payne with a slight flourish produced the yellow blooms. "If you would be happy for life, plant a garden."

She startled him by saying, "That wasn't why I evoked you."

"Evoked me?"

"You can call it that. Don't you see? I always wanted you even when I was little, though I didn't know then *exactly* how you'd look. I kept adding details: hair just as bright as brass and all lovely and shiny; a straight way of standing; large hands but with an awfully nice shape. I just thought very hard and—finally one day, there you were."

"Nonsense. I happened to be passing by when you were going into the subway and dropped some nickels. I never realized until tonight that you dropped them on purpose."

"But I didn't. Things just happened, after I . . ." She took his flowers and added them without interest to some already in a vase, while she explained, "Things do happen sometimes in the most marvellous way. But now they go . . ." the words came out like a barely heard sigh, "they go all wrong."

He tried stroking her hand. "Naturally they're wrong while you prefer physics to flowers. Stop playing around with a rigorous logic that isn't your style."

"Rigorous logic!" She pulled her hand back. "Rigor mortis!"

Payne's eyes opened wide. For a moment they looked like blue rifts in a glacier. "Oh, are you familiar enough with my theories to criticize them?"

Lee was instantly humble. "I

only meant—I don't know what I meant. I think I wanted to say: Isn't there some way you could teach me to *see* physics? I—I skipped to the back of the book and was reading about—" she brought the term out proudly, "about neutrinos. I can see them all round."

"You can? Really? I congratulate you, Rosalie. You're more advanced than any of the men at the Foundation."

"But I can see them." Her tone was slightly injured. "They're like the Cheshire Cat's grin that stayed on in the air after the Cat vanished. You know, in *Alice in Wonderland*."

"Go on. I'm fascinated."

Lee only said in a changed voice, "If I'm not your real companion, if you won't let me be, I'm not anything—not anything at all. Perhaps I shall . . ."

She put her hand with her handkerchief to her mouth suddenly. She choked back whatever she might have told Payne. Finally she spoke intensely, "I'm trying so hard, so hard, to get where we can talk together, or at least where I can listen."

"Listen? How can I talk with you about my work? Tonight I want to figure why a pi meson, a negative one, decays the way it does when you shoot it through liquid hydrogen." He added, "I'd like to go on thinking about that right now."

She laid her hands on his arm. "But . . . but our marriage—"

"No problem at all. Anyway, I told you how to solve it. Why don't you listen to what I say about the garden instead of talking about Cheshire Cats?"

"I didn't mean to annoy you."

For some reason that touched off a train of irritations. "Can't you see that the way you skip all over the book and never master any of it is a huge annoyance, particularly when I come in tired? Then you cover up with something silly. What were you saying last week? Weren't you inventing some kind of story about people who lived in a world of anti-matter, as if what I work on were a fairy tale?"

She looked away.

"Weren't you?"

"I was thinking about . . . electrons." She used the word with awe. It could have been the secret name of a deity. "Then I thought about anti-electrons, and people, and anti-people, and even," she gulped a little, "galaxies and anti-galaxies. There could be anti-galaxies. It says so here." She hugged the book.

"Don't be defensive. You've gotten more than I expected. Now be a sensible girl and leave it right there." He looked at her face and added, "Or if you have to tell fairy tales about your anti-universe, go out and tell them to your iris. You have a real way with

flowers, and you're letting the whole garden go. It used to be trim as a manicured hand. Today it's unkempt."

"I know."

"By July what's it going to look like? See, you belong there. Why, the borders need you to care for them."

She cried desperately, "Can't you see what you're doing? Don't make me evoke someone twice."

"Twice?" His lips curved down in contempt. "Now is that quite worthy of you? But go on *evoking* if you want to. I shan't be jealous."

Her eyes were close to misting. "Jealous! I don't mean anything like that. I want to say— This time I'm scared of what I think about. Scared, Robert, really scared. But I might do it if you make me." Her voice dropped as if she confessed something shameful. "I find myself adding detail to detail, the way I used to, and sort of beaming it out—some-where." She straightened suddenly. Her chin tilted up. She finished, "But then I stop."

Payne's tone was stiff. "Better think over what I said about the garden."

"You're turning it into an exile. If I'm sent away from you—" She did not finish but asked, "Aren't we ever going to be married, really married?"

Again his irritations mounted. "Not," he said sharply, "if our

being married depends on your understanding that book in your hand."

A kind of panic crept into her eyes. He tried to be reasonable. "Oh all right. Forget what I said about the garden. Tell me about your anti-world if you want to."

"I don't believe I remember now what I made up about the people in it. They were like us, exactly like us—"

He made a pretense of listening. But his mind slipped off to a series of equations. Would changing plus and minus signs affect the gravitational field of an anti-earth? He came back to their conversation as Lee garbled something she must have heard. "—and we're looking at it through a telescope that's at right angles to any dimension we know. Only what we see is Now," she capitalized it with an inflection, "Now, not millions of years ago. So with all the parts of the anti-atoms exactly like our atoms, only reversed—"

"With the electrical charges reversed."

She brushed that aside. "You see the people, since everything they're made of is the same, would be—"

Payne broke in, "Everything isn't the same. The proton isn't."

She put her finger against her forehead and tilted her head up in a way he had once found charming. "There's something about it. Here. On this page." She

spoke carefully. "It's about the mass—that's right, isn't it—the mass of—Is it a nucleus? It's twice as much as ours. Does that make anti-matter different from matter? Please tell me—"

"Don't go begging me to clarify. It doesn't do any good. I've tried."

She implored, "Couldn't you make . . . a picture?"

He shook his head. "If we can only find how atoms keep accounts of their income and output, we shan't need to bother about what they look like. Besides, I prefer to bypass pictures. I work analytically. While I do, if you dream about your anti-world, don't make it exactly like this one." His eyes narrowed a shade. "A variation here and there, due to that variation in the proton, might improve the anti-earth, don't you think?"

"You're making fun of me."

"Tonight," he snapped, "I'm too exhausted to make fun of anybody."

He saw her go into one of her painful efforts to think. "If we don't find our true relationship—the one we were meant to have—there'll be a . . . a flaw in the universe."

"Most improbable."

She flared, her hair a swirl of darkness round her head and her eyes full of sparks, "What do you really know about the universe?" In that moment she was a Lee he had never seen, her impatience with him matching his with her.

"You haven't even gotten any real sort of order out of an atom—you and all the other geniuses. Can you predict what would happen to people like us in an anti-world? What they're like? What they do?"

He felt one of her fairy tales in full spate again. He faced her squarely. He held her eyes with his lighter ones till he was sure he had her attention completely. Then he said, very gently and very softly, "Darling, you bore me."

The perfect oval of her face did not change. But everything else about her altered subtly until she stood before her husband impersonal as print—the same woman and not the same woman. He heard her tell him in a toneless voice that she wasn't hungry, that her head ached, that she wanted—again Payne waited through one of her pauses—wanted to go to bed.

Payne stayed up reading until late. He had a guilty twinge because he didn't feel badly about wounding Lee; anyone with eyes like hers was sure to be vulnerable. Finally, he went upstairs.

As he passed Lee's open door he saw her lying in the moonlight, pale in her sleep. She was still sleeping when he went to the laboratory next morning. That evening as though he had been ordered by something, someone not himself, he went in to her room, leaned over, and touched her white cheek.

An odd thing happened. He seemed to smell mold. He began to tremble, chill with the certainty that Lee would never wake.

An embolism, the doctor said, scouting the idea of suicide. The neighbors were tender to Payne, as if he were a lost child. But actually he felt closer to Lee than when she had been alive. The shadowiness of her eyes stayed with him, hauntingly, like the eyes of a memorable portrait. At any instant he could visualize her hair, a turbulence of darkness. If there were whirlwinds in the depths of space— He broke off. That was how Lee's mind worked. Had worked, he corrected himself. It was never his way, he reflected while he kept physical memories of her before him, because behind them he knew something lay that would torture him all his life if he ever faced it.

One evening Payne walked home along the shaded drive that led to the garden. His mood was one of almost exhilarated content; his work at the Foundation had gone better than well. Abstruse calculations had been something to play with. He had never experienced such a sense of power, nor had he ever known power to give him a feeling of prelude.

He looked joyously down the dark tube of boughs and tree boles. At that second he caught sight of — No, it couldn't be. But it was.

Lee! She stood against the border of flowers, shadowy against dimming bloom. Payne—stockstill, yards away—stared down the tunnel that led straight to her.

She tilted up her head; seeing him, he was sure. Her lips—delicate and of so live a coral that she never used makeup—curved into a smile, half welcome, half wistfulness.

His eyes swam. In that second the blooms behind her blurred into spiralling blue and red. He could have sworn that long, snaking arms of a galaxy formed her background. He did not try to make any meaning of it. He hurried forward—

For a half-instant there was a snowstorm of flaking light. Then Payne saw neglected flowers. Nothing more.

He felt a stab of reproach, keener than anything he had known at his wife's death. Here where he had seen, truly seen Lee, he would tidy the beds as they had never been tidied. He would leave nothing faded, nothing weed-choked. The rank growth around a delphinium seemed desecration. He yanked the intruding weeds out savagely.

Vaguely, a worry gnawed him. The day had been almost too keyed up. His formulations had come with unnatural ease. On top of that, this hallucination. The word *hallucination* irked him. He substituted *hallucinatory experi-*

ence and felt considerably better.

As he weeded, he considered seeing a psychiatrist, then decided he had not that much time to spare. Besides, he had a dark suspicion a psychiatrist might dissolve Lee into nothingness. The idea was enormously painful.

With his pocket knife he trimmed off wilted roses; each time he made a slanting cut. Somewhere, he was certain, he had heard that was the right way. *If you would be happy for life . . .* "Lee," he muttered, "if you come back a second time, this place will be in shape for you."

He pulled some crabgrass from the neighborhood of a rose. "Darling," he asked, "do you think I called you? I seem to be falling in love with you all over again."

Lee did not reappear in the garden. Payne saw her, through a doorway in his own house, as he raised his head suddenly from a work on mathematics. Oddly, he could have been looking down a shaft trained on her. His heart did something in waltz time; she was much nearer than she had been before.

Tonight she sat hunched on a large hassock. The position would have been ungraceful for anyone else. She did not look at Payne. He made no move toward her for fear she would disappear. But he fidgeted. She was unaware of him, lost in her book.

That was Lee for you, he thought. Ghost or dream or whatever she was, Lee held stubbornly to her ruling idea. He guessed what she was reading. An unfamiliar pity swept over him as she bent her splendid head over the pages. He caught glimpses of diagrams, not enough to be sure exactly what the plates showed, but enough to see that his guess was right. Lee was reading physics.

He wished he could explain whatever it was to her, for once. Experimentally he called, "Lee." She never raised her head. She only moved her hand, which soundlessly turned the pages. Speech between them was evidently out.

Yet Payne got Lee's simpler reactions, though how he did not know. He sensed to a split second when she would shut her book and look off dreamily into space. Was she still struggling with *A Non-Mathematical Approach*?

The closed volume was on her knee. Its name, Payne noted, was lettered in gold, clear and legible: *On the Validity of Thought Patterns as Determined by Their Elegance*. Payne blinked. Automatically, he checked the author's name and read below the title, *Rosalie Payne*.

After Payne had his one glance at *The Validity of Thought Patterns*, Lee eluded him. He would walk home expectantly through

the shady alley. He kept his eyes on the ground until the space between him and the flower border was shorter than the distance between him and Lee in the different rooms. The space between them had shortened once; it seemed reasonable it would shorten again—more than reasonable, for Payne felt the intensity of his own wishes was a factor. But when he lifted his eyes, he saw only the last white chrysanthemums tinged with lavender that bloomed their best after a touch of frost.

If, thought Payne, he went into the house and picked up what he had been reading the night he saw Lee, perhaps—His heartbeat quickened. He concentrated on—he used Lee's term—"evolving" her. He altered techniques. He tried not to think about her at all. He went to absurd tricks of stage setting and adjusting lights. Finally he ordered a blank volume from a bookbinder and had it made up with the title he had seen in gold. He specified that *Rosalie Payne* be stamped beneath that title. If he could have reproduced the contents, he had a hunch Lee would surely have returned. He had little hope when he laid the unwritten book on a hassock. Nothing happened, as he foresaw.

When the hollow way did open, Payne was working late in his office, his mood exhilarated contentment. As he leaned back, still

analyzing a photograph of particles in a bubble chamber, Lee was so close she could have been on the other side of the wall—only there was no wall. Payne was conscious of a dark rim bounding what he saw, making Lee's universe somehow beyond all reaching, though right at hand. She, eager as a child holding a wrapped present, studied a photograph too; he tried to see of what. All he got was a feeling of something slightly, and in no expected way, unfamiliar. But he found it hard, even craning his neck, to look. It was far more interesting to study Lee's intent face. He told himself she ought not to go at things so hard. After all, during these rare glimpses, she might be interested in him.

Payne had never been a vain man, but now he tried to see the figure he would cut before her. He wanted her to look, a wanting so desperate he was sure it would get through to her. While he sat rigid, she lifted her head, turning in his direction. She knitted her brows impatiently, a little as though he were a pet animal demanding attention. Then she smoothed her forehead with an unconscious gesture, smiled, and bent over the photograph again.

He could find some way to get to her, he told himself, some way that would not make her vanish, some way that would put them in actual communication. He had

his chance now. It might never come again.

He influenced her a little, obviously. But making her look in his direction got him nowhere. Well, since she was now absorbed in physics on something like his level, he would reach her through their shared curiosity.

Payne took a fresh sheet of paper and wrote some equations he had found of real interest. Though no complete formulation of his theories on anti-matter and on fields that could affect it, they were still suggestive.

Briefly, he hesitated. If his mathematics were beyond her hopelessly, she might be discouraged. After all, he did not know how far her studies had taken her. His fingers reached for the edge of the paper, to tear it up.

But, he reflected, his figures would be a good reaction test. He held the formulae up in front of him. Once more he willed Lee to be attentive.

Her resistance became almost tangible. Payne concentrated against her concentration. Again she frowned, and he concentrated harder. After all, he was sure she was interested and he had something breathtakingly new to show. Briefly he felt a pride in his work that almost made him forget her.

She stopped frowning and turned toward him. He raised the sheet of figures. He saw her read what he had written.

Her glowing, vibrant expression dimmed to weariness. Quickly, while she watched, he wrote out something simpler, and waited for a flash of recognising delight. But Lee looked away from the figures straight into his face. Payne could not fathom her expression.

Then with a shock of joy he felt Lee reach out for *his* attention. Something in their minds seemed to interlock. All the while Lee went about some business of her own. He saw her tack a large piece of paper to the wall, select a crayon and begin to draw.

What grew under her hand was an arabesque in depth, a figure beyond the calculus of matrices. Correspondences and symmetries were clear as in the work of a great mathematician. Yet music could not have been more moving. She glanced at him as she added the last touch.

Payne stared. He began to understand. The Atom! Still staring, he saw what she must intend to represent the proton. Wrong, for the rest of the arrangement! Of course, it would be. Trust Lee to be confused. Its cross section was twice—

Payne drew in his breath with a gasp. There was no confusion except his own. Suddenly it came clear. Lee's atom was not matter, but anti-matter.

He felt a little dizzy, and though he was sitting down, he grasped the edge of the desk. Anti-

matter, so like, so nearly the same as matter! Anti-matter, his own field of study! He knew with absolute certainty, their minds still interlocking, that he stared at some small part of a universe which almost but not quite duplicated his own in reverse.

He remembered his brief impression of a nebula when he stood in his garden. But he found himself saying an author's name, "Lee. Lee Payne." So this Lee had been married. His whole body shook with jealousy. She was his Lee. They had a unique relationship wherever, whatever, she was.

Impressions surged through him, growing clearer. No, she was not his Lee. He was suddenly sure of that. She was what his wife had brought him across uncounted parsecs. Lee's epocation must have been incredibly strong to linger like a vibration beyond her own death. Why? Why? Was this new Lee a last scarcely believable gift to him?

But while Payne questioned he no longer felt the contact of mind with mind. Instead he met resistance ten times stronger than before. He heard himself shouting and realized that in Lee's anti-world the silence was unruffled. He saw her speaking to him. Yet he

heard nothing. The two worlds were as still, each to each, as stars to some gazer with his eyes at an instrument.

But if this Lee were speaking, there was some way to understand. There must be.

It came in one flash that if he formed the words with his lips, Lee could talk to him, speaking with his very voice. He studied her face.

He copied.

"Darling," his own mouth formed the word for her. She watched him and spoke again, very slowly.

He echoed aloud, "Darling, you bore m—"

Payne never finished. He felt a bitter humiliated impulse to lash out. Only there was no way. Lee turned her back and walked out of sight.

He thought of all the ways in which a physicist might destroy himself. It could look like an accident. A freak accident. Grimly he resolved that he would never do that for any woman in any universe. Suicide—never! He could, he would be happy in spite of everything. Savagely, he resolved that tomorrow he would spend the whole day bedding the garden down for the winter.



An old Louis Armstrong record, "Weather Bird," pleases us and dismays some close friends; almost everybody, however, loves Twain. This first appeared at the time of the "Comet Scare" in the summer of 1874, and was preceded by this note: "We have received the following advertisement, but, inasmuch as it concerns a matter of deep and general interest, we feel fully justified in inserting it in our reading-columns. We are confident that our conduct in this regard needs only explanation, not apology.—Ed., N. Y. Herald"

A CURIOUS PLEASURE EXCURSION

by Mark Twain

ADVERTISEMENT

THIS IS TO INFORM THE PUBLIC that in connection with Mr. Barnum I have leased the comet for a term of years; and I desire also to solicit the public patronage in favor of a beneficial enterprise which we have in view. We propose to fit up comfortable, and even luxurious, accommodations in the comet for as many persons as will honor us with their patronage, and make an extended excursion among the heavenly bodies. We shall prepare 1,000,000 state rooms in the tail of the comet (with hot and cold water, gas, looking glass, parachute, umbrella, etc., in each), and shall construct

more if we meet with a sufficient generous encouragement. We shall have billiard rooms, card rooms, music rooms, bowling alleys and many spacious theatres and free libraries; and on the main deck we propose to have a driving park, with upwards of 10,000 miles of roadway in it. We shall publish daily newspapers also.

DEPARTURE OF THE COMET

The comet will leave New York at ten P.M. on the 20th, and therefore it will be desirable that the passengers be on board by eight at the latest, to avoid confusion in getting under way. It is not known whether passports will

be necessary or not, but it is deemed best that passengers provide them, and so guard against all contingencies. No dogs will be allowed on board. This rule has been made in deference to the existing state of feeling regarding these animals and will be strictly adhered to. The safety of the passengers will in all ways be jealously looked to. A substantial iron railing will be put all around the comet, and no one will be allowed to go to the edge and look over unless accompanied by either my partner or myself.

THE POSTAL SERVICE

The postal service will be of the completest character. Of course the telegraph, and the telegraph only, will be employed; consequently, friends occupying staterooms, 20,000,000 and even 30,000,000 miles apart, will be able to send a message and receive a reply inside of eleven days. Night messages will be half rate. The whole of this vast postal system will be under the personal superintendence of Mr. Hale, of Maine. Meals served at all hours. Meals served in staterooms charged extra.

Hostility is not apprehended from any great planet, but we have thought it best to err on the safe side, and therefore have provided a proper number of mortars, siege guns and boarding pikes. History shows that small, isolated

communities, such as the people of remote islands, are prone to be hostile to strangers, and so the same may be the case with THE INHABITANTS OF STARS of the tenth or twentieth magnitude. We shall in no case wantonly offend the people of any star, but shall treat all alike with urbanity and kindness, never conducting ourselves toward an asteroid after a fashion which we could not venture to assume toward Jupiter or Saturn. I repeat that we shall not wantonly offend any star; but at the same time we shall promptly resent any injury that may be done us, or any insolence offered us, by parties or governments residing in any star in the firmament. Although averse to the shedding of blood, we shall still hold this course rigidly and fearlessly, not only toward single stars, but toward constellations. We shall hope to leave a good impression of America behind us in every nation we visit, from Venus to Uranus. And, at all events, if we cannot inspire love we shall, at least, compel respect for our country wherever we go. We shall take with us, free of charge, A GREAT FORCE OF MISSIONARIES, and shed the true light upon all the celestial orbs which, physically aglow are yet morally in the darkness. Sunday-schools will be established wherever practicable. Compulsory education will also be introduced.

The comet will visit Mars first, and then proceed to Mercury, Jupiter, Venus, and Saturn. Parties connected with the government of the District of Columbia and with the former city government of New York, who may desire to inspect the rings, will be allowed time and every facility. Every star of prominent magnitude will be visited, and time allowed for excursions to points of interest inland.

THE DOG STAR has been stricken from the programme. Much time will be spent in the Great Bear, and, indeed, of every constellation of importance. So, also, with the Sun and Moon and the Milky Way, otherwise the Gulf Stream of the skies. Clothing suitable for wear in the sun should be provided. Our programme has been so arranged that we shall seldom go more than 100,000,000 of miles at a time without stopping at some star. This will necessarily make the stoppages frequent and preserve the interest of the tourist. Baggage checked through to any point on the route. Parties desiring to make only a part of the proposed tour, and thus save expense, may stop over at any star they choose and wait for the return voyage.

After visiting all the most celebrated stars and constellations in our system and personally inspecting the remotest sparks that even the most powerful telescope

can now detect in the firmament, we shall proceed with good heart upon A STUPENDOUS VOYAGE of discovery among the countless whirling worlds that make turmoil in the mighty wastes of space that stretch their solemn solitudes, their unimaginable vastness billions upon billions of miles away beyond the farthest verge of telescopic vision, like a remembered phosphorescent flash of spangles which some tropical voyager's prow stirred into life for a single instant, and which ten thousand miles of phosphorescent seas and tedious lapse of time had since diminished to an incident utterly trivial in his recollection. Children occupying seats at the first table will be charged full fare.

FIRST CLASS FARE from the Earth to Uranus, including visits to the Sun and Moon and all the principal planets on the route, will be charged at the low rate of \$2 for every 50,000,000 miles of actual travel. A great reduction will be made where parties wish to make the round trip. This comet is new and in thorough repair and is now on her first voyage. She is confessedly the fastest on the line. She makes 20,000,000 miles a day, with her present facilities; but with a picked American crew and good weather, we are confident we can get 40,000,000 out of her. Still, we shall never push her to a dangerous speed, and we shall rigidly pro-

hibit racing with other comets. Passengers desiring to diverge at any point or return will be transferred to other comets. We make close connections at all principal points with all reliable lines. Safety can be depended upon. It is not to be denied that the heavens are infested with OLD RAMSHACKLE COMETS that have not been inspected or overhauled in 10,000 years, and which ought long ago to have been destroyed or turned into mail barges, but with these we have no connection whatever. Steerage passengers not allowed abaft the main hatch.

Complimentary round trip tickets have been tendered to General Butler, Mr. Shepherd, Mr. Richardson and other eminent gentlemen, whose public services have entitled them to the rest and relaxation of a voyage of this kind. Parties desiring to make the round trip will have extra accommodation. The entire voyage will be completed, and the passengers landed in New York again on the 14th of December, 1991. This is at least forty years quicker than any other comet can do it in. Nearly all the back pay members contemplate making the round trip with us in case their constituents will allow them a holiday. Every harmless amusement will be allowed on board, but no pools

permitted on the run of the comet —no gambling of any kind. All fixed stars will be respected by us, but such stars as seem to need fixing we shall fix. If it makes trouble we shall be sorry, but firm.

Mr. Coggia having leased his comet to us, she will no longer be called by his name but by my partner's. N.B.—Passengers by paying double fare will be entitled to a share in all the new stars, suns, moons, comets, meteors and magazines of thunder and lightning we may discover. Patent medicine people will take notice that WE CARRY BULLETIN BOARDS and a paint brush along for use in the constellations, and are open to terms. Cremationists are reminded that we are going straight to some hot places, and are open to terms. To other parties our enterprise is a pleasure excursion, but individually we mean business.

We shall fly our comet for all it is worth.

FOR FURTHER PARTICULARS, or for freight or passage, apply on board, or to my partner, but not to me, since I do not take charge of the comet until she is under weigh. It is necessary, at a time like this, that my mind should not be burdened with small business details.



All that we know about this author you should watch is that she has written a novel of suspense, published by Harper in 1951, and has produced here a story which may well explain everything for you . . . unless, of course, you are one of those types who are inclined to go around putting piranhas in the water cooler. . . .

GO FOR BAROQUE

by Jody Scott

THE PATIENT WAS A SMALL man with wiry white hair and a white mustache. Dr. Brant nodded across the desk at him, and the patient smiled. It was a peculiar smile. A radiant but eerie smile. It bespoke security, which was obsolete. It looked copied from certain smiles Brant had seen on cherubs in old paintings. So what kind of complex might this indicate? Brant smiled right back. "Good morning," he said pleasantly. "You are Mr. Yog Farouche."

"I'm glad to meet myself," Mr. Farouche said, letting his left hand shake his right.

Well, well. Interesting deviation.

"Odd name," Brant said. "What nationality?"

"Plutonian."

"Plutonian?"

"From Pluto."

"Pluto?"

"Ninth from the sun."

"Ah," Brant said. "Pluto. Yes indeedy." He shuffled some papers on his desk. He cleared his throat. "Well, Mr. Farouche; the report from the state hospital says you're much too difficult a case for their staff, yet you are an intelligent and peaceable man. I mention this because it's the oddest referral I've ever seen. Wouldn't you say so?"

"Give me two minutes to run through all the referrals you've ever seen," Farouche said, closing his eyes.

The psychiatrist was about to say something, but he shut it off. The patient's expression . . . very strange . . . not quite definable . . .

"Yes," said Farouche.

"Yes what?"

Farouche looked pained. "If you'd do me the courtesy—" Then he smiled again. "But I'm expecting too much. Your question was loaded to find out how paranoiac I am. Let me answer: that word isn't even in my vocabulary."

"But you've just used it."

"If you're going to stick on logic we'll never get anyplace."

Brant settled back in his swivel chair. Okay. So this bird was intelligent, peaceable, difficult. The usual patient was pretty dull, which made life boring for Dr. Brant; Mr. Farouche offered a pleasant change of pace. "All right, *you tell me*. Suppose you start with a run-down of your past life. Make it as long or short as you like. . . . Sit down in the easy-chair, and relax."

Farouche sighed and obediently sat down. He let his eyes wander over the little room. There were three doors, one to the ward, through which he had come, one to the lab, and one to the reception room. It was a warm sunny morning and the smell of fresh-clipped grass blew in through the open window. . . .

Gradually his eyes clouded, half closed, looking inward, and Brant took the opportunity to study him. A man of about sixty, in the usual tan trousers and tan open-collar shirt. His eyes were a deep amber, his skin as smooth and pale as

new parchment. Looked healthy. Must have done a good amount of outside work. Ruffled hair, thick and pure white, lots of it. His eyes had that childlike look that Brant had seen often; innocent eyes, not deep, but not shallow either—very curious. Not psychotic. Not by Brant's yardstick. That was obvious right away.

"As a child," Farouche said at last, "I was too simple and beautiful to live. . . . So I died.

". . . Now don't leap to conclusions. I mean this in the mystical sense. Mystical—you don't like it? Too many bad connotations to that word. Mother used to say, 'Don't play near the aqueduct' . . . No, strike that out; that was earlier. I'll tell you about whip-whiskered Uncle Sigh (he was Cy, really, but I called him Sigh, for obvious reasons). He used to say to me 'Yoggsy, if you keep on like this, there will be no face in the mirror when you look.' Such a horrible warning! I was like an ice child—he drinks warm milk and melts; he doesn't, and starves. . . . Anyway, we lived in Penury, a well-known subsection of Chicago. As a child I was needed at home for certain dramatic scenes. I'm sure this sounds like the regular run of dull cases, eh? But I can't tell you; I've got to show you. Do you mind?"

Before Brant could open his mouth the little man had vaulted across the desk and perched him-

self on the psychiatrist's knee and begun to weep, loudly, violently, heart-brokenly. Then just as suddenly he was back in his chair across the desk. He seemed perfectly calm now. "Rejected! Rejected by my very own mother," he said dreamily. "Not that she knew it; she thought she loved me; they all do, but they nearly all love only some two-dimensional figurine of their own scrawny invention. . . . Anyway, I made up for all that. I began to develop certain powers, such as—"

Instantly he was down on all fours creeping around the floor under the desk. He began to gather up coins from hidden nooks; a dime, two nickels, a handful of dirt-crusting pennies. "Here. You've lost these over the last three years," he said, handing up the change.

Neat trick, Brant thought, taking it. He watched, fascinated.

"Then I played with other kids," Farouche said. "We played simple, familiar, every-day games, such as cowboy and Indian. . . . Do you mind?" He opened the desk drawer and took out a length of stout twine and doubled it and tied Brant's hands and feet, deftly, making him fast to the swivel chair. Then he smiled and sat down. "All right, now just go on relaxing while I continue. One point: I want you to express yourself, always. If you have anything to say, say it. Is that clear?"

"Perfectly," Brant said. He was feeling a little bounce of exhilaration in the pit of his stomach. It was like being tickled. This guy could certainly generate excitement. Also, it was harmless; all he had to do was reach out and flip the intercom switch and Dr. Eyck and Miss Potter would be here inside of two minutes. Besides, this was good therapy. Brant believed in going along with the patient all the way, as long as things didn't get rough.

"Ropes too tight? How do you feel?"

"I feel fine," Brant grinned.

"Excellent! Care for a cigarette?"

Brant nodded. Farouche lifted a cigarette out of the doctor's breast pocket and put it between his lips and lit it for him. "I'm delighted to be here," he said. "I'm glad to have been referred to the famous and capable hands of yourself and your young partner, and of Miss Potter, that understanding nurse with the starched bosom and the prim smile. You're one of the few men around with imagination. You're accessible, you can change; so you can be cured. And Eyck tries to follow in your footsteps. That's why I chose this place."

"Ah," said Brant. "You chose this place."

Farouche smiled. He removed the cigarette so the doctor could exhale. "Yes; I like a small private

institution like this, although the large joint of which I was so recently a part was pretty cool too. . . . But I was running through my past for you. For instance, Grandma dreamed she died of heart failure. This scared her so badly she woke up and died of heart failure. Silly, wasn't it? And that's the way they go. I have an early memory of Grandma bending over me to whisper, 'Go to sleep and *don't worry*, Daddy Warbucks will be here in the morning with the helicopter.' That's all I remember about Grandma, for which I'm grateful. . . . Did you realize that I'm not at all sophisticated? I should say pseudo-sophisticated; that's the fashion of the day; everybody who is anybody is pseudo-sophisticated, with tailfins. I'm a bit of a primitive myself. And I can tell you a story to prove it. Would you like to listen?"

"No," Brant said.

"Good. I like a bit of spirit in a prisoner. What would you like to hear instead?"

"Tell me about your sex upbringing."

"Ah! The first honest psychiatrist I've ever seen," Farouche marveled. "Well, as usual, I had a sex upbringing that could choke a crocodile into not laying eggs. However, I made up for all that later; and since you're being so honest, I'll tell you some hot love stories out of my past. I see that

you're fond of sex, comics, and adventure stories, in that order. So okay. My past is full of all three.

"Now this episode happened south of Pago-Pago, in a Spanish galleon, of which I was the captain. Also the absolute bloody dictator—what fun, to be a bloody dictator! I loved it. The ship was naturally not a real Spaniard; she was a Hollywood mock-up swiped off the MGM back lot one dark night, complete with skull flag and keelhauling equipment and her name in blazing rubies, *Corsair's Revenge*. . . . Now relax; the copulation scenes come later," he said, smiling.

"I'm not that hung up," Brant said huffily.

"Oh, come on. I'm a telepath—haven't you noticed yet? Anyway, I'll tell you about the crew. The crew! Some boys. I rented them along with the ship, see. I rented the whole works from MGM, right after that studio brought out its colossal sea epic, *SWORDS ACROSS JAMAICA*. As my first mate I rented the star of the picture, a typical Hollywood wax-work named Rock Bottom. I suppose *you* think the whole idea was silly."

"Not at all. Except I'm wise you use the term 'rent' advisedly."

"Ahhh!" Yog Farouche smiled, leaned back in his chair and stared at Brant. "You're coming along fine. You'll be a well man in no time. Already you sound half

alive. . . . Well, do you get the picture? Here we are, a blood-thirsty, horny crew, clipping across the Spanish Main, looking for Yankee ships to plunder. The boys all wear faded blue dungarees, calf-length, with daggers at the waist or between the teeth, and no shirts except on brisk evenings; also technicolor make-up at all times; they are a typical strength and health crowd from Vine Street. I myself wear an Admiral's costume, with sword and much gold frogging, the cat-o'-nine-tails always twitching in my hand. . . . Is this coming along to your taste?"

"Pretty much," Brant said, interested. "Where do the dames come in?"

"Soon, soon. Anyway, mornings, we practised the Extras Massing Scene, or Operation Swarm. The men climbed the rigging, jumping from high places to mattresses strategically placed below. They engaged in hurly-burly brawls on the bridge and down the hatches. The more daring ones swung from ropes, leaped there from to the brawny backs of their mates, and engaged them in noisy combat, drawing blood pretty often. In the afternoon they drank rum and swam bare and chased the cabin boy round the mizzenmast and so forth. Myself, I am up in the crow's nest yelling salty obscenities and enjoying the whole scene. Get the picture?"

"Very clearly," said Brant, spellbound.

"Okay. So the first Yankee ship to cross our path was the Queen Mary. Wasn't that a bitch? Naturally we couldn't back out after all that rehearsal, so we figured what the hell, go for baroque. At first the ship was a dim bug on the horizon, but she expanded, gradually, inexorably, like a bad dream. We came about and hove to, taking up picturesque positions about the deck. Mr. Bottom was especially magnificent, with his drawn cutlass and bare chest; he reminded me of my Uncle Sigh, after the latter lost his body hair in a boiler explosion. . . . I personally am dividing my operations between bridge and chartroom, rubbing my hands, chuckling about the rapine and plunder to come, smacking my lips, etc., etc. . . . Then, I ordered the first broadside fired."

"That's not fair! You're supposed to board them in person," Brant protested.

"What's not fair, square? It was a blank, naturally. I told you this was a Metro ship. It was the other captain who behaved like a complete swine. Without waiting for the smoke to clear, he fired, and this was no dummy, and we sank on the spot. Oh, it didn't take much. After all, the galleon was quite fragile. Like so many of our hopes and fears and desires . . ."

His amber eyes clouded. He relapsed into silence. Brant said, "But everything turned out all right, didn't it? Because you're here, aren't you? Alive and happy and all?"

"Alive?" Farouche said with a bitter little laugh. "Happy? . . . I never knew what became of my crew. I couldn't swim in my admiral suit. Straight down I went, like a stone, to the bottom of the sea, and then I lost consciousness. When I awoke the most beautiful woman was giving me artificial respiration. As I reached for her she turned to the side and *disappeared*; brother, that's when I got up and made a dash for it. But there was no place to go! I kept running into the edge of the paper.

"Let me explain. It was like being an exchange student with Flatland. In this sea-bottom country, I found myself trapped in a two-dimensional nightmare. At first it looked like a very broad stage setting, with cardboard props and scenery and a mind-shattering afterglow coming from nowhere, from the land of Ag, from a water-color sun in some other dimension. Then the truth hit me. I had fallen into a night scene in a comic strip! Grandma! I thought instantly; she's laid a curse on me.

"It was ghastly. Yellow light gleamed through four-sectioned windows, and suddenly a huge

yellow moon appeared in the upper righthand corner of the square. I moved down a street of houses which were all facades; when I went behind one, I saw the back of the house, with its two-dimensional porch upon which stood some flat milk-bottles, and a drunken two-dimensional husband trying to sneak in the back door before the clock struck. I knew there'd be trouble so I moved off in a hurry. Farther along were fire-plugs, and dogs to sniff them—you've seen a city landscape in the comics? Well, Grandma, or whoever was mocking this scene up for me, hadn't left out anything. But not a single thing.

"Behind the houses was a pitch black alley. I felt lost, abandoned. I saw a row of garbage cans, flat, gleaming, aluminum, and a flat high wooden fence with the word *meow* flashing on and off above it. I saw a pair of shiny yellow eyes and a flying (though static) shoe and a big *MEOW* and a stream of *!!?* *??!!*, and at this point I began to lose my sanity. Cricket noises rose about me, perfect lettered. A fake wind blew some leaves along the gutter. This was the ultimate in dream suburbiana! The people were asleep; I could tell because out of the four-paned windows came a lot of white balloons, and in each balloon was a saw cutting a log in half, and above the log was the word *ZZZZZZZZZ*. . . .

"I've never been so scared in my life. A rolling pin flew toward me and went POW and flew away, and I began to run, my shoes pounding on that 2D pitch-black alley between the jagged fences under that slice of yellow moon. It was so utterly—"

"Horrifying," Dr. Brant breathed, wriggling in his bonds.

"Completely. I lived in that country for six months. Six long months, evenings and Sundays only! Can you imagine what that would do to a man's sense of balance? What a freak I felt. How round, how queer, how rejected. There was a disease they got, it never appears in the papers, but sometimes it causes the corpses to twitch and jerk; these symptoms set in at the moment of death. . . . You remember Miss Raven, don't you? Such a terrible thing. But I promised not to tell. Anyway, I don't want to chill you with tales of two-dimensional corpses. It was worse than that. Far worse. I fell in love."

"Ahhh," said Brant, his eyes widening.

"Well may you ahhh," Farouche said sadly. "She was gorgeous. She was a redhead. She was a sensation. Her dialogue—you should have seen her balloons! Witty! Sparkling! Sexy! She made dumb broads like Snow White look like lumps of coal-tar. Her face was so round, so pink, without a lot of hideous detail; just

eyebrows, eyes, nose, and mouth, and a couple of red spots for the cheeks. No shaded contours, no lights and shadows—this girl was *pure*. Like you don't often find them any more. And when she spoke! Clear black words, in a white balloon, floating over her lovely head: BANG!, she would say, and HOT DINGIES!, and HEY THERE, LOVER BOY, LET'S GRAB A COUPLA HAMBURGERS—Oh, my God! I'll never forget her, to my dying day!"

He burst into tears. Brant watched, disturbed and saddened. Gently he said, "But you left that country, anyway, and came back here, didn't you?"

Farouche nodded, tears streaming down his cheeks. He took out a blue polka-dotted handkerchief and blew his nose. He caught his breath. "I got a letter from a guy who signed himself Zarkov. It said, 'You cubist, you are a walking crime against nature. I have constructed a duplicate of you using chicken skin and wire. Get out of this strip immediately or I will turn it over to the brutal and sinister Kah-Mee for torture.' . . . Do you think I'm a coward, Brant? Tell me honestly."

The psychiatrist smiled grimly. "I've heard of the Kah-Mee," he said shortly. "You're no coward. It would have been a fate worse than death."

"Yeah. That's what I figured

you'd say. So anyway, I split until the heat blew over. You're a sympathetic sort of chap, Brant. Would you like to see a picture of my girl?"

"I'd love to," Brant said eagerly.

Yog Farouche pulled a wallet out of his hip pocket, extracted a piece of five-colored paper from it, unfolded the paper and spread it out on Brant's knee. The psychiatrist sucked in his breath. "Wow," he said. "What a build. Gorgeous!" Across the bottom of the page was written, in a delicate feminine hand: 'To Yoggysy, for memories and futures, with all of my love, Brenda Starr.'

"She's a honey," Brant said, licking his dry lips. "You sure were one lucky guy."

Farouche grunted. "That's what you think. What relationship can anybody have with a two-dimensional woman? Just imagine it! Go ahead! . . . Frustrating, isn't it?"

"Ahhh," Brant said, a new light coming into his eyes.

"Yeah." Farouche put the picture back in his wallet. He rubbed his head with his knuckles and he yawned. "Well, it's over and done with, a good many years now. I'm not going to weep my weeps in public. Once again I escaped out the northeast corner of the world. Hunted, persecuted, the man without a country, always by submarine, Miami to Boston, New Orleans to San Diego, forever the

neon jungle and the low-register clarinet and overhead the moon like a monocle, like the big eye of the angel. . . . My friend, we are two puppet masters making our dolls shake hands, believing this to be the only medium of communication. But let me put you wise to the secret of the universe. Here it comes: The grail blends into a trolley line that goes over your head."

"I don't understand," Brant said.

Farouche grinned. "Honester and honester. You're hardly a homo sap any more. Can you see suns going around inside of stars going around inside of suns? Then you're on the right path. Listen, pal. Let's face it. I am seventy-three trillion years old. I've seen empires rise and fall: Rome and Athens, Ur and Egypt, Atlantis and Mu, Fanthor and Grograndina, back before the beginning of time, and you don't seem surprised at all. . . . What's wrong? Did you suddenly remember something?"

"Yes," Brant whispered, straining forward in his bonds, his eyes alive and eager. "Listen, you know where I come from? *Yeow!* Where the electrons are slightly smaller, hence the chronons are shorter—think what this does to a Micky Mouse watch! So we have electrons hopping from now to the other side of now, forming different elements; this is the Flipped

Coin theory, beautiful as light running through water in space! Do you know that I watched—”

“You’re cured,” Farouche said. He threw his leg over the chair-arm and began to buff his fingernails, looking bored. “The rest is old hat to me, pal.”

“I watched Titanosaurus hatch and wither, right here on this little planet! This planet—hah! Once I wouldn’t have stopped here for fuel. This is the backwoods, the edge of town—up *there* is where all the interesting people live. You can see it on starry nights, the stamping ground of the intergalactic smart set. . . . If you knew what games they play, and against what fabulous settings! Listen, Yoggysy. Help me. I’ve got to go back home. I’ve got to go back home! I’ve got to go back home!”

His voice rose to a shriek. Farouche got up, waving him silent. “Shhh! Do you want that Potter bitch in here, that starched custodian of wilted souls? Wait!” He went over to the window and threw one foot across the sill and disappeared into the garden. In a few moments he was back, with a flat green leaf in his hand and the radiant smile on his face.

“Look here, friend.” He held the leaf in front of Brant’s eyes. In the cupped center of it stood a round firm shimmering dew-drop. He said, “Nasturtium, with a jewel. Look. Don’t think; simply look.”

Brant looked. The drop was only a dew-drop. It was a moist solid tiny crystal ball. Inside was the room, turned upside-down, and his own curved attenuated face, and the open window, the sun streaming in, Yog Farouche holding a nasturtium leaf, with a crystal ball in the center, and inside the ball was a room, with an open window, and the sun streaming in, and a world in a world in a world in a whirled—

Brant began to laugh. “Take these ropes off me,” he said. “Yes, sir, I see what you mean, I certainly do exist. And not because I think, either. Just the opposite. Zowie! Untie me fast!”

Farouche jerked a knot and the rope fell loose. “Here there and everywhere,” he said. “It’s all yours, beyond the groping fingers of time. Will you remember that?”

“Certainly. Why not? Think of all the hours I wasted! Powie! What do I do now?”

“You go back to my cubicle. If anybody asks, your name is Yog Farouche. If they keep asking, tell them about the land of Yeow. By the way, you are completely rehabilitated in three days, after which you take over Superman’s job both daily and Sunday and from there on you’re on your own. Are you pleased?”

“Delighted,” Brant said, beaming.

“All right; tomorrow, same time, same wave-length. But first,

push the intercom button and ask Dr. Eyck to come in here."

Brant flipped the switch and said, "Send Eyck in, Miss Potter," and closed the switch again.

Farouche said, "How do you feel now?"

"I feel very happy. I feel absolutely secure and unspeakably serene."

"Good; you'll feel even better tomorrow. I'll see you then."

He closed the door, rubbed his hands briskly, and sat down in Brant's chair behind the big desk. He picked up a blank card from the pile on the desk, and looked at it. Then he opened the drawer and found a bottle of ink, poured some ink on the card, smeared it around with his fingers, blotted it off, and placed the card second in the pile. At that moment, Dr. Eyck came in.

Eyck looked alarmed. "Where's Dr. Brant?"

"Out," said Farouche. "Don't worry; he's put me on minimum security." He smiled the radiant smile.

"Oh." The young psychiatrist sat down in the easy chair. He was a husky blond in whites, with a long face and a broken nose, and he was wearing horn glasses. "Minimum security, hey? You sound like an old hand around here. . . . Hello, a nasturtium leaf. Where'd this come from?"

"Outside in the garden," Farouche said.

Eyck smiled gently. "Not in this garden. We've only got roses."

"This year, yes; but you will have nasturtiums, summer after next."

"Well, now, that may be true," Eyck said, letting his expression go bland. "So Dr. Brant put you on minimum security, did he? Where did you say he went?"

"I didn't say, but he's out getting in touch with some people he used to know. He wants you to check me on Rorschach while he's gone. Said to tell you he slipped a couple of different blots into the pack, but you just record my statements as usual. Whatever *that* means," he smiled.

Eyck smiled back and settled in the chair, on familiar grounds now. "First, you're to look at the ink-blots I show you, and then describe what they seem like to you. I'll just jot down what you say. Say anything that comes into your mind," he said, handing over the top card.

Farouche looked at it. He squinted. He turned it upside down. "Reminds me of blue light passing through a chunk of ice. . . . You can feel the wind in it. It's a man who puts his fingers to his temples and concentrates on smashing eggs. Ever try that? . . . Yes, he's obviously from Betelgeuse, where I was born; crepuscular, in moss gray and moss green, under the blurred signs; and now he's a young psychiatrist

whose heart is doing a different thing than his hands. Very sad. Very sad. Very sad.

"Ah," said Dr. Eyck, looking at Farouche for the first time. "Go ahead. What else? Does it remind you of anything in your past?"

"Yeah; it reminds me of the time I put some dough on three race horses; one named Fat Chance, one named Zeitgeist, one named Go for Baroque. . . . Funny how some guys like long odds more than life itself. . . . I took one look at your paint-smearred face and I knew you were one of them. . . . Anyway, I was saying—Goethe, who dropped out of the race some time ago, once asked me this question: Did you ever watch while a bird hypnotizes a snake into eating it?"

Dr. Eyck wrote busily, nodding. "Go on, go on," he said.

"I remember I dumped five grand on Fat Chance and another five on Zeitgeist, simply because I hated myself that day. But the very next day I loved myself and I won a quarter of a million on Go for Baroque. I want you to remember that. The horse's name will remind you. Baroque—that means 'irregular in form'—it's more fun that way, see. Will you remember?"

"Certainly," Dr. Eyck smiled, writing.

"Eyck, old boy, no wonder you never change anybody. You don't even know anybody is there."

". . . How's that?"

"You're alive like a machine," Farouche said. "You don't experience anything. You have a shortage of viewpoints. So naturally you don't help anybody; you just wear a white coat and follow the rulebook."

"We effect a good many cures —" Eyck began stiffly.

"Oh, snap it off. A witch doctor will cure the same percentage. Check the figures some time. Look at me." He held Eyck's eyes with his amber ones for a few seconds. "You've been thinking along the same lines, haven't you?"

Eyck stared, opened his mouth, closed it again, and nodded.

Farouche said, "All right. Go back to your notebook." He picked up the card and squinted at it, and Eyck did as he was told, with a flicker of puzzlement on his long face. Well, some patients could sure be peculiar. That's the way it went on this job. . . .

"Okay," Farouche said, flipping the card. "Next picture. Here we are, squeezed between Was and Will-be like yellowed photographs in the family album. . . . Here's a snapshot of you graduating from high school, with a vulture on your shoulder; that was before you died. . . . You know what? Sometimes I'm full of nostalgia for something that hasn't happened yet. Or for the second just gone by. Or for wind in a chimney that fell to pieces five hundred years

ago. It's funny, saying this to a guy with no imagination, and watching his inner reactions. It may take several weeks to shake you loose. . . . Well! Here I see a field of flowers growing on the bright sidewalks of eternity," he said, pointing; and then he put the card down. "That's all. What's the next one?"

Dr. Eyck put the first card face down on the desk, and reached for the second card. He glanced at it. This must be one of the special ones Brant slipped into the pack. H'mmm. What a strange day it was today. This card was unusual too, all right. Never seen anything like it. What could the blot be? It seemed like an eye, the eye of a cyclops, wearing bifocals. One single eye with a fountain of tears rushing out of it. The tears were so real they were getting his hands wet. . . . How terrible. . . . Things he'd never thought of before. . . . Ancient things. . . . Tears like liquid diamonds, the sorrow of the ages. . . . What a pit of grief, how sad, how terrible. . . . Excruciating!

"Don't cry," Farouche soothed. "You're almost born now. Everything's going to be all right very soon."

"Soon!" Eyck sobbed, staring at the gushing tears. "Soon, soon, soon! Always the big waiting room. Pie in the sky. That's how they've fooled me. A crock of lies! No wonder everybody's crazy! Hoo,

hoo, hoo. . . . I'd like to stuff 'soon' right—"

"I know," Farouche said bitterly. "It's awful. Like they say When at Delphi do as the delphiniums do. Even if you're a tiger lily. What fools people are! How they love their chains!"

"Yes! Yes!" Eyck wept, tearing up the card and throwing the pieces into the sunshine. "It's true, you're right, I'm surrounded by fools, blind fools; they've got my worst interest at heart."

"Suicide-prone," Farouche prompted. "The race is heading down the big drain. . . . No scream could do justice to that horror!"

Eyck nodded, sobbing. He put his head in his hands.

"Here everything is slick, glossy, tasteless, like expensive cardboard. What's the use of living? The houses, the entertainment, the people—a bunch of lemmings playing follow-the-leader down to the sea!"

Eyck nodded jerkily, head in hands.

"But so what?" Farouche said. He relaxed suddenly. He stretched widely, and he yawned. "When I'm eating a plum, I don't remember how pineapple tastes. So this world is full of debasing attitudes and fashions. Who cares what other idiots do? There are games beyond games beyond games, my friend; and this one is a pip-squeak."

Eyck quit sobbing. He looked up, between stiff fingers. He snuffed. "Yeah? Says who?"

"Says me, that's who. For instance, in the cracks between moments lives a world, which contains beings. Even the terms misrepresent. For when an X is utterly alien, we don't speak of it, we fold our sentience, we freeze the bursting limb. 'Repress' ain't the word for what you are doing one hundred percent of the time," Farouche said.

Eyck stared at him. He looked wary now. His face was wet and contorted. "Who told you about me?"

"Nobody had to tell me. You're fond of flowers, horses, canned ideas, and pessimism. Some combination! No wonder you always lose when you bet. You can't see the future for the trees. You dislike women, because they've kicked you around, because you and other people have kicked them around, around and around. But you buy just about anything anybody tries to sell you, which later makes you mad. So I'll have to use these quirks until I can cure them. And that, pal, is the secret of changing the world."

Eyck began to get to his feet, slowly.

"You're the one," he whispered. "You are the Voice I've been waiting for. You—"

"No doubt! Pleased to meet you. I remember you well. When

you were a kid they took you to Dr. Lamb with the white marble smile, he who washes his hands in formaldehyde and says, 'All right-ee, we'll have those wings off in no time!' . . . This is the way they do it, this gang of local murderers. Because wings sometimes break the furniture."

"Yes!" Eyck said excitedly. "How did you know! Every night I used to dream about— Say, what's your name? What's happening here, anyway?"

"We're changing games. The old one was a bore. My name is Farouche. I've taken over three state hospitals, two rehabilitation centers and a chamber of commerce, and my next goal is to induce governmental leaders to come here for my cure. When I've finished with these birds there won't be any war, among other things. And you can assist me. Does that make life worth living?"

"Zowie!" Eyck said. "Pow! It's the answer! I never thought I'd—I'm wondering what—"

"Don't worry about a thing. First, I'll ask you to step into the lab and fix me up a needleful of pentathol, because Miss Potter is my next patient, and who knows how she'll react? Except me, of course. She's sub-clinical schizophrenic. You may not have noticed, because anybody who isn't putting piranhas in the water cooler passes for normal in this corrupt society. You think you've

suffered? Take a look at the face of Potter. She may require three or four weeks. And I've got all those patients in the ward to take care of today."

"I see what you mean," Eyck said thoughtfully.

"Before you go, ring the bell and ask Nurse Potter to step in."

"Right," Eyck said. He leaned across the desk and pressed the intercom button. "Will you come

in for a moment please, Nurse?"

Then he winked at Farouche, and went out through the laboratory door.

Mr. Farouche moved after him and bolted the door so he wouldn't be disturbed too soon.

He sat at Dr. Brant's desk and smoothed down his wiry hair.

He leaned back, relaxed, smiling radiantly, waiting for the nurse. . . .

Through Time And Space With Ferdinand Feghoot: XI

IN 2631, FERDINAND FEGHOOT FOUND himself spaceshipwrecked on the fifth planet of Schimmelhorn III. The only other survivor was Dr. Jacqueline Cusp, the famous biologist, advocate of parthenogenesis, author of the popular work entitled *All Men Are Beasts*, and founder of a female movement which required its members to wear Mother Hubbards and full masks at all times.

In the wreck, their clothing had been almost completely burned off, but Feghoot, whose chivalry was proverbial, had salvaged part of the ship's cargo of cured hides at great risk to himself, and had fashioned robes for the two of them.

"We had no idea," he told his friend Robert Louis Stevenson on his next junket into the past, "that this planet was the home of the gnurrs, who devour fabrics, and leather, and even synthetics. That same night they descended upon us, and, without even disturbing us, ate up every one of the hides, including those we were wearing. At dawn I was wakened by the most hideous scream that ever I heard. The good doctor had found herself stark, staring naked!"

"It's an interesting story," commented Stevenson. "I might be able to use it if I could think of a title."

"Why not call it 'Dr. Jacqueline Missed Her Hide?'" suggested Ferdinand Feghoot.

—GRENDAL BRIARTON
(with thanks to E. Nelson Bridwell)

What characteristics are typical of a life form that might succeed man? Surviving radioactive weather was obviously one, thought the confident, possibly right, probably regrettable Dr. Barnes.

THE CAGE

by *Miriam Allen deFord*

ROGER FAIRFIELD STOOD WITH Dr. Dudley Barnes outside the unbelievably enormous iron, steel-netted cage, and gazed with complete incredulity at what was clearly visible before his eyes.

"Look," said Barnes quietly. "And take your time."

The two-acre enclosure had been left untouched; many tall trees grew within the cage, and there was a rich undergrowth. Here and there were clumps of the glacial rocks common in the High Sierra.

And all over the terrain, in and out of miniature caves formed by crevices in the rocks, all over the trees and in the air as well (since they could fly as easily as they walked), swarmed the little creatures, about six inches tall. They were brown in color, covered with chiton. They had antennae and bulging eyes with slit-like mouths beneath them. They breathed apparently through tracheae instead of lungs.

But as they walked upright when they were not flying; their tiny upper limbs picked up minute particles, or wielded bits of twig, and tied around their lean bodies were fragments of woven grass that seemed rather ornaments or insignia of rank than clothing.

"The X-creatures," Barnes said.

"They look like some kind of large insects, only—"

"They *were* insects, generalized social insects—or their ancestors were, when I discovered them in the remote Andes 20 years ago. I can no longer call them that. They become adult at about six months, and their life-expectancy is about four years, so let us estimate one and 5/7 years as a generation. The youngest adults you see here are only the 12th generation—not long enough to cause any appreciable changes under ordinary circumstances. But you must remember that for 20 years these creatures have been treated by intensive radiation. Not only are they

now completely resistant to radioactive conditions that would wipe out all other animal life, but also their evolution has been speeded up enormously. I should say that they are now at approximately the stage of mankind in the Paleolithic."

In the subdued humming, permeating the area Fairfield could hear a distinct suggestion of articulate speech.

"Can they talk?" he gasped.

"Oh, yes, of course—their brains have developed association areas, and they have Broca's and Wernecke's areas just as we have. The visual verbal area, which would enable them to read, is not developed yet. But their speech, though limited in vocabulary and without grammar, is quite intelligible. Later I shall turn on the amplifier so you can hear it more plainly. I understand a good bit of it myself."

"But what do they think about you? What do they think you are?"

"I am their god," Barnes replied simply. "When they have become civilized, I shall still survive as a legend, doubtless—and poor X-creatures will be excommunicated or put to death for not believing in me. Look."

He pointed downwards. There, near the edge of a rock-crevice, a number of the creatures had thrown themselves flat on the ground, their wings folded and their antennae waving as they

raised their arms in supplication. The backs of their heads were daubed with spots of yellow mud.

"Those are the priests, or medicine men. They are worshiping me. When I am not here they worship at those bits of carved wood you see planted here and there—apparently crude images of me. They use flakes of flint for carving, and for weapons as well."

"What do they eat?"

"Many things—they are omnivorous, like man. They nibble at leaves and grass, and lately I have noticed a tendency, which I am encouraging, to store up such supplies and to clear ground and plant seeds—the primitive beginnings of agriculture. They will probably never go through a pastoral stage, since there are no animals suitable for domestication. But their chief diet consists of gnats and midges and small flies and ants. Incidentally, look over there."

Following Barnes' pointed finger, Fairfield noticed a group of the X-creatures squatting before one of the miniature caves. A faint gleam of light showed within it.

"They have discovered fire," Barnes explained. "Rubbing their bits of flint together has caused friction, and they have found out how to pile leaves and keep themselves warm in cool or rainy weather—in winter they stay mostly in the caves, out of the snow. They are beginning also to

boil their meat; they have constructed wooden and stone receptacles. They don't need clothes to keep warm—though I suppose a bumble-bee skin might make a nice cozy wrap—because their chiton covering protects them far better than our thin skin does us."

"What about lightning, or forest fires?"

"At their present stage of development, I must deal with that—they couldn't escape from a general conflagration."

Fairfield laid down the field-glasses with which he had been observing the inhabitants of the cage. He felt sick and shaken.

"What's the matter, Mr. Fairfield? You look upset."

"I am," he said grimly. "There are a lot of questions I have to ask you, Dr. Barnes."

"That's what you're here for, isn't it?" The geneticist's tone was bland.

"In the first place—I'm not a scientist like you, but I've been writing about science for a long time now, and I have plenty of reading background. What is to prevent these—things—from growing to such numbers that nobody can confine or control them? You can cage them here now, but if they keep on evolving—become, to all effects, civilized beings—they will find a way out, won't they? And even while they're here, why haven't they proliferated until the population is so big it suf-

focates itself? Insects lay innumerable eggs."

"One thing at a time. Yes, it's quite true that in freedom they would—perhaps some day will—undoubtedly far outnumber human beings. But under present conditions, naturally I keep the population down. The number of fertilized eggs allowed to hatch is kept to a strict minimum—if for no other reason than that by selective breeding I eliminate all individuals not likely to go the way I am training them to go. You see that gate—it can be electrified when I open it, and they have learned that to go near it then is sure death. I have devised an instrument—a sort of combined lazy tongs and butterfly net—with which I can isolate and withdraw any individual at will. Those I treat and return go back the same way. I wish I knew what myth they have built up to account for those abductions, or what the returned traveler tells of his adventure! They are just beginning to think as individuals instead of collectively—perhaps there are heretics and rebels already."

"But good God, doctor! These are insects!"

"They *were* insects, as I said before—isolated, generalized organisms which when I first discovered them in the high Andes displayed one remarkable mutation: they walked upright on their

two hindmost limbs. The other four ended in something I could roughly call embryo hands, furnished with digits. And I could see that by selective breeding those first creatures could be so developed as to possess, for all practical purposes, an opposable thumb. That was the first prerequisite for their upward evolution: the hand and the brain go together. And their heads were relatively large.

"Mr. Fairfield, I studied those creatures for months. That was when I slipped away from the camp and my native guides, knowing perfectly well that I could frustrate their search for me and all the expeditions which I was sure would subsequently be sent to hunt for me. That is why for 20 years I have been considered dead, probably in some fall from a precipice, with my corpse concealed forever. Your people ferreted me out—but that's something we'll talk of later. Let me go on with this.

"As I said, I studied those creatures for months. I found it took two months for the fertilized egg to hatch. After three months the larvae pupate."

"I saw no cocoons here."

"No, you can't. They are kept and tended carefully by the females, who dig and cover them over with leaves. After a month more the adult form—the imago—emerges; they are able to breed

one year later—a unique delay among insects. Do you realize what that means?"

"I don't quite follow you."

"Why, it means that of their four-year life-expectancy, one eighth is spent in infancy, another quarter in immaturity. If man had the same relative growth, childhood and adolescence would take up about 26 years of his average 70. In other words, the X-creatures have a more prolonged infancy than we have. And that is the other crucial factor.

"Let me quote that great biologist, Sir Charles Scott Sherrington: 'Had wings arisen in the vertebrates, without cost of a limb-pair to co-exist with leg and arm, the consequent additional experience and exploitation of a great three-dimensional medium would have evolved a brain of wider components and on fuller lines than is the human.'

"These things here—inhabitants of this Garden of Eden, descendants of half a dozen Adams and Eves I brought from South America and for which I built this cage and all the rest of the improvements on the vast estate I bought here—are destined to become our superiors mentally. I figure that under my treatment, in 30 years more they will have reached a status equivalent to that of civilized man today—with untold potentialities far beyond those of any man."

Fairfield felt himself turning white with horror.

"But *why*?" he croaked hoarsely. "That's just my point! Why should you, a human being like the rest of us—not just the world's greatest geneticist, as they used to call you before you disappeared, not just the Nobel Prizewinner and the dedicated scientist, but a man like us all—why are you deliberately breeding a creature which inevitably will destroy your own kind?"

"Calm yourself, Mr. Fairfield. We'll discuss all that fully, very soon. Let's go back to the house now, and you can ask any questions you please and I'll answer them. But before we do, let's get a closer approach to my wards here, to prove to you how far they have developed already."

He touched a button near the gate, and immediately every sound, from the rustling of the trees to the ripple of the little brook that ran through the enclosure, became immensely louder. Now Fairfield could hear plainly a babble of conversation—though to his unaccustomed ear the words sounded chiefly like modulated grunts.

"It would be hard to isolate any particular speech in so large a crowd even of human beings," said Barnes, "but perhaps I can interpret a few dialogues near the fence. There—see those two males, walking toward the brook?"

Fairfield found it impossible to tell a male from a female; all the creatures seemed to be of about the same size: but doubtless Barnes had learned some differentiating marks. The geneticist listened intently for a few seconds, and then reported:

"They are planning a hunting trip. The initiation ceremony for a batch of cocoons is about to take place, and the rites are climaxed by a feast, so there must be plenty of dried meat on hand. That's about all they're saying; but here is something pretty, which unfortunately I shall have to spoil."

He pointed upward to a low branch of a nearby tree, to which two of the creatures had flown.

"He is telling her that she pleases him exceedingly, and that he will buy her from her clan—I don't understand clearly on what basis these tribal groups are founded, but they've existed since the second generation here—for many pieces of flint. And she is enthusiastically in favor of the idea. The beginning of marriage, you see—they used to be quite promiscuous.

"But this female is one I have marked as from a strain which is not to be bred from, so as soon as she is fertile I shall have to take her out and destroy her. Poor creature, he will be distracted for an hour, and grief-stricken for at least a day.

"Well, that's enough for your first glimpse. Let's go back, and we

can talk as much as you want."

They climbed down the trail again and drove in the tough little car on the blacktop road between redwoods and pines a quarter mile to the comfortable modern house staffed by the deaf-mute servants.

"How do you manage to live in this wilderness?" Fairfield had asked last night when Barnes had met him in the little town to which he had been flown by private plane from the San Francisco airport. "Oh," Barnes had replied airily, "it's easy. I come down once a month for mail and supplies. Of course, as you know, I have this whole set-up under another name. When you're independently rich, as I am, you can get a lot of things done without too many questions. The story I gave out here was that I was a wealthy retired ornithologist, and that I had the cage built to study the native birds; actually, no bird could get into it to devour my X-creatures.

"Till those pestiferous bosses of yours got on my trail, I'd kept Dudley Barnes safely dead until I was ready, if ever, to resurrect him."

Back again in the book-lined study, over highballs, Fairfield nerved himself to speak. He was acutely conscious of the fact that he was only a newspaper writer on science, albeit a celebrated one, interrogating—accusing—one of the great of science.

Just why, he wondered as he watched his host stuffing tobacco into a well-worn pipe, had Barnes replied as he did to Goodwin's letter?

He recalled vividly the day Goodwin had summoned him to his office.

"I've a curious story to tell you, Fairfield," he began. "I've kept it under my hat for several weeks, but now the time has come to confide it to you, because it means a job for you. It's top secret for the present.

"Have you ever heard of Dudley Barnes?"

Who hadn't? But he had been dead for 20 years.

"Well, we got a tip a while ago from one of our West Coast correspondents, Fletcher, who was on a hunting trip and blundered on—and got thrown out of—an amazing mountain retreat in northern California, apparently owned and operated by that very same Nobel Prizewinner and authority on genetics who disappeared on an expedition in the Andes. He couldn't discover its purpose, but it's some kind of scientific project. Fletcher recognized him immediately from his photographs."

But why, Fairfield wondered now, when Goodwin had tracked the rumor down, had Barnes given up his long-cherished anonymity? For Goodwin had gone on to say that he had written to Barnes—

their man had found out the name under which the great geneticist was living—asking for information, and Barnes had written back that if the paper wanted to send a fully qualified man (young and healthy, he had specified for some unknown reason) he would explain and show the whole thing to him. Goodwin had proposed Roger Fairfield, and Barnes had replied saying he knew Fairfield's work well and would welcome him.

So here he was. And now what?

"Let's have some lunch and then you can go on with your questions," his host said amiably.

"No, let's talk first."

"As you wish. I presume the first question is: am I crazy? Well, you've seen the things for yourself."

"I still want to know *why*."

"You asked that before. Do I hate the whole human race, have I deliberately bred a creature to destroy my own kind? My dear boy, are you so sunk in your specialized work that you don't realize the situation mankind is in?"

"You mean the danger of nuclear war?"

"I mean the imminent possibility that somebody—I don't say Russia, I don't say the United States or the United Kingdom—but somebody, may at any moment, by accident or design, pull the trigger that could mean the end to us all. And if by then noth-

ing is ready to succeed mankind, our planet goes back to, let us say, the Devonian. Perhaps the long upward climb will start again from there; perhaps not—the prevailing radioactivity may prevent it.

"But if another form by that time has developed as my X-creatures have already developed—and is immune to radioactive damage—you and I will at least die knowing that we are not the end of civilized life on earth."

"O.K.," Fairfield said after a long pause. "Let's grant that. But in all probability, if worse came to worst, some of us humans would be left here and there. Suppose the holocaust happened tomorrow. Would you want the survivors to be left to struggle not only with all the other horrors that would be inevitable, but also with the equivalent of an Old Stone Age race which would soon overrun the earth and wipe out the last vestiges of humanity?"

Barnes puffed on his pipe.

"Let's hope it *won't* happen tomorrow," he said quietly. "Though even that would be better than any prospect that what would be left of us could ever recover what we had lost. Even today my X-creatures would essentially be no lower than us brutes they would supplant. And they have in them the potentiality to create, in a world where man might be only an extinct animal, a far higher civilization than man-

kind can even envisage.

"My hope is, of course, that it will never happen. The day it is certain there is no more danger of man's blowing himself out of existence, every one of those things out there in the cage will be liquidated; I've made provision for that. But with speeded-up evolution such as they are undergoing, in 30 years more of these beings will be fully civilized, at least as much so as man is today. If they had to take over the world then, they wouldn't exterminate any human survivors—they would cherish and learn from and honor them. Remember, their religion would teach them we humans were once their gods."

"All very fine, but let's be realistic, Dr. Barnes. To begin with, if the catastrophe does occur, it will be sudden. You'll be wiped out with the rest of us. Do you count on having time first to liberate your X-creatures and set them on their way? If you don't, they'll be unable to leave the cage and they'll just eventually exterminate themselves in a population explosion."

"I've arranged for that. At a fixed level of radioactivity in the atmosphere, the gate will open automatically, and all but the subnormal among the X-creatures—which we wouldn't want out anyway—will have the brains to escape. What I hope, naturally, is that disaster will hold off for the

30 years more we need for the best results."

Fairfield hesitated.

"I don't mean to be rude, Dr. Barnes," he said, "but let's face facts. You're 66 years old. Are you going to be here to manage things for the next 30 years?"

The old man unexpectedly beamed.

"Ah!" he exclaimed. "That's just the point, and I was justified in writing your superior to send you out here. Of course I have no expectation of living and functioning in high gear till I'm 96. Somebody else will have to live here with me, be trained in my methods and procedure, and inherit my mission—and also, incidentally, my not inconsiderable fortune."

"Well, that makes sense. I can see now why you were willing at last to give this thing publicity. Have you picked out your—apprentice?"

"My apprentice *and* my successor, to join me and follow me, in strictest secrecy till the time for revelation comes. Yes, I certainly have.

"Mr. Fairfield, surely you've guessed. It is you."

Fairfield jumped to his feet. His voice shook with anger.

"Now I *know* you're crazy!" he cried. "Me? Do you imagine for one minute I'd give up my career, my associations, my personal life, and devote the rest of my existence

to nursing those superinsects of yours? This is just a writing assignment for me, Dr. Barnes, not a life sentence. I'm leaving here right now and going back to New York to write my story."

"Oh, no, you're not, my friend."

Roger Fairfield found himself looking into the barrel of an automatic sighted between his eyes.

"Do you think I really intended to give this story to the world before I was ready?" Dudley Barnes inquired calmly. "Do you think I'm such a fool I wouldn't know that the minute it broke the Federal government would take action? My creatures would be destroyed, and I'd be put either in a penitentiary for subversive activity or in a mental hospital."

"You can't keep me here. I'll get out somehow."

"How? My servants are deaf mutes but they're also bigger and stronger than you, and they obey my orders. You'd never get as far as the garage, or as the beginning of the road if you fancy you could run away on foot. There's no telephone here, no short-wave radio, no means of communication nearer than the town you can't reach. If necessary, I'll have you bound when I'm tired of holding you at pistol point. And don't think of rushing me, my boy; I'm a crack shot and at the first move I'll let you have it."

Fairfield sat down again. His legs were trembling.

"What's more," Barnes went on inexorably, "if by any fluke you should manage to make a getaway, the instant you were gone I should go down to the cage and open the gate. Before anybody could learn to cope with my protégés, they would already be far beyond easy extermination. A long-drawn-out international war with the X-creatures at their present stage of development would be almost as terrible as a thermonuclear blast—and in the end the X-creatures would win by mere force of numbers."

Fairfield's mind was whirling wildly.

"Maybe you can keep me here by physical force—for a while," he said at last, his voice hoarse. "But what good would that do you? You couldn't make me help you with this devilish project of yours, or agree to take it over after you."

Barnes smiled.

"You think so? After a few weeks or months of imprisonment—and I have a nice little place prepared for you—you'd be quite willing to do anything I ordered, in exchange for freedom to move about the estate and have decent food and living conditions instead of a cold stone floor to sleep on and nothing much but watery soup to eat. To say nothing of daily injections of a sedative.

"You'd be only too glad, by then, to take part in a serious and exciting scientific experiment. And

my guess is that by that time you'd have come to your senses, and would be willing not only to learn to act as my assistant, but to agree with my conclusions and to become my enthusiastic successor when the time comes."

"Put the gun down," Fairfield said wearily. "I give in."

Dr. Barnes laughed heartily.

"So that you can overpower me and run? Hardly."

He jerked his chin. At the signal the mute man servant, moving fast, came through the door which had concealed him, and before Fairfield could stir seized his arms and handcuffed him behind his back. The automatic was still pointing. The man tripped him deftly and he felt his ankles being tied. Then the mute lifted him easily and threw him bodily on a couch. Only then did Barnes lower the pistol. He spoke to the servant in sign language and the man disappeared. Barnes drew up a chair beside the couch on which Roger Fairfield was writhing impotently.

"We're both tired and hungry after all this fuss," he said easily. "We'll have our lunch in here. I can prop you up and feed you."

"Thanks very much," Fairfield growled through his teeth. "You needn't bother."

"Nonsense, my dear boy; calm down. Let's discuss this like reasonable beings."

"All right, here's the first rea-

sonable idea. Has it occurred to you that I didn't just come out here on my own?"

"No, I invited you."

"And my paper sent me. If I don't return or report pretty soon, Goodwin's going to make inquiries. Don't forget we got on to you in the first place because one of our correspondents, Fletcher, got close enough to this place, just by chance, to see you and recognize you from your photographs. Goodwin will send him again, and if he doesn't succeed they'll keep it up till somebody does find me."

"That was an unlucky accident. I've taken steps to see that it can't happen again."

Barnes spoke quietly, but Fairfield thought that for the first time his captor looked a bit disconcerted. He took what advantage he could.

"Look, Dr. Barnes," he said earnestly, "all this melodrama is ridiculous. You're not a mad scientist and I'm not an international spy. My paper and I are just as much concerned about the nuclear bomb threat and the welfare of our country and world as you are. If we decide it's better to keep this whole thing a secret, we'll do just that, and you can trust us. You don't have to kidnap me and make a prisoner of me, just to try to force me into your service. We might even find somebody else, better qualified than I am, to do what you want me to do. I can

think of half a dozen highly trained young men who would give their eyeteeth to do voluntarily what you're trying to compel me to—if not for the sheer scientific interest of it, then for the money they would earn and inherit."

"And if you decided it *wasn't* better to keep it secret—what then?"

"Then I give you my word—and you know the reputation of our paper and I hope you know mine—that we would give you the chance to clean things up here and get somewhere to safety before we made it public. I'll put that in writing if you wish."

"But that would mean destroying my creatures at your time instead of my own."

"Not necessarily. I think I could persuade Goodwin to let you take a few of the creatures with you and go on with the experiment in secrecy somewhere else, if we had your promise not to let the new batch free unless the big crisis arrived."

There was a long silence. Then without a word Dudley Barnes stooped and untied Fairfield's ankles, and when the younger man stumbled to his feet unlocked the handcuffs. The woman servant came in with a tray. They ate lunch together peaceably if not amicably.

When they had finished, Dr. Barnes broke the uneasy quiet.

"I have been alone here for a long time," he said in a low voice. "I get papers and magazines and books, but I have had no one to speak to. Perhaps I have become—obsessed."

For the first time Fairfield felt a twinge of compunction.

"Perhaps," he answered gently.

"If you can get me Mr. Goodwin's word to match your own—"

"Trust me; I'll do that. I'll go back when I've got the full story, and we'll communicate with you at once."

"And you'll print nothing till I give you leave—till I've had time to wind things up here and disappear?"

"I promise you."

He felt uncomfortable. That was the way he would like to manage it, but could he pledge Goodwin too? And Goodwin was his boss, and this was a terrific story.

"Let's go back to the cage, then. You're not too upset by your—er—accident?"

Fairfield laughed.

"Just a bit stiff."

"I do apologize for my impetuous actions," Barnes murmured as they drove to the cage.

"Forget it." Fairfield glanced at the sky. "It's going to rain soon, isn't it?"

"Then we must hurry. They can't fly in the rain. The water gets into their tracheae and they can't breathe. I'm trying to breed for resistance to that, so they won't

always have to seek shelter in wet weather, as they do now."

They had alighted where the road ended and were climbing the last steep quarter mile to the cage, Barnes half trotting up the rough trail. The old man's face was pale, his lips bluish; he was panting. Fairfield glanced at him and wondered about his heart.

The clouds were heavy, but rain had not yet begun to fall. The X-creatures were going about their various pursuits as before, flying as much as they walked.

"Why," Fairfield asked suddenly, "don't they fly to the sides or roof of the cage and try to get through the mesh or tear it down?"

"Simply because they don't know it's there."

"Don't know—"

"Oh, they can see and feel it, of course. But they don't know it is a cage. It is just the world—the way the world is made."

Dr. Barnes handed field-glasses to Fairfield and turned on the amplifier.

"Do you ever talk to them?" the writer asked.

"Never. As they become civilized, I want them to stop thinking of me as their god, whose word was heard by their ancestors and passed down to the descendants. Some day I hope they will understand me—and you, too, since you must seem to them another god who has suddenly appeared

beside me—as natural phenomena of some kind which must be investigated scientifically. Otherwise, how will they comprehend how to deal with human and animal survivors when—or if—the time comes that they must be freed?"

"I see." A thought occurred to him. "I was here with you this morning—which I gather would be to them equivalent to two weeks ago. Do you suppose they, or at least their priests or medicine men or whatever they are, have begun yet to speculate about this sudden doubling of their god?"

"You mean, has there been time for a heresy to arise? I doubt it; I imagine it would take much longer, except perhaps in the case of some very precocious shaman. And if such a one has voiced his heretical opinions yet, he has probably already been executed for his sin. Religion is always conservative. Let me listen and find out if there are any indications of anything of the sort."

He focused his own binoculars on a small group near the fence. Even to Fairfield's unaccustomed eye it had a furtive look.

"By Jove!" Barnes exclaimed. "I think you're right. Only there are no priests in that conclave. And they aren't taking exactly the line you suggested. These must be the potential intellectuals. The argument isn't whether there are one or two gods, but whether, if God

isn't One, the entire phenomenon isn't after all merely some manifestation of nature.

"That's generations ahead of anything I'd expected. Of course their vocabulary isn't up to the kind of wording I'm using. But that's the general idea. Now I wonder—ah, here it comes!"

From a nearby cave a little procession was emerging. All of its members were daubed with yellow mud. It converged directly on the agitated little group in the corner. In an instant the participants had scattered, all but two or three who were too slow. Before they could escape, the priests had surrounded and seized them.

"Now," said Barnes grimly, "the Inquisition will begin."

"Will they kill those poor creatures? Can't you stop it?"

"I wouldn't think of interfering with their social development. They have to go through this stage. We did: we're not altogether out of it yet. There will be some pretty nasty executions soon, I fear. Ordinarily they bury their dead facing south, because that's the direction from which I come to them. It will be interesting to see how they dispose of the corpses of apostates."

It was stupid to feel pity and indignation on behalf of beings so alien and inimical. Nevertheless, Roger Fairfield did feel it. He started to expostulate. A drop of rain fell on his hand.

In half a minute it was pouring hard. At the first drops the Inquisition had broken up. Every X-creature in sight was scrambling for shelter. The ones that had flown to trees and to the cage-ceiling clambered hastily down.

"That ends the show for today," Barnes said. "Let's get under cover ourselves."

"Wait just a minute," Fairfield pleaded. "I'd like to see one of them close to. Can't you open the gate and take one out before they all hide in the caves?"

"I don't know. I never open the gate until it is electrified, and if I turned on the juice in the rain I might be shocked myself." He glanced speculatively at Fairfield. "That wasn't what you had in mind, was it?" he asked softly.

"Good heavens, no! How could you think such a thing?"

"I'm sorry. I guess our little conflict back there jarred me more than I knew. Let me make amends. Here, I'll catch a specimen for you."

He lifted the lid of the long box by the gate and extracted from it the strange-looking implement he had described earlier. Then, cautiously, he opened the gate a crack and inserted the expanded instrument.

Few of the X-creatures were left in sight, and those were hurrying to shelter. Barnes zigzagged the extensible net over the ground and finally caught one of them. He

extracted the net and closed up its lazy-tong handle. The little creature was not struggling. This, apparently, was something that happened often and might happen to anyone; it was fate, and it was useless to fight it.

Barnes handed the net to Fairfield, who bent over it. A sharp cry jerked him upright.

"Quick! Oh, my God!" Barnes screamed hoarsely. "Shut the gate!"

Fairfield dashed to slam it shut. He was too late. Half a dozen of the X-creatures, perhaps not even realizing that they had left the cage, since no electricity deterred them, had followed after the net before Barnes could reach to close them in.

"We must get them!" the old man gasped. "If there is one male and one female among them, that will be enough. I might as well have let them all escape."

In the pelting rain it was a hopeless task. The escapers had crawled under leaves on the muddy ground. Both men searched feverishly. Barnes looked white and sick.

"Not yet! Not yet!" he groaned. "They mustn't be freed yet!"

There was not a sign of an X-creature outside the fence:

"You told me you had a way of exterminating them if it became necessary," Fairfield reminded him. "Can't you use it on these?"

"It's a mist of poison gas, fatal to insects, but harmless to lung-

breathers. But if I use it so near the cage it will kill them all. And even then, without the cage to confine them, I couldn't be sure that I'd got every one that came out."

The two stared at each other in dismay.

And then, with the amplifier still on, they caught a tiny sound at their feet. It was an X-creature, crouching on its abdomen, its thorax raised and its arms waving. Fairfield looked at it. Not yet washed off by the rain, a pinpoint of yellow mud stuck to the back of its head.

One of the medicine men had been among the half dozen through the gate. In his dim mind he realized now that somehow he had transgressed, had broken a taboo, had displeased his god. And so he was praying.

Barnes knelt on the ground and bent his head to listen to the creature's almost inaudible grunts. When he arose, his face was whiter than ever.

"He says," he muttered, "that he did not mean to sin by following after when God had taken one of them to travel to the Faraway Land, perhaps for a while, perhaps forever. He begs me to forgive him. And he says that if I will spare him he will lead the others back if that is what I wish. He will tell them the Water from Above was a punishment for the disobedience of the wicked who dared to deny the Revelation."

"Meaning my appearance with you this morning?"

"Exactly. It seems the orthodox interpretation must be that God had blessed them by bringing another of his divine kind to manifest his love for his creatures. This one is the chief wizard; he says they will obey him."

"So what do we do now?"

"Nothing. There is nothing we *can* do but wait and see."

They stood shivering in the rain. Fairfield glanced worriedly at Barnes. The old man looked bad. If he should have a heart attack—

"Look!" Barnes exclaimed.

At their feet, through the field glasses, they saw a bedraggled, wavering line. At its head marched the little traitor with the mud on his head.

"I'm sure they're all here," the geneticist muttered. "He said he knew them all. When I open the gate again, to let them through, you watch the opening carefully to make sure no more come out of it. It's pretty safe, though; he'd order back any who tried."

While the rain poured down, the little creatures, wriggling and sputtering as the water choked their breathing-tubes, but obeying their leader as if hypnotized, crept through the narrow opening again.

Barnes slammed the gate shut on the last of them.

"That's that," he mumbled. "Let's get back to the house. I'm all in. I don't think I could take another experience like this. Heart's dicky—I know it, but I can't get away long enough to see a doctor about it." His voice rose. "Fairfield, you'll *have* to make your people see that I have help. Either that, or I shan't dare to let the X-creatures live. I couldn't have handled that situation alone."

"It was my fault, Dr. Barnes. You wouldn't have opened the gate except for me. And I'll do my best to make them understand."

But *could* he persuade Goodwin? And even if he could, what then?

Everything depended in actuality on something far beyond his or Barnes' or Goodwin's doing or preventing.

The old man's voice startled him from reverie.

"Come on, boy, let's get to the car and out of the wet. What are you standing there for, staring up at the sky?"

Fairfield followed the old scientist down the trail, his eyes turning back to the sky.

"I was just . . . wondering," he said.





It is clearly time, the Good Doctor indicates, to be on watch for a revolution—but what we most urgently need is a good idea for the kind of revolution we shall have.

FOUR STEPS TO SALVATION

by Isaac Asimov

ONE OF THE LARGE QUESTIONS that must concern the science-fiction devotee is the one that says: "Where do we go from here?" Considering that "here" looks remarkably like a precipice these days, the logical answer isn't a pleasant one. Perhaps we had better change the question to: "Is there anywhere we can go except over the edge?"

One way of tackling this new question is to consider the route over which we've gotten this far. I have a theory that the main value of studying the past is to make it possible to understand the future, and here's one place where I can test it—at least to my own satisfaction.

Man is unique in that he represents the only species for which

the question of "going" has any meaning. All other creatures look neither back nor forward, bear no load of the past, have no fear of the future. They live in a timeless world of immediacy.

Of course, a species may "go" somewhere and even give the illusion of purpose in doing so. Some primitive crossopterygian invaded land and had descendants that were eventually amphibians, and some primitive reptile turned scales into hair and eventually had descendants that were mammals. This, however, has nothing to do with the individual. Such changes are slow alterations in response to environmental pressures, blind competition, natural selection and the rest.

Mankind, however, "goes"

somewhere independently of evolutionary change. He migrates from the tropics to the polar regions without growing a pelt of hair; he returns to the undersea world without redeveloping gills. What's more, he is about to tumble into an environment that no other species on earth has ventured into—outer space—and he will do this without seriously altering his physical nature.

Why, of all species, is man able to make "going" an individual affair? Why can he, to a certain extent, choose where he is to "go?"

The obvious answer is that he is intelligent and, while obvious, the answer is also insufficient.

There are intelligent animals that are in no way master of their own fates to any unusual extent. There is no sign of any gradual change in this respect as intelligence increases. The earthworm has no sense of past and future and lives only in immediacy, and the case is the same for the gorilla. Although the gorilla is far closer to man than to the earthworm, in the physical sense, the gap between gorilla and man as far as time-sense is concerned, is far greater than that between gorilla and earthworm.

It seems to me, then, that it is not merely a question of having intelligence but of having *enough* intelligence. Merely to have *nearly* enough intelligence, as in the case of the gorilla, is of no service at

all. In fact, the gorilla is an unsuccessful species on its way to extinction, and would be on its way out even without man's expanding economy in Africa.

So we must determine, if we can, at what point "intelligence" became "enough intelligence."

The progenitors of man first developed a brain larger than those of modern great apes nearly a million years ago, and that brain increased in size steadily (and rather quickly, as evolutionary changes go) and by 200,000 years ago, it was getting close to the modern brain in terms of sheer mass. Nevertheless, for ninety percent of his stay on this globe, pre-man was not to be distinguished from other great apes to any remarkable extent. Pre-man had a large brain, a glimmer of understanding, simple tools flaked out of rock—but still held to nothing more than a skulking and precarious life of hiding from the large carnivores.

If, a hundred thousand years ago, Genus Homo had vanished from the earth, an extraterrestrial observer, surveying the course of life's history on our planet, would have had no reason to think of pre-man as potential lord of the earth. Pre-man would probably have seemed to him nothing more than a curious advance toward intelligence which didn't work out. Intelligence still hadn't become *enough* intelligence.

But Genus Homo didn't vanish. Instead, one hundred thousand years ago, there came the turning point which led on to the inevitable establishment of human dominion over the earth. It was the discovery of fire.

Fire kept man warm through the damp, cold night and over the icy frigidty of winter, and this made it possible for man to migrate out of the tropics (to which all other great apes are confined even to this day). Fire made ordinarily coarse and incredible substances both palatable and digestible, so that man's food supply was increased. Fire, moreover, kept other animals at a distance. Since fire increased man's living-space, his food supply and his security, it probably led to the first population explosion, and after that our extraterrestrial observer would have no doubt that man was destined to be the dominant species on the planet. (I call this the "Paleolithic Revolution.")

But why was fire discovered when it was and not before? Was it a fluke? The breaks of the game? Or was it the result of some crucial evolutionary development of the brain?

Nobody knows, of course, but I have a theory and what's the good of this column, if I can't use it to publish my theories?

Consider what we really mean by the "discovery of fire." It can't mean the mere realization that

fire exists. Anything that lives and can sense its environment has some realization that fire exists as soon as it encounters a lightning-started forest-fire. And any living creature that can run responds to a forest-fire in the sensible way. It runs like mad.

But with developing intelligence comes developing curiosity and there must have come a stage when curiosity even buried good sense, so that some pre-man was foolish enough to approach the dying remnants of a burned-out area to watch in absorption while flame danced out of a burning twig. Maybe he added another twig to keep it going.

Perhaps, after any number of pre-men had demonstrated this sort of curiosity, one (more daring than the rest) brought a bit of fire into his cave, or to his camp, perceiving the usefulness of light and warmth after sunset and dimly delighted at the fact that an approaching sabertooth may have shied away at the sight of the flame.

But just having the fire in the cave or at the camp site is not the crucial "discovery" either, for after all, fires have the bad habit of dying out and what does one do then? Wait for lightning to strike again and for another forest to burn down? It is difficult to imagine a revolution, of the type that followed the coming of fire, depending upon a phenomenon that

could come to an end at any time in a moment of carelessness.

Clearly, for fire to remain a continuing force, man or pre-man would have to learn how to make fire where no fire existed before; he had to be able to create fire at will. Perhaps, fire had been brought to the camp site any number of times to enlighten a family or a tribe for some days or weeks and then gone out. It would be remembered in the future as a lucky windfall (like Eskimos coming across a stranded whale) and then, after some time, forgotten. This would not be the discovery of fire. Learning to make a fire, however, to ignite one from a cold start, so that fire under human control became a permanent phenomenon, *that* was the discovery of fire.

What was involved in this discovery? It might have been fumblingly discovered by accident that two rocks struck together created a spark that might set fire to dry and powdery wood. Or some prehistoric genius may have noted the heat developed by friction and twirled a pointed stick in a wooden tinder-filled hole.

How it happened doesn't matter. The point is that it did happen and that, on the Stone Age scale of things, it was a piece of complicated technique that had been discovered. It seems to me quite possible that a person who could make fire was a rare indi-

vidual and that with his death the secret might be lost again—*unless* he could communicate it to others.

We could suppose that he demonstrated the process by actually doing it and that others, watching, caught on. This is possible, if the process is an uncomplicated one, but learning a complicated process just by watching is a slow and inefficient job indeed. Try teaching someone to do something as apparently simple as swinging a golf club with the proper stance by dumb show only and see how quickly you lose your temper.

By dumb show, you can demonstrate the striking together of two rocks to form a spark, but how, by dumb show, can you explain that only certain rocks will do this, and that the rocks must be held just so and that for heaven's sake, man, the tinder has to be soft and spongy and, above all, *dry!*

The crucial discovery was not fire at all, then, but rather the development of adequate communication.

Now, many animals communicate. All sorts of mammals and birds have warning cries and comfort signals and yowls for help. Communication may not even be by modulated sound. Bees are well known now to be able to pass on information on honey sources by dancing about in various ways. But in all cases, these sounds or other signals are limited to things

of fixed and concrete significance.

What is needed is some form of communication which is complex and versatile enough to be made to represent new ideas; even ideas that have no concrete significance. In other words, a form of communication that can represent abstractions. The only form of communication we know of that will meet this requirement is human speech.

The key importance of speech shows up in experiments in which young chimpanzees and human babies are brought up side by side under identical conditions. For a couple of years, the two advance together. In fact, because chimpanzees mature at an earlier age, the chimpanzee is somewhat ahead of the baby. Then something happens, and the chimpanzee falls behind and remains hopelessly behind forever after. The something is that the baby learns to speak, while the chimpanzee does not.

The importance of speech is shown, in a completely different way, in a well-known story from the Bible (Genesis 11) where God, in order to prevent men from building their impious Tower of Babel, is pictured as adopting a simple (and deadly) expedient. God says: "Go to, let us go down, and there confound their language, that they may not understand one another's speech."

He did so and that effectively ended the project.

My theory, then, is that the discovery of fire came only after the development of speech and that it could not have come before. The development of speech, furthermore, could not have come about until the brain had developed to the point where the speech center was sufficiently complex to allow the necessary delicate manipulation of lips, tongue and palate to make speech possible. (The chimpanzee doesn't learn to speak because it can't; the speech centers in its brain aren't sufficiently advanced.)

This is the point of "enough intelligence" in evolutionary terms. It is at the point of the adequate development of the speech center.

Speech, then, is the first step to salvation.

Speech for the first time linked a species in time as well as in space. If space alone is considered, many forms of life herd or band together, even low forms. What can be a tighter and more integrated society than that of the termite hill?

With the development of speech, however, there came a new power. Parents could pass on their experience and painfully garnered wisdom to their children, not only by demonstration, but by explanation. Not only facts but also thoughts and deductions could be passed on. The new generation could begin with that and build upon it.

This meant that knowledge could be accumulated over several generations. By speech man conquered death, for the wisdom of the past lived on and a tribe consisted not only of the living members, but of dead members (in terms of their remembered words) as well.

This meant that a true culture could be developed, for no art, science or school of philosophy can reach a point of any value at all if one must start from scratch and proceed only as far as a single generation can carry matters. Furthermore, the development of any technique over a period of generations must give rise to the thought of "change" or "progress." For the first time individual members of a species can become aware of having come from some place, from their great grandparents discovery of some technique, to their own better development of it. For the first time, the question could conceivably arise: "Where do we go from here?"

I maintain, now, that it was an advance in communication that made the question possible at all, and that the crucial advances made by mankind involved further advances in communication. Wherever some real revolution takes place in man's way of life, the question of communication will be found to underly it.

For instance, after the development of speech and the discovery

of fire, advance was slow and for thousands of generations, man lived on in what we would today consider complete savagery. Even the development of true man, *Homo sapiens*, about 40,000 years ago seemed to make no difference.

Then, quite suddenly, the "Neolithic Revolution" took place. About 8000 B.C., groups of men in the Near East learned to make pottery, to domesticate animals, to build up permanent communities and, most important of all, to develop agriculture.

How did that come about? If my theory is correct, only through a basic advance in communication.

Speech gives rise to oral tradition and it had been estimated that this will carry over for about four generations before it becomes so badly distorted that it forms no reliable guide. This is not to say that oral tradition cannot carry a germ of truth for longer periods. The tale of the Trojan War was kept alive by oral tradition for far more than four generations, but the germ of its truth was buried under bushels of nonsense about gods.

Well, when any form of human activity is so complicated that it takes more than four generations to develop it to the point of making it a profitable undertaking, speech alone is no longer enough. Paleolithic man may frequently have made stumbling gestures in the direction of agriculture only to

have it die out because after a while no one remembered exactly why great-great grandpappy wanted to keep those weeds around the camp-site.

Something is needed past speech, something to make speech permanent and unchanging, something that could be referred to without so much chance of being misled by distortion. In other words, some sort of written code, representing the sounds of speech.

No one is certain when writing was first developed, but it seems certain that no form of human community which we would call "civilized" was ever established without the possession of at least a small and specialized class that could read and write.

I feel that writing was developed in Neolithic times and that it was writing (or at least a primitive form of it) that made possible the development of agriculture and all the consequences of the Neolithic Revolution. Naturally, writing didn't come in all at once to bury oral tradition methodology forever. The importance of the distortions brought in by oral tradition in developing the techniques of agriculture is attested to by the wide variety of fertility rites that sprang up about it.

As writing developed, treatises on mathematics and architecture could be prepared, tax records could be kept, messages could be sent that would knit together gov-

ernments over large areas. In short, a society complex enough to build cities and establish empires became possible. The very word "civilization" comes from the Latin word for "city."

Writing, then, is the second step to salvation. It turned a savage into a civilized being.

But even with the discovery and utilization of writing, mankind could not be said to have learned to control his environment in our modern sense. The European of 1500 A.D. would not have felt ill at ease in the Egypt of 3000 B.C., once he got used to the difference in language and religion.

In fact, in many ways it seemed that man's development reached an early peak and then began to decline. The Egyptians, about 2500 B.C., built huge pyramids, and no culture for four thousand years afterward could match the sheer magnitude of such an undertaking (with the one exception of the Great Wall of China). The Minoans in Crete built castles with internal plumbing in 1500 B.C. and that was not matched until as recently as three or four generations ago. The Greeks developed an interpretation of the Universe and the Romans a system of law and government that stood as a shining and unapproached example for a thousand years after the fall of Rome.

In fact, the men of the Renais-

sance looked back to the times of Greece and Rome as a golden age to be imitated. Their notion of progress was a return to the past.

But then, after 1500 A.D., a great change took place, the third of the great revolutions of man's history. The first had been the Paleolithic revolution of fire; the second the Neolithic revolution of agriculture and cities; and now there was the third, the Modern revolution of science and industry. A rapid succession of great men from Copernicus to Newton smashed the Greek view of the Universe and laid the foundations for the new scientific view. Then another succession of men from Papin to Watt laid the foundation for the bending of the energy of inanimate nature to the service of man.

Life changed so that the man of 1961 would feel less at home in the Europe of 1500, than the European of 1500 would have felt in Egypt of 3000 B.C.

What happened? Again there must have been a fundamental advance in communication.

Writing is all very well, but it is a slow and painful process. Books are few and can be distorted by mistakes in copying. Only rich men can afford even small libraries and it takes an advanced culture to support even one or two really good libraries—as long as unaided writing is the only means of freezing words on paper.

Under such circumstances, it is easy for a book to be destroyed, for a whole culture to die. When Nineveh was captured in 612 B.C. the library of Assurbanipal was destroyed and the Assyro-Babylonian culture was dealt a staggering blow. The slower destruction of Babylon through successive futile rebellions against Assyria and, later, Persia, completed the debacle. Only scraps of the culture have been recovered by assiduous digging.

The great libraries of the Greco-Roman world went one by one as Rome weakened and died. The Library at Alexandria was largely destroyed in the fifth century by fanatic monks and what was left was finished off by the invading Arabs in the seventh century.

Even so the complete corpus of Greek knowledge survived for six more centuries in Constantinople. Then came the sack of that city by the crusaders of 1204 and that was destroyed. What we have left now are mere remnants.

About 1450 A.D., however, the art of printing was developed. With printing, knowledge was suddenly made secure. So many copies of even the most unimportant book could be published that any small town today can have a library which can serve as an important repository of human knowledge.

No atomic war which did not succeed in wiping out the human

race entirely could wipe out human knowledge today to the extent that the sack of a single city in 1204 did.

More than that, before the days of printing, an unpopular view was easily suppressed. The Greek philosopher, Democritus, held that matter was atomic in nature, and the Greek philosopher, Aristarchus, held that the earth revolved about the sun. Both views were unpopular and in the small world of scholarship of those days, such thoughts were not followed up and what writings were put out in favor of those views did not survive. We know of Democritus and Aristarchus only through the casual comments of those who disagreed with them.

Once printing was invented, however, matters were different. Copernicus had views very similar to those of Aristarchus and for many years (for safety's sake) he

contented himself with circulating a handwritten manuscript of his heliocentric theory. Naturally, nothing much happened. But then he agreed to have a book printed. Copies of that book penetrated everywhere in Europe and *that* was decisive.

Men could be suppressed, silenced, even burned, but books, once they were published in sufficient numbers, could not be. Galileo was retired by the Inquisition and reduced to silence, but his books were not and not all the power of the Index could keep them from being read.

Furthermore, every scientist who made a discovery rushed into print and copies of his reports flooded every cranny of Europe. Science became a community-sing performance rather than a solo aria, and many brains made light work.

Printing, then, is the third step

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to salvation. It turned philosophers into scientists.

And now what? Each revolution carried mankind only so far and then further advance was dependent upon a new basic advance in communication. Furthermore, the time between advances is shrinking. After the coming of man, 900,000 years passed before the development of speech. Then 100,000 years passed before the development of writing. Then 10,000 years passed before the development of printing.

Now 500 years have passed and I think it is time for the fourth step to salvation.

The printing press still functions with blinding speed (more than ever in fact) and scientific lore is poured out by it in a suffocating flood. Knowledge still flashes from one end to the other of the scholarly world—but who is at the receiving end? Actually,

it is simply impossible for one man to absorb it all. He can live and work only by shutting his ears resolutely to almost all of it and concentrating only on the splinter that immediately engages his attention.

There is the real precipice mankind is facing. It is not the possibility of nuclear war which can conceivably be avoided by an exercise of good will all round. It is not the consequences of the population explosion which can conceivably be avoided by the exercise of good sense all round.

The precipice is rather this: That the world of science, upon which man's way of life now irrevocably depends, may break down under its own weight; that the time is coming when one scientist will be unable to understand another; that the time is even coming when no scientist can learn enough in a reasonable

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lifetime to make significant advances of his own.

Naturally, there are ways of staving off the evil day. More and more effort should be put into recruiting scientists and developing methods of teaching science and of storing information—there are microfilming and punch-cards and computer memories to help.

There is even room for the encouragement of some scientists to make a specialty of being unspecialized; that is to spend their lives learning as much as they can about as many branches of science as possible in order that they might serve as translators, describing each specialty to men of another specialty, and all specialties to the general public. (Actually, this is the ideal I have in mind for myself, but I am doing it entirely on my own. I would like to see many men specially trained and educated for the purpose.)

Yet I cannot help but feel that all this staving off of the evil day is only that, a staving off. The evil day will yet come unless the fourth step is taken. And, if my theory is correct, the fourth step must be some fundamental advance in communication.

And try as I might, I cannot imagine what the advance can possibly be, except for the development of some method of pouring knowledge directly from one brain to another without the intermediary of books or even speech. A

short-circuiting of all three previous steps, in other words, is the only way we can now keep up with the growing complication of knowledge.

But what is the use of advocating telepathy as an answer when telepathy is not within the realm of possibility? Even people who believe that Rhine-type experiments prove the existence of telepaths and telepathy (and I am not one of those who believe) cannot maintain that the telepathy is at any higher level than that involved in being able to guess the correct card a little oftener than random chance would permit.

Perhaps in the eventual course of evolution, the brain might develop a telepathy center sufficiently complex to send and receive "thought waves" just as the development of a speech center a hundred thousand years ago allowed the coming of speech.

But we can't wait for evolution. We stopped waiting a hundred thousand years ago and we can't start again now.

Which leaves me with the original question as to whether there is anywhere we can go except over the edge.

Alas, I can't think of anywhere.

But then I wouldn't have been able to think of printing in 1400, or of writing in 8000 B.C. and I probably wouldn't have been caught dead within half a mile of a twig-on-fire in 100,000 B.C. . . .

BOOKS



Intending to keep a weather eye on thinking in the field, Mr. Bester this month calls in a guest critic—James Blish—and they both take a look at ROGUE MOON, by Algis Budrys. Gold Medal Books, 35¢

THE KINDLY EDITOR (TO QUOTE the Good Doctor Asimov) has requested this department to explain our reviewing policy to readers and authors.

In the first place, there is no editorial control over the book reviews. We review what we please, when we please, and how we please. Our spelling and syntax are occasionally revised, but always most apologetically. Our opinions are often contradicted, but only after they are safely in print.

We review only those books which we admire. We feel it would be unfair to authors to publish completely adverse criticism, so we prefer to ignore the books which we dislike. The only exception to this policy are those authors of such standing that they cannot be ignored; but we deeply regret the necessity to handle them roughly.

We have been reproached for our severity to authors. We do not feel that we're being severe. No

book is perfect; no author is a perfect craftsman, although we would all like to be. Nothing would give this department more pleasure than the opportunity to review *the* perfect story by *the* perfect author, but we have yet to find this miracle in science fiction, and this most emphatically includes our own work.

Therefore, as a colleague, we feel obliged not only to point out the admirable qualities of a book, but to indicate its weaknesses as well, hoping that it will help the artist. We must accept this responsibility. We've said before that no one but a writer can understand another writer's problems. We must attempt to do for our fellow-craftsmen what we hope they will do for us.

The Kindly Editor (a very shy man) fears that it might seem boastful to review a book which originally appeared in this magazine, and prefers a mere "also published" acknowledgment. We disagree, and begin this month's col-

umn with *ROGUE MOON* by Algis Budrys, one of the finest flashes of heat-lighting to dazzle us this year.

Mr. Budrys has come very close to realizing our ideal of science fiction, the story of how human beings may be affected by the science of the future. In his protagonists he has drawn two vivid characters, Edward Hawks, Doctor of Science, and Al Barker, compulsive adventurer, and the clash of their reactions to each other is like a thunder storm. Mr. Budrys' subordinate cast is equally well-drawn, and when you emerge from the book you feel as though you've participated in a sophisticated brawl, compact of deadly conversation, venomous sex, and potential violence.

The science, although not altogether novel (it involves the replication of men in order to explore a fantastically enigmatic cavern in the moon), raises fascinating human problems. How does it feel to have a replica of yourself die? What sort of men will submit to this? What sort can survive?

Mr. Budrys touches on this, and then, alas, abandons it. In fact, he brought his book to a semi-cadence at exactly the point at

which it cried for completion. We can only surmise that perhaps he became emotionally exhausted (which happens to many authors midway through a novel) but was too pressed by deadline or financial obligations to put the manuscript aside and wait until he was recharged enough to finish it.

The result is that one is left hanging in the midst of overpowering conflicts which remain unresolved, and this department implores Mr. Budrys to finish his powerful novel with a sequel.

At this point we shall introduce an innovation for which we have been lobbying for some time. We've felt that readers may become bored with us, and might welcome new blood. Permission has been granted us to turn this department over to illustrious colleagues from time to time, and this month we take great pleasure in presenting the eminent James Blish, a sensitive craftsman and perceptive observer of the science fiction scene. Mr. Blish, by one of those pleasant coincidences, has also reviewed Mr. Budrys' book, and we hope the contrast between the two points of view will entertain you.

—Alfred Bester

From his first magazine appearance in science fiction, Algis Budrys was clearly a born writer, as opposed to the technicians who have lately dominated the field.

Budrys is, inarguably, a technician himself, and a consummately skillful one, but his gifts go far beyond craftsmanship into that instinctual realm where dwell the

genuine ear for the melos and the polyphony of the English language, and the fundamental insight into the human heart.

ROUGE MOON¹ is a testament to the fact that Budrys the science-fiction writer is the only one of his generation who has never stopped learning and growing. (In fact he is the only one to show himself capable of learning anything at all, so we are phenomenally lucky that he did it on so grand a scale.) That he had many good gifts was evident from the outset, but in addition he has prosecuted their use to the uttermost limits of his strength. If he is now to go on to a larger audience than that of the s.f. field, as he should, it is only after writing a work which epitomizes everything he has ever had to offer us.

So it is no surprise that ROGUE MOON is a masterpiece. It would have been visibly a masterpiece in any year; it was especially conspicuous in 1960, a year in which its nearest competitor (and that not every near) was an (admittedly electrifying) blood-and-thunder novel harking back (even in its atrocious grammar) to the dear dead days of Harl Vincent and Charles Willard Diffin. No other

entry showed even this much merit, though several were ambitious enough in intent.

A full-scale analysis of ROGUE MOON can't be attempted here; though the plot is deceptively simple, both conception and execution are so complex that such an analysis would be scanty were it as long as the novel itself. Nor would I have the brass to offer the "essence" of the case, which is knowable only to Budrys. But in my own universe, two layers of this multiple structure bulk largest.

To me, then, ROGUE MOON is primarily a man-against-nature story in which the devices, the symbols, the machinery being brought to bear upon it by the author are those of modern warfare. The battlefield is the death machine on the moon; the weapons are the technology mustered to get through the machine, logistics included—which, with marvelous appropriateness, are as deadly as the death machine itself, killing "us" even before "they" do, *but without our being aware of it*. This point is driven home by the device of the duplicated man, who, although he dies many times both on Earth and in the death machine and is able to remember each death, can never be convinced that he is not the same person who began the experiment.

There are two stories being told: the apparently simple man-against-nature yarn and the paci-

¹And it is the novel which this discussion concerns; the book publication schedule made it necessary that the F&SF version appear in one instalment, which in turn required it to be heavily cut.

fist parable. It is also clear, however, that the "nature" of the first story and the "enemy" of the second was identical, and that neither of them are located on the moon; they are in the souls of the men themselves, in short they are not "them" but "us." After all, the death machine (like any other fact of nature) has been there for a million years without killing a soul, and it is far from certain—indeed, it is highly unlikely—that killing men is what it was designed to do. The two-fold enemy is the primary viewpoint character's drive for knowledge at any cost, and that of the secondary viewpoint character for suicide. In this sense, much is made of the military value (potential, because wholly unknown) of the death machine; hence, knowledge-is-power. And there you have the two-sided coin of modern warfare: lust for power on the one side, suicidal mania on the other.

If I am making it sound as though both male protagonists in this story are crazy, I am understating my case. The entire cast of characters, including all the minor ones, is as various a pack of gravely deteriorated psychotics as has ever graced an asylum. I cannot remember ever encountering before a novel in which all the characters were demonstrably, clinically, incurably insane, including the hero and the heroine, but that is the fact here. Nor is it inadvertent;

not a single word in this book is.

Why did Budrys populate his book solely with madmen? For two immediately visible reasons. One is embodied in the book's epigraph, a motto off a tombstone by which the author plainly says that he considers the situation in the book quite normal—at least for our times. In other words, he means *you*, and me, and himself. The other is to be found in three pages of an imaginary Arthuriad, in tone rather reminiscent of the historical romances of Maurice Hewlett but a good deal more distinguished, in which the leading character is compared to Merlin fashioning invincible armor for Launcelot, whom he hates; this, plainly, is the pacifist parable again, applying not only to the bombsmiths and others who are accumulating the means for our forthcoming suicide, but to all the rest of us who acquiesce in it. The motive given, both for the hero and for Merlin, is pride.

(The author's preferred titles for the book, by the way, were **HALT, PASSENGER**—from the epigraph—and **THE ARMIGER**—from the imaginary play. So I doubt that I am laying greater stress on these two elements than they were intended to bear. Of course, it may be the wrong stress all the same.)

There are two love stories involved—one involving the hero and his girl; the other a quadrangle involving the secondary protagonist, *his* girl, the hero, and

truly loathsome villain who is distinguished both by being the most pitiable character in the book, and by being no crazier than anybody else in it. This second is, of course, actually a sort of serial orgy, by virtue of the fact that every time the secondary protagonist comes home he is all unawares a different man; and the simpler love-story is actually a triangle for the same reason, though the hero is aware of that point, and his awareness gives Budrys a tremendous curtain-line.

My wife has noted that the two concepts of love embodied in these relationships are both markedly immature. I find this perfectly in keeping; what *would* have startled me would have been finding anyone in this cast of bedlamites depicted as capable of a mature love relationship.

Then there is the question of what eventually happens to the man who dies many deaths. The author has so cunningly constructed his ambiguity here that you may finish the book perfectly convinced that you have been told plainly what finally happened to that man. Look again. The fate that you—not the author—have awarded this character may tell you a good deal about yourself, though the chances are 100 to one that you'd rather not have known.

There are some areas of this seemingly straight-forward yet marvelously complex novel where

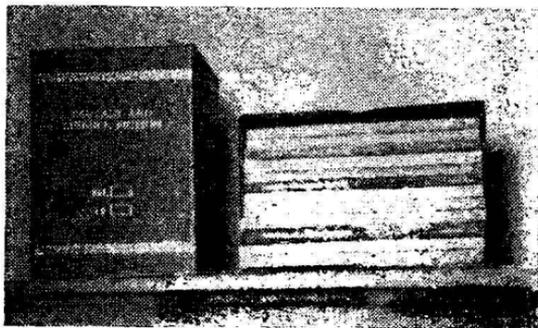
I can see the complexity but I don't know what it's for. For instance, the horrifying passage through the death-machine which takes place toward the close of the story has been put together to suggest that each menacing situation or death presented by the machine has its counterpart in an episode of the story proper. I can see this but I don't know what to make of it; is it perhaps only a piece of virtuosity to delight the author, like Joyce's cramming the names of more than 300 rivers into *Anna Livia Plurabelle* because the chapter was about a river? Since in this case the relationship between the sequence of events in the machine and the sequence of events in the story is structural, it must be doing more work than this, especially since it is strongly underscored that neither character in the machine sees what the other sees—a situation which applies to each reader vis-a-vis the book as a whole.¹

¹*And this line of reasoning leads so directly to the point that I'm amazed that it ever baffled me. The passage through the death machine is structurally analogous to the book as a whole because Budrys, through the motive he assigns for going through the machine, wants to comment on the reason why a man troubles himself to produce a work of art: "To do something nobody has ever done before." The book abounds in such philosophical points, equally tightly integrated into its action.*

As a testament, *ROGUE MOON* is more than impressive; it is not only a bequest but a monument. As a promise, it is more nebulous because no author can make promises for himself, let alone for any other writer. Nevertheless I think it show once more that a science fiction novel can be a fully real

ized work of art, provided that it comes from the hands of a dedicated artist who also knows the field. Budrys is not the first man to do it, but you will not need more than one hand to count his peers; he is leaving s.f. from the top step.

—JAMES BLISH



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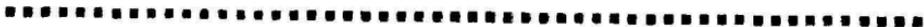
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On watch and at rest, Jack Wilson possessed special tastes in seafood and women; he also had the wherewithall, financially and temperamentally, to go to surprising lengths in search of satisfaction. . . .

SOMETHING RICH AND STRANGE

by Randall Garrett and Avram Davidson

IF JACK WILSON'S CURIOUS VOYAGE did not exactly reveal to him what song the sirens sang, it was satisfactory in other respects.

The specialist all too often finds that he has developed his taste to such a point that he is satisfied but rarely, and excited almost never. Since the recent trouble in Tibet, for example, it is impossible to get a really properly prepared yak roast. The smaller animal of the same name, from Sikkim and Nepal, is not only deficient in marbling, but is generally fibrous and watery. There are many long faces and rumbling bellies around the old Lhasa Club in Darjeeling nowadays.

Jack Wilson, however, is a seafood specialist, and for gourmets of this kidney there is a single ray of bright light shining through the foul fog of flaccid flounder fillets

that are standard Friday fare throughout the country, a single escape route from curdled shrimp in greasy batter. Knowers and lovers of seafood will recognize at once that we refer to the *J & M Seafood Grotto*, a place containing not a single ketchup bottle, and whose very slices of lemon are not the coarse, ordinary sort, but the rare and delicate Otaheite variety, from a little grove somewhere in Georgia.

Pardon us; no. We will not tell you where the *J & M Grotto* is, beyond the fact that it is only a few hundred feet from the shore of the Pacific, at the aft end of a wharf somewhere between Coronado and Nootka Sound—which is enough shoreline for anyone to search. It is doubtful whether any true seafood man will tell you where it is, either, unless you are

known to him, not only as a friend, but as a fellow *aficionado*.

Nor do the proprietors of the *Grotto* advertise; they do not want customers who cannot appreciate their savory wares, and they do not lack for those who do.

And no man appreciates those wares more than Jack Wilson.

He is not one of your *Guide to gourmets*. Wine-mumblers and all their arcane habble-gabble he classifies with Turkish water-tasters, tea-tiplers, and other nuts and phonies. Beer he regards as most appropriate to wash the hair of women of a certain class. Women—of all classes—he loves. Also, seafood.

Now, the love of seafood, like the love of women, can lead a man into strange situations, and Jack Wilson, who combined these loves in a very literal way, managed to get himself into a situation which . . .

It would be easier to begin at the beginning.

Jack loves the food at the *J & M Seafood Grotto* as much as, if not more than, anyone else; but ten years ago, the *Grotto* did not exist, and Jack spent a good deal of his time traveling on faërie seas and delighting in the fruits thereof. The War—in which he had done his part—had been over only slightly more than half a decade, and the world economy, insofar as pelagic goodies were concerned, had not yet returned to its prewar

norm. Russian caviar, to be sure, had begun to trickle back into the world market, but, owing to the tragically unsettled conditions in Azerbaijan and the Trans-Kur, beluga fisheries in the *western* Caspian were a mere shadow of their former selves; and the good gray roe obtained from the capacious bellies of the sea-sturgeons which frequent the *eastern* reaches of that water lack, as all the world knows, a certain degree of delicacy.

There was some compensation in Jack Wilson's knowing a small, weathered shed near New Smyrna where smoked mullet—fit for gods and Texas oilmen—was to be had.

Too, ever since the Kuomintang government had lost the Mandate of Heaven (except for Formosa, Matsu, and Quemoy), the small but suavely flavored shrimp—some say they are prawns, but no matter—found only at the spot where the Gulf of Po Hai disembogues into the Yellow Sea, were no longer to be had at any price. At least, not at any price Jack Wilson was prepared to pay.

Cost was of little consequence to him; he was of what are tritely described as "independent means," which is to say he could spend much, much money without engaging in the tedious task of working for it.

So it was that, except for the

thalassic victuals indigenous to the Communist-controlled areas of the world, Jack was not forced to rely on the vagaries of the export-import trade; whither went the wind and water, there went Wilson. Manga-reva knew him, and the shoals of Capricorn. The great sea-turtle's watery epithalamion enchanted him, and so did its green soup. In a tiny fishing village on the coast of Dalmatia, whose name contained seven letters, six of which were consonants, he discovered and delighted in a small, pink squid seethed in its own sepia. He found four wonderful ways of preparing the rare and tiny mauve crab of the Laccadive Islands, all of which required it to be sautéed in ghee. He learned that *baccalà*—that dried codfish which, in shape, texture, and, for that matter, flavor, is not unlike an old washboard—when prepared with *ciabolini*, sea-urchin sauce, and olive oil of the first pressing, will take the mind of even a Sicilian *signorotto* off the subject of nubile servant girls, for a short time.

And he was infinitely appreciative of that exquisite forcemeat of pike, whitefish, and carp, lovingly poached in court bouillion, which the dispersed of Minsk and Pinsk have made known to continents and archipelagoes alike as gefilte fish.

Let it not be thought, though, that Jack Wilson's entire field of

endeavor to satisfy the inner man was circumscribed by his search for gustatorial novelties or staples in the seafood line. Seafood was his *specialty*. But he shared with all men those tastes in which all men worthy of the name delight. However, although Jack was well-versed in venery and found it enjoyable, invigorating and worthwhile, it presented little challenge. A man who possesses reasonable intelligence, an amiable disposition, excellent health, a pleasing countenance, and a six-figure bank balance seldom really needs to *chase* women.

That Our Jack had never married was due to nothing so juvenile as "not wanting to give up his freedom"; nor did he have any basic objection to the institution as such. He felt, with some mild degree of certitude, that he would—some day—marry, and from this prospect he had no urge to shrink. But . . . somehow . . . whatever it was that he was looking for in a wife, he had yet to find a woman who seemed to have it.

He recalled the Mexican aphorism that "one must feed the body in order that the soul may live in it;" and, hence, food—and its preparation and consumption—always seemed to him to partake of a spiritual as well as a physical and social quality. An intelligent and appreciative interest in victualry made, in Wilson's

view, all the difference between dining and mere feeding. The more a woman showed a genuine interest in the food he chose for the two of them, the more genuine was his own interest in her; an extra dimension was supplied their friendship. Alas! for the ugly advance of ready-mixed, frozen, tinned, and pre-cooked rations: Jack Wilson had rarely met a woman who was his equal in the kitchen, and few who were not infinitely his inferior.

Wilson's peregrinations were usually aboard his own vessels—for, as a lover of the dolphin-torn sea itself, he possessed a diesel-powered yacht fully capable of braving a stormy Atlantic—and it can be realized that many a weekend, and sometimes many a week, was passed with pleasure and profit on the bosom of the deep. And the one thing he never disclosed to any one of the fine selection of prime cuties which he had squired over seven or eight seas was that he was looking for something more than perfection in a woman.

As a matter of plain fact, he was looking for a mermaid.

Wilson was quite certain that the mermaid legend was no legend at all, but simple truth. There had been too many sightings, too many reports from widely scattered spots over the earth's seas, over too many centuries of human

history, to doubt that such beings had once swum the seas of the planet. And, as far as Jack Wilson was concerned, they were still swimming them. (For that matter, he had an equally unshakable faith in the actual existence of the sea serpent—but, then, he had no desire to *find* a sea serpent.)

It is not to be thought that Jack actually thought of marrying a mermaid; that would perhaps have been carrying things a bit too far, especially for a man of his fastidious tastes. He did not even particularly desire to make love to a mermaid, although the sheer physical mechanics of the process interested him in a semi-scientific sort of way. What Wilson was actually pursuing was a dream of beauty. A beatific vision.

The vision was compounded partly from the stuff that dreams are made of, but it included, as well, some of the more memorable features of some of the more memorable women whom Wilson had known intimately. And it happened that each of these hauntingly lovely items in his mind had likened in some way to the treasures of the sea itself, recasting poetry to do so:

*Full fathom five my true love
glides . . .*

His true-love had, to begin, long sun-blond hair the color of the golden sands of Trincomalee (Merrilyn Madison, whose tresses

remained in his mind long after the grace-notes of her body had blended pleasantly with the symphony of a score of others.) His true-love had teeth like a perfectly matched set of the finest Bahrein pearls (The Contessa Della Gama; he chose to forget that those teeth had a particularly nasty bite). His true-love's eyes were as blue as the Bay of Naples on a summer's day (Marya Amirovna, whose eyes, like the sea, shifted to gray when a storm was gathering). Her skin was as milky white as the waters which lave the beach at Saipan (Kirsten Jonsdotter, tall, majestic, and passionate). Her bosom was magnificently bifurcate and tipped with coral (Amy, Duchess of Norchester; she of the cool manner and the hot blood). Her . . .

But enough.

Now, each of these women had been, in her own way, as nearly perfect as anything merely human can be. Yet each had failed to satisfy him for long, not because of the presence of any particular flaw, but by the absence of some indefinable quality. And so, in Wilson's mind, over a period of years, his vision of the mermaid had come to assimilate all the perfections of the women he had known, plus that definition-defying *something*.

He did not, on an intellectual level, consider that every mermaid would resemble his vision. He rea-

soned that such creatures must vary, one from the other, much as non-pinniped females do. But in his secret imagining—deep, deep, down, full fathom five—he knew that *his* mermaid would be the perfect one.

Alex MacNair, captain of the *Lorelei*, Jack Wilson's yacht, neither believed nor disbelieved in mermaids. He was perfectly willing to believe—if he saw one—but, left to himself, would not have walked to the side to look. Mermaids, he felt, were, like luries and kelpies, out of his province. His task was to captain a seagoing vessel. The uses to which that vessel was put were the province of the owner, and Captain MacNair was quite happy with such a division of labor and responsibility. And as for any picturesque devotion to Old Scotland, he limited that to a deep fondness for Ballantine's Twelve Year Old.

He had only once made the mistake of slighting his employer's dream-hobby. It was in Port-au-Prince, early in Jack's enthusiasm. "Captain MacNair! Look! A trawler off New Zealand sighted a mermaid, according to the paper!"

The captain had politely taken the proffered journal and read the item slowly, decoding the almost 18th Century elaborateness of the French prose with deliberation while Jack fidgeted at his side.

"Ah!" MacNair said finally,

looking up. "Interesting. Very interesting. I tell you what it probably was, Mr. Wilson. Very likely they spotted a dugong. Or a manatee. That's what it was." And he held out the paper as the patronizing smile slowly withered on his face.

"Captain," said Jack, his tone the only chill thing that Haitaian noon, "have you ever seen a dugong?"

"I have, sir."

"And your eyesight is good?"

"Twenty-twenty, Mr. Wilson."

"Then tell me: Would *you* ever mistake a dugong for a mermaid? Does a dugong look like a beautiful woman to you?"

MacNair considered his recollection of the dugong. It was somewhat larger than a grown man, and much more visibly mammalian than—say—a porpoise or a whale. From the waist down, the ichthyoid tail, with its horizontal flukes, might have some likeness to the tail of a mermaid, but—from the waist up?

The flippers could never be mistaken for arms, certainly. And that bald, bulging head, with its swollen face and deep-seated eyes and its bristly, lumpy, divided upper lip certainly did not resemble anything human at all.

"Now that I think on it, Mr. Wilson," MacNair conceded, "I do not believe that any sober person could mistake a dugong for a pretty woman."

"Exactly! Not even the most depraved sailor would, or could, make such a mistake."

MacNair was privately of the opinion that his employer had obviously not known as many depraved sailors as he, MacNair, had, but he kept his own counsel, and never again deprecated Wilson's hobby. Ahab had chased whales; Mr. Wilson, mermaids. Mermaids, on the whole, were certainly preferable, being much safer. So was seafood. "A fare day's work for a fair day's pay," was MacNair's motto.

Wilson had long employed a clipping service in New York, another in London, a third in Paris, and, after the war, a fourth in Tokyo, to supply him with mermaid data culled from the periodicals of the world. These clippings were arranged methodically in his leather-bound scrapbooks. Over a period of years, they had expanded into several volumes.

What made Jack Wilson unhappy was that he was always too late. No matter how quickly he got to an area where a mermaid had been sighted—and he had flown on several occasions—the shy creature had always decamped by the time he arrived.

There seemed to be no help for it. The big international news services do not consider mermaid sightings to be real news. Unlike, for example, axe murders and sex circle exposés, they are relegated

to the Silliness Files, and are usually a week or two old before they are ever printed. Even then, the reports are used only as fillers, and the details of fact are meager, since most of the space is given over to what Jack considered the dubious wit of the reporter or rewrite man.

Still, all in all, Jack was not a dull boy nor an unhappy one. If the chase had few hazards, yet it was not without spice. More than one worthwhile episode, culinary or amatory, had resulted.

We now come—and it is about time, considering his importance to the resolution of this story—to Professor Milton Rowe. Wilson and Rowe had never been more than a nodding, can-I-just-take-a-look-at-your-notes, acquaintances in their undergraduate days at Miskatonic University. In lab and office, he was conscientious, hard-working, sober-sided, and just a little bit dull. He seemed shy, drank little, and was the despair of match-making faculty wives. He was also an ichthyologist.

Jack Wilson had been threading his way, one afternoon, through the old part of Antibes and found himself face to face with a smallish, pleasant sort of man with a receding chin, a large mouth, thick and heavy glasses, and American clothes.

It was the same Rowe that Wilson had known, a decade or so older, and yet very much not the

same Rowe at all. Mildly interested in the difference, Jack invited him to join the group aboard the *Lorelei*. It was an invitation for the weekend, but it lasted six weeks. The difference became discernible within six minutes of his being introduced to Michi and Josette.

Like many plain-looking men before him, the professor had discovered that a man does not need the figure of a shot-put champion nor the features of a cinema star to attract and hold the attention of a desirable woman. Charm, wit, and understanding are much more important, and—now that he was far away from the reek of the laboratory, the chalky dryness of the classroom, and the mannered respectability of faculty social life—Professor Milton Rowe could display all three qualities without restraint.

Very few men could get as much out of a vacation as he could.

The *Lorelei's* passengers embarked for Cythera, and for six weeks they burned upon the waters of the tideless (but certainly not dolorous) midland sea. Michi, Josette, Jack, Milt, the sweet-salt air, the sea itself, a succession of small, little known, and quite charming harbors, fine cognac, golden days, and bright nights . . .

It was with the most agreeable astonishment that Miskatonic's

Professor of Marine Biology realized that oceanic life-forms were not only fascinating to study they were good to eat, too!

All four of the passengers were lolling on the decks one afternoon, not fretting their skins with anything more than those bits of fabric called *le minimum*, and drinking something both cool and invigorating from a bottle in an ice bucket.

Professor Rowe, while idly proving to himself once again that the ball of his thumb fit nicely into Josette's comely navel, launched into an exposition of the pelagic peregrinations of the Chinook salmon, at the end of which Josette asked wonderingly: "but, how do you know all zese sings? How do you know where are ze fish—where zey go—so you can study zem?"

"Well, my pet, we have several ways. But we've got a new one now that can accurately predict almost exactly where a given school will be at a given time. Within certain variable limits, that is. We use one of the new electric computers."

Jack, who had been half dozing, suddenly sat up, very interested. "Predict *where* they're going to be? How can you, my old?"

His old waved a careless hand. "Well, I cannot give you the details mathematical. In general, it's something like this. We have information on fish migration going

back for over a century in some cases. You know the sort of thing, Jack. Fishermen's log books, containing the amount of catch, the date, information on the weather, and things like that. Weather's very important in such matters. And plankton.

"Anyway, all this is converted into a sort of mathematical code and put on punched cards—date, time of day, barometric pressure, wind velocity and direction, temperature of the air and water, kinds and number of fish sighted —" He took a breath. "—latitude and longitude, depth of water, direction of current, type of shoreline nearby, if any.

"Oh, and the brightness of the sun and moon, too. Light has an effect on the depths at which certain fish swim. And then there's the state of the tide, the salinity of the water, and so on and so on.

"We have thousands and thousands of cases, you see," Rowe continued enthusiastically. We take all that data and put it through the computer, and the damned thing chews it all over and cross-correlates everything with everything else. Get it?

"So that when we want to find out just what fish will be at a given place at a given time, all we have to do is feed in the information on date, time, latitude, longitude, and so forth, and the computer mutters to itself and then goes *chuff!* and pops a card

with a lot of holes punched in it. This card is run through a decoding machine, and out comes a list of the kind and number of fish to be found at that exact place and time under those circumstances.

"On the *other* hand, if we want to know where to find a particular kind of fish, the computer will tell us what conditions to look for in what places. You see?"

Jack frowned, concentrating. Josette's smile had by now begun to flag. Michi, a direct actionist, picked up a bottle of suntan oil and tendered it to Jack. He did not seem to see, nor be interested in this offer of the freedom of her gleaming body. He nodded bemusedly. The blue waves danced. He blinked. He glanced around as if suddenly remembering where he was. "Well!" he said. He smiled, and the spell was broken. Michi once again offered the flask of anointing, and this time he took it.

Although offered passage home on the *Lorelei's* transatlantic run, Milt declined. He didn't believe, he said, in pushing his luck. He returned on a populous Greek passenger ship, growing more and more sedate with each nautical mile, and by the time he had returned to the Miskatonic campus at Arkham he looked and acted the very model of a model ichthyologist.

Wilson made himself busy,

once back in New York. He and Captain MacNair had already spent much time going through the scrapbooks and putting down, in tabular form, every bit of information available from the clippings. The next step was to get more data.

Selby Research Associates was prepared to have a stab at finding out anything for anybody who was prepared to pay for it. Selby himself, a lean, scholarly-looking, bearded man, shook Wilson's hand, waved him to a chair, and raised polite eyebrows in inquiry.

Wilson took a sheaf of papers from his briefcase. "I want some weather reports," he said. "This is a list of ships. Find the exact latitude and longitude of each ship, the date and time given. And I want to know the weather at each time—wind direction, tide conditions, temperature, barometric pressure—everything."

Selby nodded rather absently, knowing that the first thing he intended to check was Wilson's credit rating. "Anything else, Mr. Wilson?"

"Yes. Here's a list of various locations along the coast of a score or more countries. I'll want the same weather information for the dates given, and, if possible, a contour map of the pertinent territory—shore line, and so on."

Selby stroked his beard briefly. He was not a man to resist when Opportunity came to his door

with a battering ram. "Did we mention a retainer, Mr. Wilson?" was all his comment.

"How much?"

Selby, who had been thinking of a figure, doubled it, added fifty percent, and said it aloud. Wilson opened his checkbook, wrote, "Begin immediately," he said, handing it over. Selby, taking the check in his two hands as if it were a piece of T'ang chinaware, assured him they would.

Jack made several phone calls with an eye toward furthering the next step in his scheme, and found it more difficult than he'd supposed. In another ten years computers would be as numerous as leaves—fallen or otherwise—in Vallambrosa, but in 1950 they were not so easy to find. Most of the big ones were still in the experimental stage, and it was difficult to find one he could rent or hire.

He was soon convinced that in order to obtain the use of a computer complex enough to do the job he would have to see Rowe.

"Well, now, Jack, I'm not sure," said Milt. "What 'sea creature'?"

"Not quite in your line, Milt. A mammal, I think. Relative of the porpoise, perhaps. Or of the dugong or manatee." And he babbled on convincingly, including something about Stellar's Sea Cow (believed extinct since 1715). It was heresy, coarse and rank, and it hurt him. He hoped that the

means would be justified by the end he had in mind.

Wilson outlined the data he had on mermaid sightings, without, of course, admitting that it was a mermaid he sought.

Professor Rowe listened intently, but, at the end, he answered with a slow shake of his head. "I'm afraid not, Jack. I'd like to help you, believe me, but the work we're doing will have the computer tied up for the next two years. We couldn't possibly squeeze in a private project like this. After all, we're studying *fish*, not mammals. Now, if you want to give us your data, I can put it in with the rest. It will add to our total data bank. But we couldn't possibly give over time for a rare sea mammal like that."

"Oh," said Wilson, looking downhearted. "Well, that's that, then." After a moment, he brightened. "By the by, Milt, will you be coming to the lecture I'm giving at the Faculty Club?"

"I never miss a meeting of the Faculty Club," the professor said. "What sort of lecture are you giving?"

"Oh, on the sea. Just your sort of thing, really. I'm showing some eight millimeter movies."

"Movies?" Professor Rowe felt suddenly as though a stream of ice water were defying the laws of gravity and flowing *up* his back.

"Yes. You remember. The ones we took this summer."

"You—uh—edited them, of course?" the professor asked weakly.

Wilson looked innocently bland. "Why, no. Haven't had time."

The two men looked into each other's eyes for the space of a full minute.

Then Professor Rowe looked away and sighed. "If you can find time to edit those films, Jack, I believe I can find time in the computer schedule for your project. After all," he said musingly, the light of Pure Science gleaming suddenly in his eyes, "it isn't *really* out of line with the other work we're doing."

"I'm glad you see it that way," Wilson said. "But I don't see why you want to edit the films. They're just the ones we took off Capri with the underwater camera."

Professor Rowe looked at his friend's face and scanned it carefully, almost expectantly, as if examining the mouth for signs of unmelted butter.

The process took somewhat longer than Wilson had anticipated. The vast mass of data (from which he had carefully edited any mention of the word "mermaid") had to be reduced to mathematical form. Each one of the hundreds of data factors had to be assigned a numerical value expressed, not in the decimal notation of the Arabic system, but in the binary system used by digital computers.

Then, after the data bits had been translated into numbers, they had to be carefully encoded as holes in cards measuring 7 and $\frac{7}{16}$ inches by $3\frac{1}{4}$ inches—hundreds and hundreds of them.

After the first three days, Jack Wilson stopped coming around to watch; the immediate fascination had worn off and faded away into monotony.

Finally Professor Rowe informed him that the calculations had been carried to completion.

The professor's desk was covered with a stack of large sheets of tracing paper, on each of which was drawn a long, wavy line which appeared to follow an irregular, elongated series of dots.

"We've graphed the whole thing, including interpolations and extrapolations," said Professor Rowe. "Naturally, in a multidimensional problem such as this, the graphs are necessarily two-dimensional abstracts, but all the information you'll need is there."

Before Jack could mention the fact that he was unable to make head or tail of the squiggly lines, the professor riffled through the pile and extracted a single sheet. As he spread it out on the top of the pile, he said: "Here's the most important one, as far as you're concerned. The line follows the migration pattern chronologically, according to weighted spatial coordinates."

Jack nodded silently.

"Your mammal," the professor went on, "follows this curve very nicely. Now, as to the extrapolation of the curve . . ."

He took another sheet of tracing paper from the stack, walked over to a large Mercator projection of the Earth's surface, and thumbtacked the tracing paper carefully over the map. For the first time, Jack Wilson found he could make sense out of the blue lines.

"They look like shipping routes on a navigational chart," he said.

"Don't they, though?" agreed the professor. "The Mediterranean, the Caribbean, both very well traveled up until a few decades ago. Then the pattern shifts more strongly to the South Pacific, via the Suez Canal and the Indian Ocean. There, the pattern is strongly cyclic, as you can see.

"The animal obviously prefers warmer waters, coming northward, toward the equator, during the winter months of June, July, and August, and heading southward, toward Australia and Oceania during the summer months of December, January, and February."

The professor reached over to his desk and picked up a card, which he handed to Wilson. "Here's the latitude and longitude and dates for the next several months. As you'll see, your best bet is to search the Great Barrier Reef, just off the coast of Queensland."

Jack Wilson took the card and

looked at it while visions of sea maidens danced in his head. Rowe, all unknowing, went on, "One of those little islands along there, and the adjacent waters, is where Beast X is most likely to appear."

Wilson looked up, sharply. "Beast X?"

"That's what we call it down in the computer room," said Rowe. "After all, we had to call it *something*, and 'creature alleged to resemble members of the order *Sirenia*' is rather cumbersome, don't you think?"

And rather incorrect, too, Jack thought. "Beast X" indeed! This lovely creature of the sun-dappled waves and the blue-green depths! Oh, well, anticipation was about to become realization, and little things like this didn't matter at all.

"Milt," he said aloud, "I'm very much obliged to you. You may expect a picture post-card from Queensland . . . and, of course, you're expected to be with us on the *Lorelei* next summer."

The professor nodded abstractedly. He did, indeed, conjecture vision of Summer Past and Summer Yet To Come, void of dumpy, nosey faculty wives and adenoidally virtuous co-eds alike; and, in this vision, the grey skies of Arkham were replaced by blue ones in which shone the bright, undying, unconquered Sun, in whose warmth he lay on yellow sands

alongside young women with compact but yielding curves and electric fingers. But the vision, though pleasant, was a dim one; as a bear, snug in its stuffy cave of a winter, might dimly dream of fish leaping in streams and bushes heavy with ripe berries.

"I still don't see, sir," said Captain MacNair gloomily, "why you don't take the helicopter. Seems to me, if you'll pardon my saying so, sir, that it would be a good deal less dangerous."

"Possibly it would, Captain," said Wilson, "but I don't want to frighten off our quarry now that we're this close. Besides, Professor Rowe said that these figures are only approximate. She might not show up for two or three days, and I doubt we could hover that long in a 'copter. No, MacNair; we'll do it my way."

"Very well, sir." The Captain still looked gloomy. "We'll be as close as we can get within the hour, sir."

The plan, as Jack Wilson visualized it, was quite simple. The Great Barrier Reef area was not one where ships of any great draft could move with impunity, and the island which Jack Wilson sought was well within that area. Therefore, the *Lorelei* would stand down as close as possible, and, from there on in, Wilson would go it alone. He had bought a well-built outrigger sailboat for the pur-

pose, and loaded it with provisions, a small outboard motor, and several five-gallon cans of gasoline. Wilson was taking no chances with unfriendly winds, since he had more than forty miles to go from the point where the *Lorelei* would be waiting. As an added precaution, he carried a small, waterproof, two-way radio. In case all did not go well, a call to the *Lorelei* would bring Captain MacNair in the helicopter which had been anchored to the deck of the ship.

At the rendezvous point, Captain MacNair dropped anchor, and the crew began to lower Wilson's outrigger over the side. The sea was relatively calm, and overhead the hot sun of late January poured down upon the sweating men.

"Now, remember," said Wilson finally, just before he went down the ladder to the outrigger that bobbed lazily on the blue waters, "I'll give you a call every six hours." He glanced at the sealed skin-diver's wristwatch he was carrying. "If I don't call, get in that 'copter and come a-running. Got it?"

"Yes, sir; I do," said Captain MacNair.

"Good." Wilson clambered down the ladder, boarded the outrigger, and cast free. When the wind caught the sail, he aimed her for her destination, waved toward the *Lorelei*, then concentrated on his course.

Six hours later, he reported to

Captain MacNair. "I'm within sight of the island group, Captain. I'll take a look around the smaller islands, but I think I'll beach the boat on the biggest one."

"Very well, sir; but you'd best hurry. Sunset in forty-five minutes."

"Will do."

Wilson felt pretty good, all things considered. He had arrived at high tide, just as he had planned, which meant that all but the highest islands of the Reef were underwater. He had already done some aerial reconnaissance earlier in the month, and found that this particular group of tiny coral islands contained the only island that was both close to the predicted co-ordinates and large enough to have plants growing on it. It was also a Hell of a long way from any other island of any consequence. It *must* be—it *had* to be—the island where The Mermaid would come.

Already, in his own mind, she had ceased to be simply "A mermaid"; she had become *The Mermaid*—with capitals.

All these things buoyed him up. But one thing depressed him. His stomach.

Well, actually, it wasn't his stomach; it was his palate that had been insulted. He had to admit that his stomach was not upset in the least; he felt no queasiness whatever. It had, after all, been more than twenty-four hours since

he had eaten that horrible mess, just before the *Lorelei* had left the mainland of Australia.

It was supposed to have been baked shark's fin, and no one else in the little restaurant in Yeereemeeree had noticed anything particularly wrong with it, but to a connoisseur, it had given the impression that the shark had been dredged from the interior of a whale, along with a bumper crop of ambergris and decayed squid. Normally, Jack would have taken a single whiff and shipped the whole thing back to the kitchen by rocket express, but it had been specially selected by Donna Brennan, a lush beauty who had come all the way from Melbourne to see him. He could hardly have refused.

But his insulted taste buds still felt indignant, and that now-faint but still perceptible indignation was the only thing that took the fine edge off Wilson's glow of adventure. In fact, as he sailed around the tiny islands in the vicinity of the larger one, the surge of excitement within him almost completely drowned out the memory of that despicable shark's fin.

Maneuvering the boat required great care; even at high tide, there were places where the jagged surface of the Great Reef was only inches below the top of the water, capable of ripping the bottom out of the boat.

There wasn't a sign of anyone

or anything in the area, except for the brightly-colored fish that darted about in the clear waters. The sky, now colored a brassy orange from the reddened rays of the sun as it approached the horizon, was empty. Not a single bird floated overhead. The breeze was barely perceptible, and the only sound was the wash of the waves against the coral crags.

Wilson made his way to the largest island, beached the boat, and dragged it up on the sands. Then he looked around. The island would have delighted any cartoonist. It was somewhat larger, perhaps, than the cartoonist might have liked, since it measured about fifty yards long by thirty wide, and there was a little more vegetation on it than most cartoonists portray, but it certainly showed that tiny islands with a handful of palm trees on them *did* exist.

Wilson was working on the theory that a mermaid would not be frightened by a single, unarmed man. Historical evidence indicated that they avoided big concentrations of humanity, but that a lone individual didn't bother them. At least, Jack Wilson hoped it would work that way.

By the time he had made a complete survey of the island, the last red rim of the sun had sunk beneath the horizon. There was no one there but himself. He gathered armfuls of dried driftwood,

scooped out a pit in the gritty coral sand, and built himself a small fire.

His stomach was of two minds. It wanted to be filled, but the memory of that shark's fin rejected the notion of eating just yet. Jack decided to wait until he was really hungry before he put any of the tinned beef or turtlesoup into it. Meanwhile, he'd be satisfied with a cup of coffee. It was a remarkable thing, painfully remarkable, how full the sea was of good things to eat and how empty the earth of people capable of cooking them.

Twenty minutes later, he was sipping a cup of hot, black, sweet coffee *à la grecque* and contentedly smoking a cigarette as he gazed into the dancing flicker of the small driftwood fire. It was the only light in a sea of blackness that surrounded him. The night was moonless, and in the clear sky only the stars rivaled the ruddy glow from the sandpit.

How long, he wondered, would it be before The Mermaid showed up? Niggling doubts about her ever showing up he dismissed as too absurd to countenance. Hadn't she been sighted time after time? Weren't her movements so regular as to . . . Just so. Exactly. She would be along. Wilson lay back on his sleeping bag and blew plumes of smoke toward the stars. *Her hair would be long and sun-blonde, her teeth like perfectly matched Bahrein pearls, her eyes*

as blue as the Bay of Naples on a sunny day, her skin milky white, her breasts . . .

"Ahum!"

He jerked his head up and looked around. The noise had sounded for all the world like someone clearing his throat. Wilson found that looking at the fire had made him a bit night-blind for the moment. Until his vision cleared . . .

"Ahhum!" The noise came again, this time with more persistence. He located its source as being somewhere to the right, near a coral outcropping. He suddenly wished he had brought a gun.

Very cautiously, he said: "Hello?"

"'Ullo, Cocky," came a somewhat diffident voice. "Could you spare a gasper?" The voice was a sort of whiskey tenor, and by now Jack could make out a dimly-lit shape in the flickering fire. Someone was leaning across the low ridge of coral, arms folded, like a friendly bartender. Someone with a light mop of stringy hair. Someone with odd, very odd, skin coloration—great splotches of pink, black, and white, like a piebald pony.

Half-caste abo., Wilson's mind said. Semi-albinism. Must have seen my light and paddled over creeping around in the dark . . .

"Who is that?" he asked, trying to peer further into the gloom.

"Me nyme's Mavis." The voice

pronounced it *My-vis*. "Wot's yours, Cocky?"

The voice didn't fit in with his vision at all. Not one damn bit. Nor did anything else about the figure. But Jack Wilson's mind jumped straight to one sudden, dreadful conclusion, and his heart gave a truly horrifying leap. "You're a—a mermaid?"

"Not 'ardly. Old Mavis eyen't been exactly wotcher might call a *myde* for, oh, ever so long. More wotcher might call a *mer-lydy*—if you tykes me meaning, Cocky." There was a rather coarse giggle. "And now wot about that gasper?"

Wilson's mind felt numb, barely capable of functioning. "Why, sure, Mavis," he heard his voice saying, "but why don't you come over by the fire? I've got some hot coffee, and . . ." He came to an abrupt halt as he realized how utterly ordinary his voice sounded.

Mavis needed no urging. "Now, that's wot I calls a dinky-doo gent," she said, gratified. "I 'aven't 'ad a good, 'ot cup o' coffee since that narsty little yellerfeller scragged old Joe Kelly, wot used ter fish for trepang in the Torres Straight." As she said this, she heaved herself over the ledge and propelled herself down the sand toward Wilson, fire, and coffee.

He threw on more wood, and he could see her clearly as she came.

There was no longer any doubt that she was of the sea. None. Her

method of locomotion, necessitated by the muscular, horizontal-fluked tail which took the place of her legs, was a sort of humping crawl similar to that of a seal. In the flaring firelight, details became clear. Unlike the portrayals of fanciful artists, Mavis did not have a sheath of iridescent scales on her tail; it was covered with thick, tough hide, like that of a dolphin, and was marked in many places by scars.

Her hair, one might say, was blonde, as a mass of unravelled but not unsnarled hempen rope, trailed in weedy seas for countless years, might be said to be blonde. Her teeth might be compared to pearls only if one were speaking of *baroque* pearls—long, irregular, and yellow. Her eyes, it is true, were blue—but not the blue of the Bay of Naples unless the Bay of Naples is sometimes faded and bloodshot. Her breasts were like a couple of half-emptied flour bags which had been misused by dirty hands. And she was, without any possibility of doubt, a mermaid.

Or, at any rate, a mer-lydy.

She stopped near the fire, flipped her tail expertly beneath her, and relaxed into a semi-reclining position. Wilson's innate courtesy brought him partially out of his daze. He picked up the pack of cigarettes from his sleeping bag and offered her one. As she took it, he noticed that the thick, warty fingers had a small

web of leathery skin between them, which didn't quite reach the lower joint.

Jack fired up his lighter and proffered the flame. Mavis looked at the cigarette. "Coo-ee! A blinkin' *Sobranie!* You *are* a toff, you *are*." She puffed it alight and smiled at him—the smile which one sees on the face of a more-than-middle-aged, unsuccessful, but ever-optimistic prostitute. It was not exactly a leer, but it was well on its way to becoming one.

Wilson snapped out the light and busied himself with the coffee pot. "Cream?" he asked bleakly.

"'F'you please," Mavis said daintily—an effect somewhat marred by an enormous burp that seemed to have all three hundred pounds of her behind it. She looked embarrassed. "Eel," she explained. "It *will* repeat, you know. Carn't stop it. Many's the time I says to me self, 'Now, Mavis, no eel!' But, then, wot's life if you've always got to be a-dicting, eh? 'A bit of wotcher fancy does yer good' is my motto. *Erp.*"

Jack winced. "Sugar?" he asked, in a low, stricken voice.

"Four spoonsful. I do like my bit of sweet, and it's seldom I gets it nowadays, people bein' the wye they are. Why, the sea itself eyen't syfe no more—all them perishin' skin-divers! Bleedin' lot of liberty-tykers is wot *they* are!" Resentfully, she fingered a newish scar on her tail. "I used to *love* the Pa-

cific afore all them ruddy bombs
 . . ."

Wilson handed her the coffee. Close up, the fish odor was even stronger. She took it with a resounding "Ngkyew!" and, little finger stuck out, she slurped appreciatively. "Ah, that's good! See, it's all right as long as you styes in the bleedin' water, but if you comes out of an evening, that breeze gives you summat of a chill, it does. And 'oo wants to be took sick 'ere, miles from bloody woof-woof?" Another slurp. "Ahhhhhh."

Wilson's paralyzed mind was reacting almost automatically. "Glad you liked it. I don't suppose you get much coffee."

She gave a great, gusty, fish-laden sigh. "No, myte, I don't, and that's a fact. It eyen't like it used ter be. 'Ere I am, still in me prime, and there's 'ardly nuffink to look forward to." Few females need much encouragement to talk; Mavis needed none. Her remarks were mostly of a plaintive nature, ranging from fresh-water swimming ("I styes clear o' rivers nowadays, Cock. Orl this pollution mucking up the plyce—some of the things yer sees floatin abaht, why, it fair brings the blush to me cheeks!") to the fun she used to have riding along in the bow wave of a sailing vessel ("Carn't tyke chances like that no more; if some idjit don't tyke a shot at you wiv a bleedin' rifle, you still runs a risk of gettin' yer arse snagged in the screw!").

When she finally reached the Summing Up, she had disposed of four cups of coffee and half of the So-branies.

"No, Cocky, I tell you," she said reflectively, drawing in a mouthful of smoke with a wet, smacking sound, "mag all you wants to, but this mermyde gyme 'as 'ad it. Why, tyke Boro-Boro an' all them other bleedin' 'eathen is-lands: Used ter come out in wack-in' big canoes, the buggers did, first full moon arfter the flippin' solstices, all chantin' an' racketin' an' wyvin' torches to welcome me. 'Gryte Sea Muvver 'Oo Fills Our Nets Wiv Fish' and all that palaver, y'know—fling cocoanuts, yams, 'ot taros, and 'ole roasted pigs into the old briny—then back to the beach for fun and gymes and all them lewd nytive rytchuals. But *now?*" She was torn between sarcasm and a sigh. "Not no more, myte. Flippin' missionaries 'as turned their silly 'eads; got 'em singin' 'ymns orl night long, cor stone the crows! Fit ter splitcher bloody ear-'oles, the cows! No, I tell you the stryte dinkum oil, Cocky, this mermyde graft 'as bleedin' well 'ad it, an' I'm 'arf ready to pack it in."

Wilson felt much the same way. But how to go about it? While he was considering the problem, Mavis suddenly said: "But 'erc, Cock! I been maggin' sumfin' orful, and you 'aven't 'ad yer tucker yet!"

"I'm not very hungry," he said weakly.

But he might as well not have spoken. "You just sit right there, Cock, and I'll pop inter the wet and snaffle a couple o' nice ones, an' we'll 'ave a bit o' scoff." She propelled herself to the water's edge and slid in with scarcely a ripple.

As she vanished, the cloud that had seemed to blanket Jack's mind vanished, too. The shock of seeing (and hearing and smelling!) his dream shattered had numbed his brain.

Now the numbness had gone, to be replaced by pain.

He tried to bring back the dream, if only for a little while, but he found the task impossible. When he tried to conjure up the beatific vision, all that came was the warty, piebald face of Mavis. Perhaps no sane man could mistake a dugong for a beautiful woman, but it would be relatively easy to mistake Mavis for a dugong. He had been building his whole life around the quixotic pursuit of a dream, and now, God help him, he had found the reality. He hated himself for having had the dream, and he hated poor Mavis for having destroyed it.

Simply sitting there in the sand, staring blindly into the fire, now mostly embers and ashes, he hardly even noticed when Mavis returned, carrying two fish of unknown name but of reassuringly

familiar construction. He paid only peripheral attention as she expertly cleaned and scaled them with a piece of shell. Not a word of her chatter penetrated as she stuffed the fish with one kind of seaweed and wrapped them in another, then plunged the dripping packages into the hot ashes of the fire, amid a hissing cloud of steam, and raked glowing embers over the pile.

He was still squatting stupidly as she humped herself over into the shadows and dug about in the sand. Uttering small cries of triumph, she disinterred two round objects and, making her way back to the fire, presented him with one.

"'Ave a bit of wallop," she said invitingly.

"Eh?" He stared at the thing. "What's this?"

Mavis chuckled richly. "Why, cor bless your 'ead, you been practically sittin' smack on top o' one o' me private caches o' workin' cocoanuts! I keeps a supply ready on all these narsty little bits of islands. Wot else would bring me ashore? 'Ere—"

Expertly, then, she pulled out the plugs of twisted palm fronds which allowed the carbon dioxide to escape during fermentation, but prevented sand from sifting in. "Nah, then! 'Ave a go!"

Wilson took the coconut, sniffed, and tasted. That part of his mind which had not been dulled

by shock had to admit that the stuff wasn't bad. He took a long swig; it went down smooth and warm.

"Ahhh!" said Mavis, licking her bristly upper lip; "that's wot myde the deacon dance!"

Jack said nothing. There was a whole night to get through, and then the rest of his life after that, and he might as well start the ordeal as drunk as possible. He took another swig of the jungle juice. Mavis moved off, then she moved back.

"Got no bib," she said gayly, "but 'ere's your tucker, Cocky."

Wilson looked down at the palm frond she had spread on the sand in front of him. He didn't move; he merely stared at the whole baked fish resting there. Then the soft sea breeze wafted a delicate scent to his educated nostrils, bringing a flow of saliva from beneath his tongue.

Almost as if it had volition of its own, his hand reached out and

broke off a bit of the crisp skin and flaky flesh and popped it into his mouth. . . .

The *J & M Seafood Grotto* was opened to a select clientele only a few months later. Jack Wilson, the junior partner, still makes excursions in the *Lorelei* to procure both rare and staple oceanic delicacies for the house's table, but he rarely stays away long.

The few people who have seen his wife, the senior partner, say that she isn't much to look at, and is confined to a wheelchair, her lower extremities covered, which is probably why she stays hidden in the kitchen most of the time. There are rumors that she and Jack often go for midnight swims in the nearby surf; and there are other rumors of various sorts, not confirmed.

What needs no confirmation is the fact that Jack seems very fond of his wife, indeed—and that her seafood simply is out of this world.



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Three years in a row, now, The Magazine of FANTASY and SCIENCE FICTION has been awarded the HUGO as the world's best science fiction magazine. The award is made by the annual World Science Fiction Convention, on the basis of voting by the entire membership. If by chance you have never seen a HUGO, the one to the right is the latest model, lovingly imported to our office from the 18th World Science Fiction Convention, held in Pittsburgh, in 1960. Other 1960 award winners included two F&SF entries: "Flowers for Algernon," by Daniel Keyes (Best Short Story), and "Starship Soldier" (serialized in F&SF), by Robert A. Heinlein (Best Novel). And we are pleased to report also that an artist whose work appears regularly on our cover—Ed Emsh—won the award as Best Artist.



It is always gratifying, of course, to receive awards, but we are well aware that a past honor is not a guarantee of future excellence, and we are not lounging comfortably around our offices basking in the reflected silvery sheen of our latest trophy. *F&SF* has always provided the widest possible variety of the best available material in the fields specified in its title. We have brought you virtually every top writer in the science fiction arena—such as Theodore Sturgeon, Robert A. Heinlein, Isaac Asimov, Alfred Bester, to name only a few of our regulars—as well as a large number of brilliant writers from other fields—Howard Fast, Robert Graves, John Collier, and Allen Drury, for example have been among the contributors to recent issues. *F&SF* also published the first stories of such able practitioners as Richard Matheson, Chad Oliver, Philip K. Dick, and Zenna Henderson. These are only a fraction of the top-calibre names we have brought you in the past—and only a fraction of those we will be bringing you in the near future. Quality has been our hallmark—and it will continue to be so.



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