THE MAGAZINE OF

Fantasy AND Science Fiction

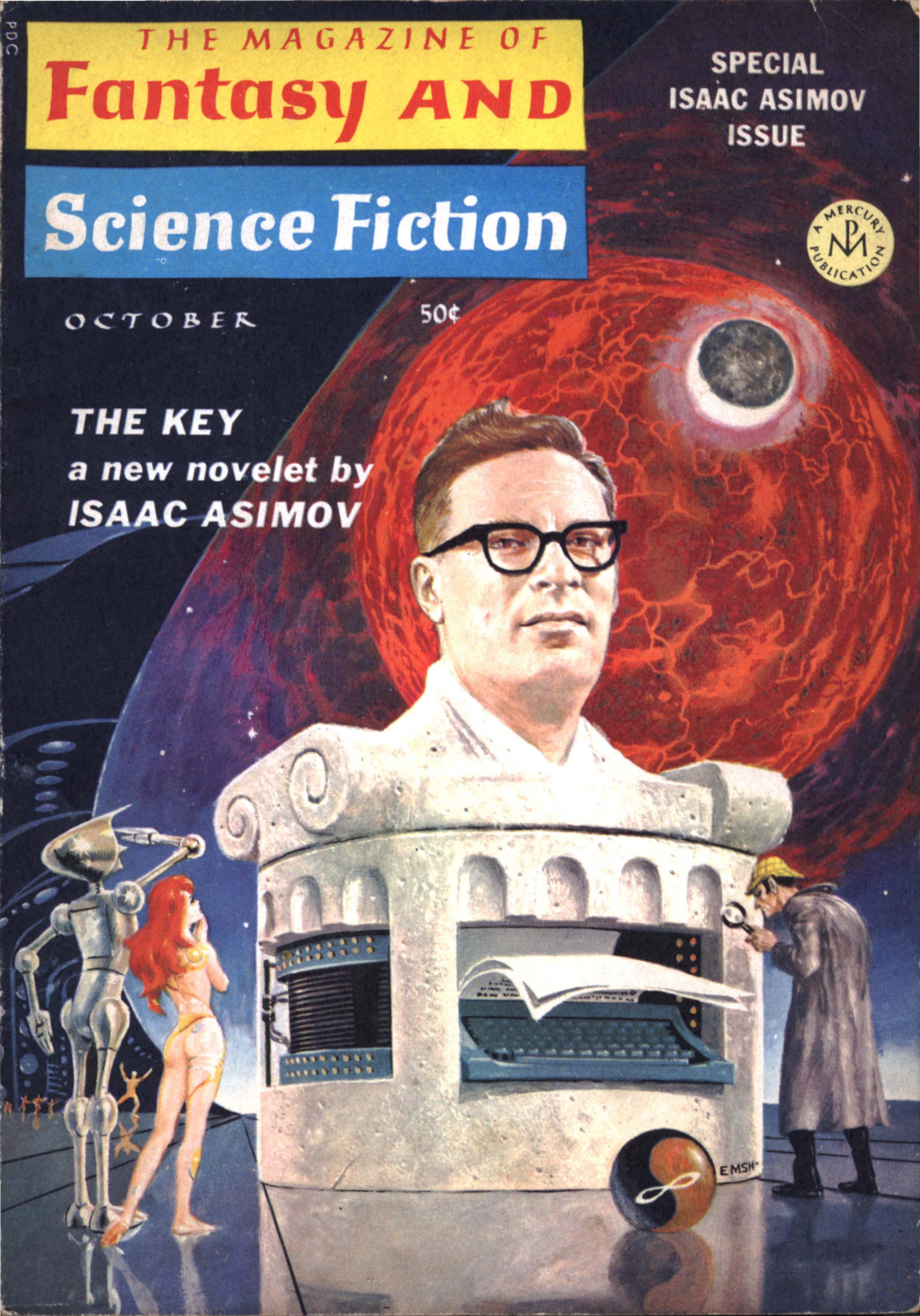
SPECIAL ISAAC ASIMOV ISSUE

A MERCURY PUBLICATION

OCTOBER

50¢

THE KEY
a new novelet by
ISAAC ASIMOV



Fantasy and Science Fiction

OCTOBER *Including Venture Science Fiction*

Cover by Ed Emsh

The Magazine of Fantasy and Science Fiction, Volume 31, No. 4, Whole No. 185, Oct. 1966. Published monthly by Mercury Press, Inc., at 50¢ a copy. Annual subscription $5.00; $5.50 in Canada and the Pan American Union, $6.00 in all other countries. Publication office, 10 Ferry Street, Concord, N. H. 03302. Editorial and general mail should be sent to 347 East 53rd St., New York, N. Y. 10022. Second Class postage paid at Concord, N. H. Printed in U.S.A.

IN THIS ISSUE

Since, in our modest framework, this issue is something of a "spectacular," we'd like to be able to claim that it was years in the making. In one sense it's true, since we've been badgering Isaac about a special Asimov issue for at least several years. The problem was to get Dr. Asimov away from his other commitments long enough to write some new fiction. Finally, in late December of last year, THE KEY reached us in the mail—the perfect Christmas present. We read it the next day, and our spectacular was underway—for the most part, with a cast of one.

And still, what a cast! If Isaac Asimov keeps going at the same rate he's maintained in the past 15 years, he'll have written some 225 books by the time he's 75. If his output was cut off tomorrow, we'd have to be content with the 75 books you'll find listed in the BIBLIOGRAPHY on page 36, along with some 265 shorter pieces. It's not complete (Dr. Asimov says his own collection contains nearly a thousand non-duplicated items), but it's long enough for all practical purposes, and we had to leave room for the other material.

Including—PORTRAIT OF THE WRITER AS A BOY, Dr. A's own question-and-answer reminiscence of his beginnings as a writer.

Including—YOU CAN'T BEAT BRAINS, L. Sprague de Camp's affectionate portrait of Isaac Asimov, on page 32.

Including—an unadvertised special, a spirited poem by you-know-who, in which Dr. Asimov demonstrates that he is indeed in THE PRIME OF LIFE (and then some). Gahan Wilson *has* done in the Good Doctor in his cartoon on page 56, but that's your macabre cartoonist for you. It's all a gag, of course; Dr. Asimov is alive and well in West Newton, Mass.

The painting for the cover was done especially for this issue by Ed Emsh, who is demonstrably the most imaginative and proficient artist in the science fiction field. His contributions to it have been limited recently because of his film-making activities (two films recently completed for The U. S. Information Agency), however we hope to soon offer more covers by Emsh.

This issue also marks *F&SF's* 17th Anniversary. As proud as we are to pay tribute to one of SF's masters, we are always pleased to be able to bring you good stories by newcomers—and there are two exceptional such stories in this month's issue: COME BACK ELENA by Vic Chapman and AN EXTRAORDINARY CHILD by Sally Daniell.

More—a horror tale by regular Arthur Porges, some pointed science fiction from Brian Aldiss, an unusual blending of SF and art by Jon DeCles, and a reprint feature, a short fable by Robert Louis Stevenson. Judith Merril is missing (from the magazine and this issue only. She's resettling in London.), but will be back next month with her usual incisive comments on books.—E. F.

Isaac Asimov is one of the few writers to successfully blend the science-fiction and detective story, and his first substantial magazine fiction in some time is a sample of that talent. The science fictional detective here is Wendell Urth (who has made three other appearances in these pages: THE SINGING BELL, *January 1955;* THE TALKING STONE, *October 1955; and* THE DYING NIGHT, *July 1956). Those of you who read Dr. Asimov's column regularly also know that he is not a timid man with a pun, and punning does figure prominently in the suspenseful story which you are about to read.*

THE KEY

by Isaac Asimov

KARL JENNINGS KNEW HE WAS going to die. He had a matter of hours to live and much to do.

There was no reprieve from the death sentence, not here on the Moon, not with no communications in operation.

Even on Earth there were a few fugitive patches where, without radio handy, a man might die without the hand of his fellowman to help him, without the heart of his fellowman to pity him, without even the eye of his fellowman to discover the corpse.—Here on the Moon, there were few spots that were otherwise.

Earthmen knew he was on the Moon, of course. He had been part of a geological expedition—No, selenological expedition! Odd, how his Earth-centered mind insisted on the "geo-."

Wearily, he drove himself to think, even as he worked. Dying though he was, he still felt that artificially-imposed clarity of thought. Anxiously, he looked about. There was nothing to see. He was in the dark of the eternal shadow of the northern interior of the wall of the crater, a blackness relieved only by the intermittent blink of his flash. He kept that intermittent, partly

because he dared not consume its power source before he was through and partly because he dared not take more than the minimum chance that it be seen.

On his left hand, toward the south along the nearby horizon of the Moon, was a crescent of bright white Sunlight. Beyond the horizon, and invisible, was the opposite lip of the crater. The Sun never peered high enough over the lip of his own edge of the crater to illuminate the floor immediately beneath his feet. He was safe from radiation—from that at least.

He dug carefully but clumsily, swathed as he was in his spacesuit. His side ached abominably.

The dust and broken rock did not take up the "fairy-castle" appearance characteristic of those portions of the Moon's surface exposed to the alternation of light and dark, heat and cold. Here, in eternal cold, the slow crumbling of the crater wall had simply piled fine rubble in a heterogeneous mass. It would not be easy to tell there had been digging going on.

He misjudged the unevenness of the dark surface for a moment and spilled a cupped handful of dusty fragments. The particles dropped with the slowness characteristic of the Moon and yet with the appearance of a blinding speed, for there was no air resistance to slow them further still and spread them out into a dusty haze.

Jennings' flash brightened for a moment, and he kicked a jagged rock out of the way.

He hadn't much time. He dug deeper into the dust.

A little deeper and he could push the Device into the depression and begin covering it. Strauss must not find it.

Strauss!

The other member of the team. Half-share in the discovery. Half-share in the renown.

If it were merely the whole share of the credit that Strauss had wanted, Jennings might have allowed it. The discovery was more important than any individual credit that might go with it. But what Strauss wanted was something far more; something Jennings would fight to prevent.

One of the few things Jennings was willing to die to prevent.

And he was dying.

They had found it together. Actually, Strauss had found the ship; or, better, the remains of the ship; or, better still, what just conceivably might have been the remains of something analogous to a ship.

"Metal," said Strauss, as he picked up something ragged and nearly amorphous. His eyes and face could just barely be seen through the thick lead-glass of the visor, but his rather harsh voice sounded clearly enough through the suit-radio.

Jennings came drifting over from his own position half a mile

away. He said, "Odd! There is no free metal on the Moon."

"There shouldn't be. But you know well enough they haven't explored more than one percent of the Moon's surface. Who knows what can be found on it?"

Jennings grunted assent and reached out his gauntlet to take the object.

It was true enough that almost anything might be found on the Moon for all anyone really knew. Theirs was the first privately-financed selenographic expedition ever to land on the Moon. Till then, there had been only government-conducted shot-gun affairs, with half a dozen ends in view. It was a sign of the advancing space age that the Geological Society could afford to send two men to the Moon for selenological studies only.

Strauss said, "It looks as though it once had a polished surface."

"You're right," said Jennings. "Maybe there's more about."

They found three more pieces, two of trifling size and one a jagged object that showed traces of a seam.

"Let's take them to the ship," said Strauss.

They took the small skim-boat back to the mother ship. They shucked their suits once on board, something Jennings at least was always glad to do. He scratched vigorously at his ribs and rubbed his cheeks till his light skin reddened into welts.

Strauss eschewed such weakness and got to work. The laser beam pock-marked the metal and the vapor recorded itself on the spectrograph. Titanium-steel, essentially, with a hint of cobalt and molybdenum."

"That's artificial, all right," said Strauss. His broad-boned face was as dour and as hard as ever. He showed no elation, although Jennings could feel his own heart begin to race.

It may have been the excitement that trapped Jennings into beginning, "This is a development against which we must steel ourselves—" with a faint stress on "steel" to indicate the play on words.

Strauss, however, looked at Jennings with an icy distaste, and the attempted set of puns was choked off.

Jennings sighed. He could never swing it, somehow. Never could! He remembered at the University —Well, never mind. The discovery they had made was worth a far better pun than any he could construct for all Strauss's calmness.

Jennings wondered if Strauss could possibly miss the significance.

He knew very little about Strauss, as a matter of fact, except by selenological reputation. That is, he had read Strauss's papers and he presumed Strauss had read his. Although their ships might well have passed by night in their University days, they had never hap-

pened to meet until after both had volunteered for this expedition and been accepted.

In the week's voyage, Jennings had grown uncomfortably aware of the other's stocky figure, his sandy hair and china-blue eyes, and the way the muscles over his prominent jaw-bones worked when he ate. Jennings, himself, much slighter in build, also blue-eyed, but with darker hair, tended to withdraw automatically from the heavy exudation of the other's power and drive.

Jennings said, "There's no record of any ship ever having landed on this part of the Moon. Certainly none has crashed."

"If it were part of a ship," said Strauss, "it should be smooth and polished. This is eroded, and without an atmosphere here, that means exposure to micrometeorite bombardment over many years."

Then he *did* see the significance. Jennings said, with an almost savage jubilation, "It's a nonhuman artifact. Creatures not of Earth once visited the Moon. Who knows how long ago?"

"Who knows?" agreed Strauss dryly.

"In the report—"

"Wait," said Strauss imperiously. "Time enough to report when we have something to report. If it was a ship, there will be more to it than what we now have."

But there was no point in looking further just then. They had been at it for hours, and the next meal and sleep were overdue. Better to tackle the whole job fresh and spend hours at it. They seemed to agree on that without speaking.

The Earth was low on the eastern horizon almost full in phase, bright and blue-streaked. Jennings looked at it while they ate and experienced, as he always did, a sharp homesickness.

"It looks peaceful enough," he said, "but there are six billion people busy on it."

Strauss looked up from some deep inner life of his own and said, "Six billion people ruining it!"

Jennings frowned. "You're not an Ultra, are you?"

Strauss said, "What the hell are you talking about?"

Jennings felt himself flush. A flush always showed against his fair skin, turning it pink at the slightest upset of the even tenor of his emotions. He found it intensely embarrassing.

He turned back to his food, without saying anything.

For a whole generation now, the Earth's population had held steady. No further increase could be afforded, everyone admitted that. There were those, in fact, who said that "no higher" wasn't enough; the population had to drop. Jennings himself sympathized with that point of view. The globe of the Earth was being eaten alive by its heavy freight of humanity.

But *how* was the population to

be made to drop; randomly, by encouraging the people to lower the birth rate still further, as and how they wished? Lately there had been the slow rise of a distant rumble which wanted not only a population drop but a selected drop—the survival of the fittest, with the self-declared fit choosing the criteria of fitness.

Jennings thought: I've insulted him, I suppose.

Later, when he was almost asleep, it suddenly occurred to him that he knew virtually nothing of Strauss's character. What if it were his intention to go out now on a foraging expedition of his own so that he might get sole credit for—

He raised himself on his elbow in alarm, but Strauss was breathing heavily, and even as Jennings listened, the breathing grew into the characteristic burr of a snore.

They spent the next three days in a single-minded search for additional pieces. They found some. They found more than that. They found an area glowing with the tiny phosphorescence of Lunar bacteria. Such bacteria were common enough, but nowhere previously had their occurrence been reported in concentration so great as to cause a visible glow.

Strauss said, "An organic being, or his remains, may have been here once. He died, but the micro-organisms within him did not. In the end they consumed him."

"And spread perhaps," added Jennings. "That may be the source of Lunar bacteria generally. They may not be native at all but may be the result of contamination instead —eons ago."

"It works the other way, too," said Strauss. "Since the bacteria are completely different in very fundamental ways from any Earthly form of micro-organism, the creatures they parasitized—assuming this was their source—must have been fundamentally different, too. Another indication of extraterrestrial origin."

The trail ended in the wall of a small crater.

"It's a major digging job," said Jennings, his heart sinking. "We had better report this and get help."

"No," said Strauss, somberly. "There may be nothing to get help for. The crater might have formed a million years after the ship had crash-landed."

"And vaporized most of it, you mean, and left only what we've found?"

Strauss nodded.

Jennings said, "Let's try anyway. We can dig a bit. If we draw a line through the finds we've made so far and just keep on— "

Strauss was reluctant and worked half-heartedly, so that it was Jennings who made the real find. Surely that counted! Even though Strauss had found the first piece of metal, Jennings had found the artifact itself.

It *was* an artifact—cradled three feet underground under the irregular shape of a boulder which had fallen in such a way that it left a hollow in its contact with the Moon's surface. In that hollow lay the artifact, protected from everything for a million years or more; protected from radiation, from micrometeors, from temperature change, so that it remained fresh and new forever.

Jennings labelled it at once the Device. It looked not remotely similar to any instrument either had ever seen, but then, as Jennings said, why should it?

"There are no rough edges that I can see," he said. "It may not be broken."

"There may be missing parts, though."

"Maybe," said Jennings, "but there seems to be nothing movable. It's all one piece and certainly oddly uneven." He noted his own play on words, then went on with a not-altogether-successful attempt at self-control. "*This* is what we need. A piece of worn metal or an area rich in bacteria is only material for deduction and dispute. But this is the real thing—a Device that is clearly of extraterrestrial manufacture."

It was on the table between them now, and both regarded it gravely.

Jennings said, "Let's put through a preliminary report, now."

"No!" said Strauss, in sharp and strenuous dissent. "Hell, no!"

"Why not?"

"Because if we do, it becomes a Society project. They'll swarm all over it and we won't be as much as a footnote when all is done. No!" Strauss looked almost sly. "Let's do all we can with it and get as much out of it as possible before the harpies descend."

Jennings thought about it. He couldn't deny that he, too, wanted to make certain that no credit was lost. But still—

He said, "I don't know that I like to take the chance, Strauss." For the first time he had an impulse to use the man's first name, but fought it off. "Look, Strauss," he said, "It's not right to wait. If this is of extraterrestrial origin, then it must be from some other planetary system. There isn't a place in the Solar system, outside the Earth, that can possibly support an advanced life-form."

"Not proven, really," grunted Strauss, "but what if you're right?"

"Then it would mean that the creatures of the ship had interstellar travel and therefore had to be far in advance, technologically, of ourselves. Who knows what the Device can tell us about their advanced technology. It might be the key to—who knows what. It might be the clue to an unimaginable scientific revolution."

"That's romantic nonsense. If this is the product of a technology far advanced over ours, we'll learn nothing from it. Bring Einstein back to life and show him a micro-

protowarp and what would he make of it?"

"We can't be certain that we won't learn."

"So what, even so? What if there's a small delay? What if we assure credit for ourselves? What if we make sure that we ourselves go along with this, that we don't let go of it?"

"But Strauss," Jennings felt himself moved almost to tears in his anxiety to get across his sense of the importance of the Device, "what if we crash with it? What if we don't make it back to Earth? We can't risk this thing." He tapped it then, almost as though he were in love with it. "We should report it now and have them send ships out here to get it. It's too precious to—"

At the peak of his emotional intensity, the Device seemed to grow warm under his hand. A portion of its surface, half-hidden under a flap of metal, glowed phosphorescently.

Jennings jerked his hand away in a spasmodic gesture and the Device darkened. But it was enough; the moment had been infinitely revealing.

He said, almost choking. "It was like a window opening into your skull. I could see into your mind."

"I read yours," said Strauss, "or experienced it, or entered into it, or whatever you choose." He touched the Device in his cold, withdrawn way, but nothing happened.

"You're an Ultra," said Jennings angrily. "When I touched this," and he did so— "It's happening again. I see it. Are you a madman? Can you honestly believe it is humanly decent to condemn almost all the human race to extinction and destroy the versatility and variety of the species?"

His hand dropped away from the Device again, in repugnance at the glimpses revealed, and it grew dark again. Once more, Strauss touched it gingerly and again nothing happened.

Strauss said, "Let's not start a discussion, for God's sake— This thing is an aid to communication. A telepathic amplifier. Why not? The brain cells have each their electric potentials. Thought can be viewed as a wavering electromagnetic field of micro-intensities—"

Jennings turned away. He didn't want to speak to Strauss. He said, "We'll report it now. I don't give a damn about credit. Take it all. I just want it out of our hands."

For a moment Strauss remained in a brown study. Then he said, "It's more than a communicator. It responds to emotion and it amplifies emotion."

"What are you talking about?"

"Twice it started at your touch just now, although you'd been handling it all day with no effect. It still has no effect when I touch it."

"Well?"

"It reacted to you when you were in a state of high emotional tension. That's the requirement for activation, I suppose. And when you

raved about the Ultras while you were holding it just now, I felt as you did, for just a moment."

"So you should."

"But, listen to me. Are you sure *you're* so right. There isn't a thinking man on Earth that doesn't know the planet would be better off with a population of one billion rather than six billion. If we used automation to the full—as now the hordes won't allow us to do—we could probably have a completely efficient and viable Earth with a population of no more than, say, five million. —Listen to me, Jennings. Don't turn away, man."

The harshness in Strauss's voice almost vanished in his effort to be reasonably winning. "But we can't reduce the population democratically. You know that. It isn't the sex urge, because uterine inserts solved the birth control problem long ago; you know that. It's a matter of nationalism. Each ethnic group wants other groups to reduce themselves in population first, and I agree with them. I want my ethnic group, *our* ethnic group, to prevail. I want the Earth to be inherited by the elite, which means by men like ourselves. We're the true men, and the horde of half-apes who hold us down are destroying us all. They're doomed to death anyway; why not save ourselves?"

"No," said Jennings strenuously. "No one group has a monopoly on humanity. Your five million mirror-images, trapped in a humanity robbed of its variety and versatility, would die of boredom—and serve them right."

"Emotional nonsense, Jennings. You don't believe that. You've just been trained to believe it by our damn-fool equalitarians. Look, this Device is just what we need. Even if we can't build any others or understand how this one works, this one Device might do. If we could control or influence the minds of key men, then little by little, we can superimpose our views on the world. We already have an organization. You must know that if you've seen my mind. It's better motivated and better designed than any other organization on Earth. The brains of mankind flock to us daily. Why not you, too? This instrument is a key, as you see, but not just a key to a bit more knowledge. It is a key to the final solution of men's problems. Join us! Join us!" He had reached an earnestness that Jennings had never heard in him.

Strauss's hand fell on the Device, which flickered a second or two and went out.

Jennings smiled humorlessly. He saw the significance of that. Strauss had been deliberately trying to work himself into an emotional state intense enough to activate the Device and had failed.

"You can't work it," said Jennings, "you're too darned supermannishly self-controlled and can't break down, can you?" He

took up the Device with hands that were trembling, and it phosphoresced at once.

"Then *you* work it. Get the credit for saving humanity."

"Not in a hundred million years," said Jennings, gasping and barely able to breathe in the intensity of his emotion. "I'm going to report this now."

"No," said Strauss. He picked up one of the table knives. "It's pointed enough, sharp enough."

"You needn't work so hard to make your point," said Jennings, even under the stress of the moment conscious of the pun. "I can see your plans. With the Device you can convince anyone that I never existed. You can bring about an Ultra victory."

Strauss nodded. "You read my mind perfectly."

"But you won't," gasped Jennings. "Not while I hold this." He was willing Strauss into immobility.

Strauss moved raggedly and subsided. He held the knife out stiffly and his arm trembled, but he did not advance.

Both were perspiring freely.

Strauss said between clenched teeth. "You can't keep it—up all—day."

The sensation was clear, but Jennings wasn't sure he had the words to describe it. It was, in physical terms, like holding a slippery animal of vast strength, one that wriggled incessantly. Jennings had to concentrate on the feeling of immobility.

He wasn't familiar with the Device. He didn't know how to use it skillfully. One might as well expect someone who had never seen a sword to pick one up and wield it with the grace of a musketeer.

"Exactly," said Strauss, following Jennings' train of thought. He took a fumbling step forward.

Jennings knew himself to be no match for Strauss's mad determination. They both knew that. But there was the skim-boat. Jennings had to get away. With the Device.

But Jennings had no secrets. Strauss saw his thought and tried to step between the other and the skim-boat.

Jennings redoubled his efforts. Not immobility, but unconsciousness. Sleep, Strauss, he thought desperately. Sleep!

Strauss slipped to his knees, heavy-lidded eyes closing.

Heart pounding, Jennings rushed forward. If he could strike him with something, snatch the knife—

But his thoughts had deviated from their all-important concentration on sleep, so that Strauss's hand was on his ankle, pulling downward with raw strength.

Strauss did not hesitate. As Jennings tumbled, the hand that held the knife rose and fell. Jennings felt the sharp pain and his mind reddened with fear and despair.

It was the very access of emo-

tion that raised the flicker of the Device to a blaze. Strauss's hold relaxed as Jennings silently and incoherently screamed fear and rage from his own mind to the other.

Strauss rolled over, face distorted.

Jennings rose unsteadily to his feet and backed away. He dared do nothing but concentrate on keeping the other unconscious. Any attempt at violent action would block out too much of his own mind-force, whatever it was; too much of his unskilled bumbling mind-force that could not lend itself to really effective use.

He backed toward the skim-boat. There would be a suit on board—bandages—

The skim-boat was not really meant for long-distance runs. Nor was Jennings, any longer. His right side was slick with blood despite the bandages. The interior of his suit was caked with it.

There was no sign of the ship itself on his tail, but surely it would come sooner or later. Its power was many times his own; it had detectors that would pick up the cloud of charge concentration left behind by his ion-drive reactors.

Desperately, Jennings had tried to reach Luna Station on his radio, but there was still no answer, and he stopped in despair. His signals would merely aid Strauss in pursuit.

He might reach Luna Station bodily, but he did not think he could make it. He would be picked off first. He would die and crash first. He wouldn't make it. He would have to hide the Device, put it away in a safe place, *then* make for Luna Station.

The Device—

He was not sure he was right. It might ruin the human race, but it was infinitely valuable. Should he destroy it altogether? It was the only remnant of non-human intelligent life. It held the secrets of an advanced technology; it was an instrument of an advanced science of the mind. Whatever the danger, consider the value— The potential value—

No, he must hide it so that it could be found again—but only by the enlightened Moderates of the government. Never by the Ultras—

The skim-boat flickered down along the northern inner rim of the crater. He knew which one it was, and the Device could be buried here. If he could not reach Luna Station thereafter, either in person or by radio, he would have to at least get away from the hiding spot; well away, so that his own person would not give it away. And he would have to leave *some* key to its location.

He was thinking with an unearthly clarity, it seemed to him. Was it the influence of the Device he was holding? Did it stimulate his thinking and guide him to the perfect message? Or was it the hal-

lucination of the dying, and would none of it make any sense to anyone? He didn't know, but he had no choice. He had to try.

For Karl Jennings knew he was going to die. He had a matter of hours to live and much to do.

II

H. Seton Davenport of the American Division of the Terrestrial Bureau of Investigation rubbed the star-shaped scar on his left cheek absently. "I'm aware, sir, that the Ultras are dangerous."

The Division Head, M. T. Ashley, looked at Davenport narrowly. His gaunt cheeks were set in disapproving lines. Since he had sworn off smoking once again, he forced his groping fingers to close upon a stick of chewing gum, which he shelled, crumpled, and shoved into his mouth morosely. He was getting old, and bitter, too, and his short iron-gray mustache rasped when he rubbed his knuckles against it.

He said, "You don't know how dangerous. I wonder if anyone does. They are small in numbers, but strong among the powerful who, after all, are perfectly ready to consider themselves the elite. No one knows for certain who they are or how many."

"Not even the Bureau?"

"The Bureau is held back. We ourselves aren't free of the taint, for that matter. Are you?"

Davenport frowned. "I'm not an Ultra."

"I didn't say you were," said Ashley. "I asked if you were free of the taint? Have you considered what's been happening to the Earth in the last two centuries? Has it never occurred to you that a moderate decline in population would be a good thing? Have you never felt that it would be wonderful to get rid of the unintelligent, the incapable, the insensitive, and leave the rest. *I* have, damn it."

"I'm guilty of thinking that sometimes, yes. But considering something as a wish-fulfillment idea is one thing, but planning it as a practical scheme of action to be Hitlerized through is something else."

"The distance from wish to action isn't as great as you think. Convince yourself that the end is important enough, that the danger is great enough, and the means will grow increasingly less objectionable. Anyway, now that the Istanbul matter is taken care of, let me bring you up to date on this matter. Istanbul was of no importance in comparison. —Do you know Agent Ferrant?"

"The one who's disappeared? — Not personally."

"Well, two months ago, a stranded ship was located on the Moon's surface. It had been conducting a privately-financed selenographic survey. The Russo-American Geological Society, which had spon-

sored the flight, reported the ship's failure to report. A routine search located it without much trouble within a reasonable distance of the site from which it had made its last report.

"The ship was not damaged but its skim-boat was gone and with it one member of the crew. Name—Karl Jennings. The other man, James Strauss, was alive but in delirium. There was no sign of physical damage to Strauss, but he was quite insane. He still is, and that's important."

"Why?" put in Davenport.

"Because the medical team that investigated him reported neurochemical and neuroelectrical abnormalities of unprecedented nature. They'd never seen a case like it. Nothing human could have brought it about."

A flicker of a smile crossed Davenport's solemn face. "You suspect extraterrestrial invaders?"

"Maybe," said the other, with no smile at all. "But let me continue. A routine search in the neighborhood of the stranded ship revealed no signs of the skim-boat. Then Luna Station reported receipt of weak signals of uncertain origin. They had been tabbed as coming from the western rim of Mare Imbrium, but it was uncertain whether they were of human origin or not, and no vessel was believed to be in the vicinity. The signals had been ignored. With the skim-boat in mind, however, the search party headed out for Imbrium and located it. Jennings was aboard, dead. Knife-wound in one side; it's rather surprising he had lived as long as he did.

"Meanwhile the medicos were becoming increasingly disturbed at the nature of Strauss's babbling. They contacted the Bureau and our two men on the Moon—one of them happened to be Ferrant—arrived at the ship.

"Ferrant studied the tape-recordings of the babblings. There was no point in asking questions, for there was, and is, no way of reaching Strauss. There is a high wall between the universe and himself probably a permanent one. However, the talk in delirium, although heavily repetitious and disjointed, can be made to make sense. Ferrant put it together like a jigsaw puzzle.

"Apparently, Strauss and Jennings had come across an object of some sort which they took to be of ancient and non-human manufacture, an artifact of some ship wrecked eons ago. Apparently, it could somehow be made to twist the human mind."

Davenport interrupted. "And it twisted Strauss's mind? Is that it?"

"That's exactly it. Strauss was an Ultra—we can say 'was' for he's only technically alive—and Jennings did not wish to surrender the object. Quite right, too. Strauss babbled of using it to bring about

the self-liquidation, as he called it, of the undesirable. He wanted a final, ideal population of five million. There was a fight in which only Jennings, apparently, could handle the mind-thing, but in which Strauss had a knife. When Jennings left, he was knifed, but Strauss's mind had been destroyed."

"And where was the mind-thing?"

"Agent Ferrant acted decisively. He searched the ship and the surroundings again. There was no sign of anything that was neither a natural Lunar formation or a obvious product of human technology. There was nothing that could be the mind-thing. He then searched the skim-boat and its surroundings. Again nothing."

"Could the first search team, the ones who suspected nothing—Could they have carried something off?"

"They swore they did not, and there is no reason to suspect them of lying. Then Ferrant's partner—"

"Who was he?"

"Gorbansky," said the District Head.

"I know him. We've worked together."

"I know you have. What do you think of him?"

"Capable and honest."

"All right. Gorbansky found something. Not an alien artifact, rather something most routinely human indeed. It was an ordinary white three-by-five card with writing on it, spindled, and in the middle finger of the right gauntlet. Presumably, Jennings had written it before his death and, also presumably, it represented the key to where he had hidden the object."

"What reason is there to think he had hidden it?"

"I said we had found it nowhere."

"I mean, what if he had destroyed it, as something too dangerous to leave intact."

"That's highly doubtful. If we accept the conversation as reconstructed from Strauss's ravings—and Ferrant built up what seems a tight word-for-word record of it—Jennings thought the mind-thing to be of key importance to humanity. He called it 'the clue to an unimaginable scientific revolution.' He wouldn't destroy something like that. He would merely hide it from the Ultras and try to report its whereabouts to the government. Else why leave a clue to its whereabouts?"

Davenport shook his head, "You're arguing in a circle, chief. You say he left a clue because you think there is a hidden object, and you think there is a hidden object because he left a clue."

"I admit that. Everything is dubious. Is Strauss's delirium meaningful? Is Ferrant's reconstruction valid? Is Jenning's clue really a clue? Is there a mind-thing, or a Device, as Jenning's called it, or isn't there? There's no use asking

such questions. Right now, we must act on the assumption that there is such a Device and that it must be found."

"Because Ferrant disappeared?"

"Exactly."

"Kidnapped by the Ultras?"

"Not at all. The card disappeared with him."

"Oh—I see."

"Ferrant has been under suspicion for a long time as a secret Ultra. He's not the only one in the Bureau under suspicion either. The evidence didn't warrant open action; we can't simply lay about on pure suspicion, you know, or we'll gut the Bureau from top to bottom. He was under surveillance."

"By whom?"

"By Gorbansky, of course. Fortunately, Gorbansky had filmed the card and sent the reproduction to the headquarters on Earth, but he admits he considered it as nothing more than a puzzling object and included it in the information sent to Earth only out of a desire to be routinely complete. Ferrant—the better mind of the two, I suppose—did see the significance and took action. He did so at great cost for he has given himself away and has destroyed his future usefulness to the Ultras, but there is a chance that there will be no need for future usefulness. If the Ultras control the Device—"

"Perhaps Ferrant has the Device already."

"He was under surveillance, remember. Gorbansky swears the Device did not turn up anywhere."

"Gorbansky did not manage to stop Ferrant from leaving with the card. Perhaps he did not manage to stop him from obtaining the Device unnoticed, either."

Ashley tapped his fingers on the desk between them in an uneasy and uneven rhythm. He said at last, "I don't want to think that. If we find Ferrant, we may find out how much damage he's done. Till then, we must search for the Device. If Jennings hid it, he must have tried to get away from the hiding place. Else why leave a clue. It wouldn't be found in the vicinity."

"He might not have lived long enough to get away."

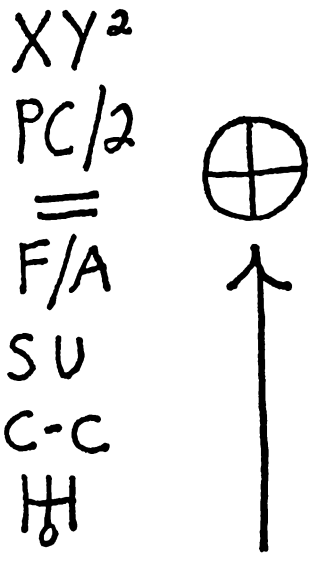
Again Ashley tapped, "The skim-boat showed signs of having engaged in a long, speedy flight and had all but crashed at the end. That is consistent with the view that Jennings was trying to place as much space as possible between himself and some hiding place."

"Can you tell from what direction he came?"

"Yes, but that's not likely to help. From the condition of the side vents, he had been deliberately tacking and veering."

Davenport sighed. "I suppose you have a copy of the card with you."

"I do. Here it is." He flipped a three-by-five replica toward Davenport. Davenport studied it for a few moments. It looked like this:



Davenport said, "I don't see any significance here."

"Neither did I, at first, nor did those I first consulted. But consider. Jennings must have thought that Strauss was in pursuit; he might not have known that Strauss had been put out of action, at least, not permanently. He was deadly afraid, then, that an Ultra would find him before a Moderate would. He dared not leave a clue too open. This," and the Division Head tapped the reproduction, "must represent a clue that is opaque on the surface but clear enough to anyone sufficiently ingenious."

"Can we rely on that?" asked Davenport doubtfully. "After all, he was a dying, frightened man, who might have been subjected to this mind-altering object himself. He need not have been thinking clearly, or even humanly. For instance, why didn't he make an effort to reach Lunar Station? He ended half a circumference away almost. Was he too twisted to think clearly? Too paranoid to trust even the Station?—Yet he must have tried to reach them at first since they picked up signals. What I'm saying is that this card, which looks as though it is covered with gibberish, *is* covered with gibberish."

Ashley shook his head solemnly from side to side, like a tolling bell. "He was in panic, yes. And I suppose he lacked the presence of mind to try to reach Lunar Station. Only the need to run and escape possessed him. Even so this can't be gibberish. It hangs together too well. Every notation on the card can be made to make sense, and the whole can be made to hang together."

"Where's the sense, then?" asked Davenport.

"You'll notice that there are seven items on the left side and two on the right. Consider the left-hand side first. The third one down looks like an equals sign. Does an equals sign mean anything to you, anything in particular?"

"An algebraic equation."

"That's general. Anything particular?"

"No."

"Suppose you consider it as a pair of parallel lines?"

"Euclid's fifth postulate?" suggested Davenport, groping.

"Good! There is a crater called Euclides on the Moon—the Greek name of the mathematician we call Euclid."

Davenport nodded. "I see your drift. As for F/A, that's force divided by acceleration, the definition of mass by Newton's second law of motion—"

"Yes, and there is a crater called Newton on the Moon also."

"Yes, but wait a while, the lowermost item is the astronomic symbol for the planet Uranus, and there is certainly no crater—or any other lunar object, so far as I know—that is named Uranus."

"You're right there. But Uranus was discovered by William Herschel, and the H that makes up part of the astronomic symbol is the initial of his name. As it happens there is a crater named Herschel on the Moon—three of them, in fact, since one is named for Caroline Herschel, his sister and another for John Herschel, his son."

Davenport thought a while, then said, "PC/2— Pressure times half the speed of light. I'm not familiar with that equation."

"Try craters. Try P for Ptolemaeus and C for Copernicus."

"And strike an average? Would that signify a spot exactly between Ptolemaeus and Copernicus?"

"I'm disappointed, Davenport," said Ashley sardonically. "I thought you knew your history of astronomy better than that. Ptolemy, or Ptolemaeus in Latin, presented a geocentric picture of the Solar system with the Earth at the center, while Copernicus presented a heliocentric one with the Sun at the center. One astronomer attempted a compromise, a picture halfway between that of Ptolemy and Copernicus—"

"Tycho Brahe!" said Davenport.

"Right. And the crater Tycho is the most conspicuous feature on the Moon's surface."

"All right. Let's take the rest. The C-C is a common way of writing a common type of chemical bond, and I think there is a crater named Bond."

"Yes, named for an American astronomer, W. C. Bond."

"The item on top, XY^2. Hmm. XYY. An X and two Y's. Wait! Alfonso X. He was the royal astronomer in medieval Spain who was called Alfonso the Wise. X the Wise. XYY. The crater Alphonsus."

"Very good. What's SU."

"That stumps me, chief."

"I'll tell you one theory. It stands for Soviet Union, the old name for the Russian Region. It was the Soviet Union that first mapped the other side of the Moon, and maybe it's a crater there. Tsiolkovsky, for instance. —You see, then, the symbols on the left

can each be interpreted as standing for a crater: Alphonsus, Tycho, Euclides, Newton, Tsiolkovsky, Bond, Herschel."

"What about the symbols on the right-hand side?"

"That's perfectly transparent. The quartered circle is the astronomic symbol for the Earth. An arrow pointing to it indicates that the Earth must be directly overhead."

"Ah," said Davenport, "the Sinus Medii—the Middle Bay—over which the Earth is perpetually at Zenith. That's not a crater, so it's on the right-hand side, away from the other symbols."

"All right," said Ashley. "The notations all make sense, or they can be made to make sense, so there's at least a good chance that this isn't gibberish and that it is trying to tell us something. But what. So far we've got seven craters and a non-crater mentioned, and what does that mean. Presumably, the Device can only be in one place."

"Well," said Davenport heavily, "a crater can be a huge place to search. Even if we assume he hugged the shadow to avoid Solar radiation, there can be dozens of miles to examine in each case. Suppose the arrow pointing to the symbol for the Earth defines the crater where he hid the Device, the place from which the Earth can be seen nearest the zenith."

"That's been thought of, old man. It cuts out one place and leaves us with seven pin-pointed craters, the southernmost extremity of those north of the Lunar equator and the northernmost extremity of those south. But which of the seven?"

Davenport was frowning. So far, he hadn't thought of anything that hadn't already been thought of. "Search them all," he said brusquely.

Ashley crackled into brief laughter. "In the weeks since this has all come up, we've done exactly that."

"And what have you found?"

"Nothing. We haven't found a thing. We're still looking, though."

"Obviously one of the symbols isn't interpreted correctly."

"Obviously!"

"You said yourself there were three craters named Herschel. The symbol SU, if it means the Soviet Union and therefore the other side of the Moon, can stand for any crater on the other side: Lomonosov, Jules Verne, Joliot-Curie, any of them. For that matter the symbol of the Earth might stand for the crater Atlas since he is pictured as supporting the Earth in some versions of the myth. The arrow might stand for the Straight Wall."

"There's no argument there, Davenport. But even if we get the right interpretation for the right symbol, how do we recognize it from among all the wrong interpretations, or from among the right in-

terpretations of the wrong symbols? Somehow there's got to be something that leaps up at us from this card and gives us so clear a piece of information that we can tell it at once as the real thing from among all the red herrings. We've all failed and we need a fresh mind, Davenport. What do you see here?"

"I'll tell you one thing we could do," said Davenport reluctantly. "We can consult someone I— Oh, my God!" He half rose.

Ashley was all controlled excitement at once, "What do you see?"

Davenport could feel his hand trembling. He hoped his lips weren't. He said, "Tell me, have you checked on Jennings' past life?"

"Of course."

"Where did he go to college?"

"Eastern University."

A pang of joy shot through Davenport, but he held on. That was not enough. "Did he take a course in extraterrology?"

"Of course, he did. That's routine for a geology major."

"All right, then, don't you know who teaches extraterrology at Eastern University?"

Ashley snapped his fingers. "That oddball, What's-his-name— Wendell Urth."

"Exactly, an oddball who is a brilliant man in his way. An oddball who's acted as a consultant for the Bureau on several occasions and given perfect satisfaction every time. An oddball I was going to suggest we consult this time and then noticed that this card was *telling* us to do so.—An arrow pointing to the symbol for the Earth. A rebus that couldn't mean more clearly 'Go to Urth,' written by a man who was once a student of Urth and would know him."

Ashley stared at the card, "By God, it's possible.—But what could Urth tell us about the card that we can't see for ourselves?"

Davenport said, with polite patience, "I suggest we ask him, sir."

III

Ashley looked about curiously, half wincing as he turned from one direction to another. He felt as though he had found himself in some arcane curiosity shop, darkened and dangerous, from which at any moment some demon might hurtle forth squealing.

The lighting was poor and the shadows many. The walls seemed distant, and dismally alive with book-films from floor to ceiling. There was a Galactic lens in soft three-dimensionality in one corner and behind it were star charts that could dimly be made out. A map of the Moon in another corner might, however, possibly be a map of Mars.

Only the desk in the center of the room was brilliantly lit by a tight-beamed lamp. It was littered with papers and opened printed

books. A small viewer was threaded with film, and a clock with an old-fashioned round-faced dial hummed with subdued merriment.

Ashley found himself unable to recall that it was late afternoon outside and that the sun was quite definitely in the sky. Here, within, was a place of eternal night. There was no sign of any window, and the clear presence of circulating air did not spare him a claustrophobic sensation.

He found himself moving closer to Davenport, who seemed insensible to the unpleasantness of the situation.

Davenport said in a low voice, "He'll be here in a moment, sir."

"Is it always like this?" asked Ashley.

"Always. He never leaves this place, as far as I know, except to trot across the campus and attend his classes."

"Gentlemen! Gentlemen!" came a reedy, tenor voice. "I am so glad to see you. It is good of you to come."

A round figure of a man bustled in from another room, shedding shadow and emerging into the light.

He beamed at them, adjusting round, thick-lensed glasses upward so that he might look through them. As his fingers moved away, the glasses slipped downward at once to a precarious perch upon the round nubbin of his snub nose. "I am Wendell Urth," he said.

The scraggly gray Van Dyke on his pudgy, round chin did not in the least add to the dignity which the smiling face and the stubby ellipsoidal torso so noticeably lacked.

"Gentlemen! It is good of you to come," Urth repeated, as he jerked himself backward into a chair from which his legs dangled with the toes of his shoes a full inch above the floor. "Mr. Davenport remembers, perhaps, that it is a matter of—uh—some importance to me to remain here. I do not like to travel, except to walk, of course, and a walk across the campus is quite enough for me."

Ashley looked baffled as he remained standing, and Urth stared at him with a growing bafflement of his own. He pulled a handkerchief out and wiped his glasses, then replaced them, and said, "Oh, I see the difficulty. You want chairs. Yes. Well, just take some. If there are things on them, just push them off. Push them off. Sit down, please."

Davenport removed the books from one chair and placed them carefully on the floor. He pushed it toward Ashley, then took a human skull off a second chair and placed it even more carefully on Urth's desk. Its mandible, insecurely wired, unhinged as he transferred it, and it sat there with jaw askew.

"Never mind," said Urth, affably, "it will not hurt. Now tell me what is on your mind, gentlemen?"

Davenport waited a moment for Ashley to speak then, rather gladly, took over. "Dr. Urth, do you remember a student of yours named Jennings? Karl Jennings?"

Urth's smile vanished momentarily with the effort of recall. His somewhat protuberant eyes blinked. "No," he said at last. "Not at the moment."

"A geology major. He took your extraterrology course some years ago. I have his photograph here if that will help—"

Urth studied the photograph handed him with near-sighted concentration, but still looked doubtful.

Davenport drove on. "He left a cryptic message which is the key to a matter of great importance. We have so far failed to interpret it satisfactorily, but this much we see—it indicates we are to come to you."

"Indeed? How interesting! For what purpose are you to come to me?"

"Presumably for your advice on interpreting the message."

"May I see it?"

Silently, Ashley passed the slip of paper to Wendell Urth. The extraterrologist looked at it casually, turned it over and started for a moment at the blank back. He said, "Where does it say to ask me?"

Ashley looked startled, but Davenport forestalled him by saying, "The arrow pointing to the symbol of the Earth. It seems clear."

"It is clearly an arrow pointing to the symbol for the planet Earth. I suppose it might literally mean 'go to the Earth' if this were found on some other world."

"It was found on the Moon, Dr. Urth, and it could, I suppose, mean that. However, the reference to you seemed clear once we realized that Jennings had been a student of yours."

"He took a course in extraterrology here at the University?"

"That's right."

"In what year, Mr. Davenport?"

"In '18."

"Ah. The puzzle is solved."

"You mean the significance of the message?" said Davenport.

"No, no. The message has no meaning to me. I mean the puzzle of why it is that I did not remember him, for I remember him now. He was a very quiet fellow, anxious, shy, self-effacing—not at all the sort of person anyone would remember. Without this," and he tapped the message, "I might never have remembered him?"

"Why does the card change things?" asked Davenport.

"The reference to me is a play on words. Earth—Urth. Not very subtle, of course, but that is Jennings. His unattainable delight was the pun. My only clear memory of him is his occasional attempts to perpetrate puns. I enjoy puns, I adore puns, but Jennings—yes, I remember him well now—was atrocious at it. Either

that, or distressingly obvious at it, as in this case. He lacked all talent for puns, yet craved them so much."

Ashley suddenly broke in. "This message consists entirely of a kind of word-play, Dr. Urth. At least, we believe so, and that fits in with what you say."

"Ah!" Urth adjusted his glasses and peered through them once more at the card and the symbols it carried. He pursed his plump lips then said cheerfully, "I make nothing of it."

"In that case—" began Ashley, his hands balling into fists.

"But if you tell me what it's all about," Urth went on, "then perhaps it might mean something."

Davenport said quickly, "May I, sir? I am confident that this man can be relied on—and it may help."

"Go ahead," muttered Ashley, "At this point, what can it hurt?"

Davenport condensed the tale, giving it in crisp, telegraphic sentences, while Urth listened carefully, moving his stubby fingers over the shining milk-white desk top as though he were sweeping up invisible cigar ashes. Toward the end of the recital, he hitched up his legs and sat with them crossed like an amiable Buddha.

When Davenport was done, Urth thought a moment, then said, "Do you happen to have a transcript of the conversation reconstructed by Ferrant?"

"We do," said Davenport. "Would you like to see it?"

"Please."

Urth placed the strip of microfilm in a scanner and worked his way rapidly through it, his lips moving unintelligibly at some points. Then he tapped the reproduction of the cryptic message. "And this, you say, is the key to the entire matter? The crucial clue?"

"We think it is, Dr. Urth."

"But it is not the original. It is a reproduction."

"That is correct."

"The original has gone with this man, Ferrant, and you believe it to be in the hands of the Ultras."

"Quite possibly."

Urth shook his head and looked troubled. "Everyone knows my sympathies are not with the Ultras. I would fight them by all means, so I don't want to seem to be hanging back, but—What is there to say that this mind-affecting object exists at all? You have only the ravings of a psychotic and your dubious deductions from the reproduction of a mysterious set of marks that may mean nothing at all."

"Yes, Dr. Urth, but we can't take chances."

"How certain are you that this copy is accurate? What if the original has something on it that this lacks, something that makes the message quite clear, something without which the message must remain impenetrable."

"We are certain the copy is accurate."

"What about the reverse side? There is nothing on the back of this reproduction. What about the reverse of the original?"

"The agent who made the reproduction tells us that the back of the original was blank."

"Men can make mistakes."

"We have no reason to think he did, and we must work on the assumption that he didn't. At least until such time as the original is regained."

"Then you assure me," said Urth, "that any interpretation to be made of this message must be made on the basis of exactly what one sees here."

"We think so. We are virtually certain," said Davenport, with a sense of ebbing confidence.

Urth continued to look troubled. He said, "Why not leave the instrument where it is? If neither group finds it, so much the better. I disapprove of any tampering with minds and would not contribute to making it possible."

Davenport placed a restraining hand on Ashley's arm, sensing the other was about to speak. Davenport said, "Let me put it to you, Dr. Urth, that the mind-tampering aspect is not the whole of the Device. Suppose an Earth expedition to a distant primitive planet had dropped an old-fashioned radio there, and suppose the native population had discovered electric current but had not yet developed the vacuum tube.

"The population might discover that if the radio was hooked up to a current, certain glass objects within it would grow warm and would glow, but of course they would receive no intelligible sound, merely, at best, some buzzes and crackles. However, if they dropped the radio into a bathtub while it was plugged in, a person in that tub might be electrocuted. Should the people of this hypothetical planet therefore conclude that the device they were studying was designed solely for the purpose of killing people?"

"I see your analogy," said Urth. "You think that the mind-tampering property is merely an incidental function of the Device?"

"I'm sure of it," said Davenport earnestly. "If we can puzzle out its real purpose, earthly technology may leap ahead centuries."

"Then you agree with Jennings when he said—" Here Urth consulted the microfilm—" 'It might be the key to—who knows what? It might be the clue to an unimaginable scientific revolution."

"Exactly!"

"And yet the mind-tampering aspect is there and is infinitely dangerous. Whatever the radio's purpose, it *does* electrocute."

"Which is why we can't let the Ultras get it."

"Or the government either, perhaps?"

"But I must point out that there is a reasonable limit to caution. Consider that men have always held danger in their hands. The first flint knife in the old Stone Age, the first wooden club before that could kill. They could be used to bend weaker men to the will of stronger ones under threat of force and that, too, is a form of mind-tampering. What counts, Dr. Urth, is not the Device itself, however dangerous it may be in the abstract, but the intentions of the men who make use of the Device. The Ultras have the declared intention of killing off more than 99.9 percent of humanity. The government, whatever the faults of the men composing it, would have no such intention."

"What *would* the government intend?"

"A scientific study of the Device. Even the mind-tampering aspect itself could yield infinite good. Put to enlightened use, it could educate us concerning the physical basis of mental function. We might learn to correct mental disorders or cure the Ultras. Mankind might learn to develop greater intelligence generally."

"How can I believe that such idealism will be put into practice?"

"I believe so. Consider that you face a possible turn to evil by the government if you help us, but you risk the certain and declared evil purpose of the Ultras if you don't."

Urth nodded thoughtfully. "Perhaps you're right. And yet I have a favor to ask of you. I have a niece who is, I believe, quite fond of me. She is constantly upset over the fact that I steadfastly refuse to indulge in the lunacy of travel. She states that she will not rest content until someday I accompany her to Europe or North Carolina or some other outlandish place—"

Ashley leaned forward earnestly, brushing Davenport's restraining gesture to one side. "Dr. Urth, if you help us find the Device and if it can be made to work, then I assure you that we will be glad to help you free yourself of your phobia against travel and make it possible for you to go with your niece anywhere you wish."

Urth's bulging eyes widened and he seemed to shrink within himself. For a moment, he looked wildly about as though he were already trapped. "*No!*" he gasped. "Not at all! Never!"

His voice dropped to an earnest, hoarse whisper. "Let me explain the nature of my fee. If I help you; if you retrieve the Device and learn its use; if the fact of my help becomes public; then my niece will be on the government like a fury. She is a terribly headstrong and shrill-voiced woman who will raise public subscriptions and organize demonstrations. She will stop at nothing. And yet you must not give in to her. You must *not!* You must resist all pressures. I wish to be left

alone exactly as I am now. That is my absolute and minimum fee."

Ashley flushed. "Yes, of course, since that is your wish."

"I have your word?"

"You have my word."

"Please remember.—I rely on you, too, Mr. Davenport."

"It will be as you wish," soothed Davenport. "And now, I presume, you can interpret the items?"

"The items?" asked Urth, seeming to focus his attention with difficulty on the card. "You mean these markings, XY^2 and so on?"

"Yes. What do they mean?"

"I don't know. Your interpretations are as good as any I suppose."

Ashley exploded. "Do you mean that all this talk about helping us is nonsense? What was this maundering about a fee, then?"

Wendell Urth looked confused and taken aback. "I would like to help you."

"But you don't know what these items mean."

"I—I don't. But I know what this message means."

"You do?" cried Davenport.

"Of course. Its meaning is transparent. I suspected it half way through your story. And I was sure of it once I read the reconstruction of the conversations between Strauss and Jennings. You would understand it yourself, gentlemen, if you would only stop to think."

"See here," said Ashley in exasperation. "You said you don't know what the items mean."

"I don't. I said I know what the *message* means."

"What is the message if it is not the items? Is it the paper, for Heaven's sake?"

"Yes, in a way."

"You mean invisible ink or something like that."

"No! Why is it so hard for you to understand, when you yourself stand on the brink?"

Davenport leaned toward Ashley and said in a low voice, "Sir, if you'll let me handle it, please?"

Ashley snorted, then said in a stifled manner. "Go ahead."

"Dr. Urth," said Davenvort, "will you give us your analysis?"

"Ah! Well, all right." The little extraterrologist settled back in his chair and mopped his damp forehead on his sleeve. "Let's consider the message. If you accept the quartered circle and the arrow as directing you to me, that leaves seven items. If these indeed refer to seven craters, six of them, at least, must be designed merely to distract, since the Device surely cannot be in more than one place. It contained no movable or detachable parts—it was all one piece.

"Then, too, none of the items are straightforward. SU might, by your interpretation, mean any place on the other side of the Moon, which is an area the size of South America. Again PC/2 can mean 'Tycho,' as Mr. Ashley says, or it can mean 'halfway between Ptolemaeus and Copernicus,' as Mr.

Davenport thought, or for that matter 'halfway between Plato and Cassini.' To be sure, XY^2 could mean 'Alfonsus'—very ingenious interpretation, that—but it could refer to some coordinate system in which the Y-coordinate was the square of the X-coordinate. Similarly C-C would mean 'Bond' or it could mean 'halfway between Cassini and Copernicus.' F/A could mean 'Newton' or it could mean 'between Fabricius and Archimedes.'

"In short, the items have so many meanings that they are meaningless. Even if one of them had meaning, it could not be selected from among the others so that it is only sensible to suppose that all the items are merely red herrings.

"It is necessary, then, to determine what about the message is completely unambiguous; what is perfectly clear. The answer to that can only be that it *is* a message; that it *is* a clue to a hiding place. That is the one thing we are certain about, isn't it?"

Davenport nodded, then said cautiously. "At least, we think we are certain of it."

"Well, you have referred to this message as the key to the whole matter. You have acted as though it were the crucial clue. Jennings himself referred to the Device as a key or a clue. If we combine this serious view of the matter with Jennings' penchant for puns, a penchant which may have been heightened by the mind-tampering Device he was carrying—So let me tell you a story—

"In the last half of the sixteenth century, there lived a German Jesuit in Rome. He was a mathematician and astronomer of note and helped Pope Gregory XIII reform the calendar in 1582, performing all the enormous calculations required. This astronomer admired Copernicus but he did not accept the heliocentric view of the Solar system. He clung to the older belief that the Earth was the center of the Universe.

"In 1650, nearly forty years after the death of this mathematician, the Moon was mapped by another Jesuit, the Italian astronomer, Giovanni Battista Riccioli. He named the craters after astonomers of the past and since he, too, rejected Copernicus, he selected the largest and most spectacular craters for those who placed the Earth at the center of the Universe—for Ptolemy, Hipparchus, Alfonso X, Tycho Brahe. The biggest crater Riccioli could find he reserved for his German Jesuit predecessor.

"This crater is actually only the second largest of the craters visible from Earth. The only larger crater is Bailly, which is right on the Moon's limb and is therefore very difficult to see from the Earth. Riccioli ignored it, and it was named for an astronomer who lived a cen-

tury after his time and who was guillotined during the French Revolution."

Ashley was listening to all this restlessly. "But what has this to do with the message?"

"Why, everything," said Urth, with some surprise. "Did you not call this message the key to the whole business. Isn't it the crucial clue?"

"Yes, of course?"

"Is there any doubt that we are dealing with something that is a clue or key to something else."

"No, there isn't," said Ashley.

"Well, then— The name of the German Jesuit I have been speaking of is Christoph Klau—pronounced "klow." Don't you see the pun? Klau—clue?"

Ashley's entire body seemed to grow flabby with disappointment. "Far-fetched," he muttered.

Davenport said, anxiously, "Dr. Urth. There is no feature on the Moon named Klau as far as I know."

"Of course not," said Urth excitedly. "That is the whole point. At this period of history, the last half of the sixteenth century, European scholars were Latinizing their names. Klau did so. In place of the German "u", he made use of the equivalent letter, the Latin "v." He then added an "ius" ending typical of Latin names and Christoph Klau became Christopher Clavius, and I suppose you are all aware of the giant crater we call Clavius."

"But—"began Davenport.

"Don't 'but' me," said Urth. "Just let me point out that the Latin word 'clavis' means 'key.' *Now* do you see the double and bilingual pun? Klau—clue, Clavius—clavis—key. In his whole life, Jennings could never have made a double, bilingual pun without the Device. Now he could, and I wonder if death might not have been almost triumphant under the circumstances. And he directed you to me because he knew I would remember his penchant for puns and because he knew I loved them too."

The two men of the Bureau were looking at him wide-eyed.

Urth said solemnly, I would suggest you search the shaded rim of Clavius, at that point where the Earth is nearest the zenith."

Ashley rose. "Where is your videophone?"

"In the next room."

Ashley dashed. Davenport lingered behind. "Are you sure, Dr. Urth."

"Quite sure. But even if I am wrong, I suspect it doesn't matter."

"What doesn't matter?"

"Whether you find it or not. For if the Ultras find the Device, they will probably be unable to use it."

"Why do you say that?"

"You asked me if Jennings had ever been a student of mine, but you never asked me about Strauss, who was also a geologist. He was a student of mine a year or so after Jennings. I remember him well."

"Oh?"

"An unpleasant man. Very cold. It is the hallmark of the Ultras, I think. They are all very cold, very rigid, very sure of themselves. They can't empathize, or they wouldn't speak of killing off billions of human beings. What emotions they possess are icy ones, self-absorbed ones, feelings incapable of spanning the distance between two human beings."

"I think I see."

"I'm sure you do. The conversation reconstructed from Strauss's ravings showed us he could not manipulate the device. He lacked the emotional intensity, or the type of necessary emotion. I imagine all Ultras would. Jennings, who was not an Ultra, could manipulate it. Anyone who could use the Device would, I suspect, be incapable of deliberate cold-blooded cruelty. He might strike out of panic fear as Jennings struck at Strauss, but never out of calculation, as Strauss tried to strike at Jennings. —In short, to put it tritely, I think the Device can be actuated by love, but never by hate, and the Ultras are nothing if not haters."

Davenport nodded. "I hope you're right. But then—why were you so suspicious of the government's motives, if you felt the wrong men could not manipulate the Device?"

Urth shrugged. "I wanted to make sure you could bluff and rationalize on your feet and make yourself convincingly persuasive at a moment's notice. After all, you may have to face my niece."

On the rare occasions that a science fact article other than Dr. Asimov's column appears in the Magazine, it is usually by L. Sprague de Camp, himself the author of more than forty books. Here, he offers an obstructed profile of Isaac Asimov, which concentrates on the small things (e. g., Isaac and the Army rifle) and manages very nicely to give us a full picture of the man.

YOU CAN'T BEAT BRAINS

by L. Sprague de Camp

IN THE SUMMER OF 1939, IN THE office of John W. Campbell, I met a slim, good-looking stripling of medium height, with blue eyes, dark-brown hair, and a downy mustache. This, Campbell told me, was one of his newest writers, Isaac Asimov.

Since I was some years older than he and had been writing professionally for all of two years longer, it seemed like a case of old pro to eager novice. That distinction vanished in a few months, as Isaac got the writing bit in his teeth and ran away with it. He soon pulled ahead of me in total sales, and I have been panting in his wake ever since.

The next time I saw Isaac was at a fan meeting in New York. Called upon to introduce himself, he said: "I am the world's worst science-fiction writer." For a number of years he persisted in this pose of modesty. At last he became so famous, both as a science-fictioneer and as a non-fiction popularizer of science, that it sounded silly, like Sir Edmund Hilary apologizing for being such a feeble mountain climber.

Anyway, as the years passed, my wife Catherine and I came to know Isaac better, and the better we knew him the more he became one of our very favorite people. We learned that he was born in the Soviet Union, near Smolyensk, in 1920 and was brought to the United States three years later; that his parents ran a candy store in

Brooklyn; that he had just graduated from Columbia University as a chemist and was working there for his master's. He financed his higher education by professional writing. Thousands of Americans list themselves as "writers" in the Census but fail to make a living even when they write full-time. And here was Isaac, writing part-time . . .

The mustache disappeared when he got married (I have always thought it a pity) and the Hitlerian War gathered us up. Robert Heinlein, Isaac Asimov, and I all went to work for what was then the Naval Aircraft Factory and is now the Naval Air Experimental Station at the Philadelphia Navy Yard. There we worked for three and a half years, fighting the Axis with slide rule and requisition forms in quintuplicate. We did test and development engineering on naval aircraft parts, accessories, and materials.

After the war, I hung up my uniform while Isaac put his on. The Army kept him for a year. Some might not pick Isaac as a natural soldier, and certainly he would not claim he was cut out for that career. But, like Edgar Allan Poe under similar circumstances, he did all right. He made corporal by the time he got out.

He went back to Columbia, got his Ph.D., and took a chair at the Boston University School of Medicine. Ever since, he has lived in a suburb of Boston with his wife Gertrude and two attractive children.

For some years he worked on cancer research; but then, although he is still "Professor Asimov," he tapered off his academic work to spend more and more time on writing. For the last decade, he has been turning out big, solid scientific popularizations and reference books, in addition to his stories, so fast that I have abandoned trying to keep up with them. If I read them all, I should have no time left to write anything myself. That is a terrible thing to have one of one's favorite writers do to one. Note that, while Isaac is one of the merriest of men in private life, his stories have usually been serious in tone. Writers of funny stories, on the contrary, are often pretty solemn squares in private life.

Naturally, Catherine and I have come to know Isaac pretty well. For instance, we claim the credit or blame for introducing him to the demon rum. About 1941, in our apartment in New York, we gave him his first drink. It was just a teensy drink, but he turned a funny purple color, with spots, and complained of feeling strange. After he left us, he rode the subway back and forth until he felt normal enough to go home. It wasn't inebriety but some allergy that got him. So, wise man, he swore off the sauce and has stayed off it ever since. Such an ebullient personality doesn't need liquor anyway.

Also naturally, we have formed ideas as to what makes Isaac tick. I will not fill pages with what a lovable fellow Isaac is. Of course he is, and everybody who knows him knows it. To tell you how much the de Camps love Isaac is merely to lose ourselves in a vast throng. I will, instead, tell about some of his less obvious qualities.

For one thing, he has character of a very definite kind. Some people may be described as human mollusks, with a hard shell of self-confidence and self-assertion, inside of which they are mush. Isaac is the opposite. Because he clowns and jokes, and because he is so sympathetic and generous, he gives the impression that he is a pushover for anybody who wants to sway him or to take advantage of him. Some people have indeed taken advantage of him.

Inside this soft exterior, however, is a hard core of character. When he decides that he will not be pushed further, an elephant won't budge him. When he decides that something is not for him, neither wheedling nor bribery nor threats will induce him to partake of it.

Let me give a couple of examples. In his youth, he was never one to get into fights. If he never exactly turned the other cheek, he could usually joke his way out of a confrontation. Nor was he ever much for sports, although he had powerful muscles.

But, when a schoolmate, after failing to get a rise out of Isaac by pestering him, made some derogatory remark about Isaac's mother, Isaac went for him. The tormenter hit Isaac here, there, and everywhere, but he might as well have punched the statue of General Sherman in Central Park. Isaac got his hands on the other boy's windpipe and would probably have strangled him to death if adults had not pulled him off.

Again, when he and I were working for Uncle at the Philadelphia Navy Yard, we once had a commanding officer whom I shall call "Commander Fuller." If any reader saw the original stage production of *Mister Roberts,* Commander Fuller was the captain in *Mister Roberts* to the life. If you didn't, the movie gave a pretty good idea.

Well, Commander Fuller was wont to make life hard for the civilian employees in his laboratories, especially those of Jewish origin. He decided to treat Isaac in what I suppose he thought was a friendly manner, loudly crying: "Hey there, Ikey!" at every encounter and then laughing like a kookaburra. Isaac did not like the nickname "Ikey." After standing it as long as he could, he burst out:

"Commander Fuller, call me 'Isaac' or call me 'Mr. Asimov,' but *don't* call me 'Ikey'!"

Fuller went away and never bothered Isaac again.

Then again, a few years ago, he

decided that he had grown too heavy. So he cut down on his calories, and the next time I saw him he was thirty pounds lighter. He stuck to the new weight, too. He has a will of steel when he chooses to employ it.

Of course, this trait has its awkward points. Since everybody (except the Commander Fullers of this world) loves Isaac, everybody wants to bring him up and improve him. (For years he has been one of the leading improvees on my wife's list.) That means, they want him to do things the way they like to do them, which may or may not be the way Isaac likes.

I have long tried, for instance, to overcome his hatred of travel by describing to him the joys of being gypped by taxi drivers in Paris, being chased by a hippopotamus in Uganda, and catching Montezuma's revenge in Yucatán. Somehow I don't seem to have gotten very far. I fear that people who undertake thus to change Isaac are trying to bail out the ocean. They would get further if they put the effort in perfecting themselves.

That leaves what is, after all, Isaac's most important trait. This is sheer intelligence. You can't beat brains. When he is faced with a predicament—whether in writing or in lifesmanship—he may clown and holler and emote a bit, but in the end he sits down and *thinks* his way through. And, since his brain works twice as fast and reaches twice as far as most people's, he is twice as likely to reach the right conclusion.

Take, for example, Isaac and the Army rifle. Since Isaac grew up where law-abiding people did not own guns, he never got on familiar terms with guns. I once undertook to teach him to shoot a pistol. It was a little like trying to teach a man who dislikes snakes how to catch a live rattlesnake with the bare hand.

However, came the Army. Isaac had known little more about a rifle than the fact that the bullet comes out the small end. He was given a Garand M-1, instructed in its use, and told to go out on the range, lie down, and shoot at a target. Although it was snowing, and Isaac wears glasses, he made sharpshooter. He simply listened to what he was told and applied these instructions intelligently.

So, if I were about to be shot off to the third planet of Alpha Centauri and were given a choice of companions, I think I should pick Isaac. Not that many other people aren't better trained or more Tarzanlike to begin with. But I should know that, when things get tough, Isaac could think our way out if anybody could.

But, how shall I ever get him to Alpha Centauri when it is almost impossible to drag him from Boston to Philadelphia? ◄

Isaac Asimov: A Bibliography

FICTION BY ISAAC ASIMOV

PART 1—BOOKS

PEBBLE IN THE SKY[1], Doubleday, 1950
I, ROBOT[2], Gnome[3], 1950
THE STARS, LIKE DUST—, Doubleday, 1951
FOUNDATION[2], Gnome[3], 1951
DAVID STARR: SPACE RANGER[4], Doubleday, 1952
FOUNDATION AND EMPIRE[2], Gnome[3], 1952
THE CURRENTS OF SPACE, Doubleday, 1952
SECOND FOUNDATION[2], Gnome[3], 1953
LUCKY STARR AND THE PIRATES OF THE ASTEROIDS[4], Doubleday, 1953
THE CAVES OF STEEL, Doubleday, 1954
LUCKY STARR AND THE OCEANS OF VENUS[4], Doubleday, 1954
THE MARTIAN WAY AND OTHER STORIES[2], Doubleday, 1955
THE END OF ETERNITY[1], Doubleday, 1955
LUCKY STARR AND THE BIG SUN OF MERCURY[4], Doubleday, 1956
THE NAKED SUN, Doubleday, 1957
LUCKY STARR AND THE MOONS OF JUPITER[4], Doubleday, 1957
EARTH IS ROOM ENOUGH[2], Doubleday, 1957
LUCKY STARR AND THE RINGS OF SATURN[4], Doubleday, 1958
THE DEATH DEALERS[5], Avon, 1958
NINE TOMORROWS[2], Doubleday, 1959
THE HUGO WINNERS[6], Doubleday, 1962
FIFTY SHORT SCIENCE FICTION TALES[6, 7], Collier Books, 1963
THE REST OF THE ROBOTS[2], Doubleday, 1964
FANTASTIC VOYAGE[8], Houghton-Mifflin, 1966
TOMORROW'S CHILDREN[6], Doubleday, 1966

[1] *Not serialized in a magazine beforehand*
[2] *Collection of short stories and/or longer magazine pieces*
[3] *Taken over by Doubleday in 1961*
[4] *Under the pseudonym of "Paul French"*
[5] *Soft cover publication only—not science fiction*
[6] *Science fiction anthology edited by Asimov*
[7] *In collaboration with Groff Conklin*
[8] *Novelization of a non-Asimov movie*

Marooned off Vesta, *Amazing,* March 1939

The Weapon Too Dreadful to Use, *Amazing,* May 1939

Trends, *Astounding,* July 1939

Half-Breed, (novelet), *Astonishing,* Feb 1940

Ring Around the Sun, *Future,* March 1940

The Callistan Menace, *Astonishing,* April 1940

The Magnificent Possession, *Future,* July 1940

Homo Sol, *Astounding,* Sept 1940

Strange Playfellow[1,2], *Super Science,* Sept 1940

Half-Breeds on Venus, (novelet), *Astonishing,* Dec 1940

History, *Super Science,* March 1941

The Secret Sense, *Cosmic,* March 1941

Reason[2], *Astounding,* April 1941

Heredity, (novelet), *Astonishing,* April 1941

Liar![2], *Astounding,* May 1941

Nightfall, (novelet), *Astounding,* Sept 1941

Super-Neutron, *Astonishing,* Sept 1941

Not Final!, *Astounding,* Oct 1941

Christmas on Ganymede, *Startling,* Jan 1942

Robot AL-76 Goes Astray[3], *Amazing,* Feb 1942

Black Friar of the Flame, (novelet), *Planet,* Spring 1942

Runaround[2], *Astounding,* March 1942

Time Pussy[4,5], (short-short), *Astounding,* April 1942

Foundation[6], (novelet), *Astounding,* May, 1942

Bridle and Saddle[6], (novelet), *Astounding,* June 1942

Victory Unintentional[3], *Super Science,* August, 1942

The Hazing, *Thrilling Wonder,* Oct 1942

The Imaginary, *Super Science,* Nov 1942

Death Sentence, *Astounding,* Nov 1943

Catch That Rabbit[2], *Astounding,* Feb 1944

The Big and the Little[6], (novelet), *Astounding,* August 1944

The Wedge[6], *Astounding,* Oct 1944

Blind Alley, *Astounding,* March 1945

Dead Hand[8], (novelet), *Astounding,* April 1945

Paradoxical Escape[2,7], *Astounding,* August 1945

The Mule[8], (serial), *Astounding,* Nov, Dec 1945

Evidence[2], *Astounding,* Sept 1946

Little Lost Robot[2], *Astounding,* March 1947

Now You See It—[9], (novelet), *Astounding,* Jan 1948

The Endochronic Properties of Resublimated Thiotimoline, *Astounding,* March 1948

No Connection, *Astounding,* June 1948

The Red Queen's Race, *Astounding,* Jan 1949

Mother Earth, (novelet), *Astounding,* May 1949

—And Now You Don't[9], (serial), *Astounding,* Nov, Dec 1949, Jan 1950

The Evitable Conflict[2], *Astounding,* June 1950

Legal Rites[10], *Weird,* Sept. 1950

Darwinian Poolroom, *Galaxy,* Oct 1950

Day of the Hunters, *Future,* Nov 1950

Misbegotten Missionary, *Galaxy,* Nov 1950

The Little Man on the Subway[10], *Fantasy Book,* Vol. 1 #6

Tyrann[11], (serial), *Galaxy,* Jan, Feb, Mar 1951

Satisfaction Guaranteed[3,12], *Amazing,* April 1951

Hostess, (novelet), *Galaxy,* May 1951

Breeds There a Man?, (novelet), *Astounding,* June 1951

The C-Chute, (novelet), *Galaxy,* Oct 1951

Shah Guido G, *Marvel,* Nov 1951

Youth[13], (novelet), *Space,* May 1952

What If—, *Fantastic,* Summer 1952

The Currents of Space, (serial), *Astounding,* Oct, Nov, Dec 1952

The Martian Way[13], (novelet), *Galaxy,* Nov 1952

The Deep[13], *Galaxy,* Dec 1952

In a Good Cause[14], (novelet), 1951

Nobody Here But—[14], 1953

Button, Button, *Startling,* Jan 1953

The Monkey's Fingers, *Startling,* Feb 1953

Flies, *F & SF,* June 1953

Sally, *Fantastic,* May-June 1953

Kid Stuff[12], *Beyond,* Sept 1953

Belief, (novelet), *Astounding,* Oct 1953

The Caves of Steel, (serial), *Galaxy,* Oct, Nov, Dec 1953

Everest, (short-short), *Universe,* Dec 1953

The Michopsychiatric Applications of Thiotimoline, *Astounding,* Dec 1953

The Fun They Had [12,15], (short-short), *F & SF,* Feb 1954

Sucker Bait[13], (serial), *Astounding,* Feb, Mar 1954

The Pause[14], 1954

The Immortal Bard[12], (short-short), *Universe,* May 1954

The Foundation of S.F. Success[12], (poem), *F & SF,* Oct 1954

The Portable Star, *Thrilling Wonder,* Winter 1954

Let's Not, (short-short), *Graduate Journal*[16], Dec 1954

The Singing Bell, *F & SF,* Jan 1955

It's Such A Beautiful Day[14], (novelet), 1955

Risk[3], (novelet), *Astounding,* May 1955

The Last Trump[12], *Fantastic Universe,* June 1955

Franchise[12], *If,* August 1955

The Talking Stone, *F & SF,* Oct 1955

Dreamworld, (short-short), *F & FS,* Nov 1955

Dreaming is a Private Thing[12], *F & SF,* Dec 1955

The Message[12], (short-short), *F & SF,* Feb 1956

The Dead Past[12], (novelet), *Astounding,* April 1956

Hell Fire[12], (short-short), *Fantastic Universe,* May 1956

Living Space[12], *Original,* May 1956

Death of a Honey-Blonde, *Saint Detective,* June 1956

The Dying Night[17], (novelet), *F & SF,* July 1956

Someday[12], *Infinity,* August 1956

Paté de Foie Gras, *Astounding,* Sept 1956

First Law[3], (short-short), *Fantastic Universe,* Oct 1956

The Watery Place[12], (short-short), *Satellite,* Oct 1956

Each an Explorer, *Future,* #30

How to Succeed at Science Fiction Without Really Trying, (poem), *Original,* Nov 1956

The Last Question[17], *S. F. Quarterly,* Nov. 1956

The Brazen Locked Room[12,18], *F & SF,* Nov 1956

The Jokester[12], *Infinity,* Dec 1956

The Dust of Death, *Venture,* Jan 1957

Male Strikebreaker, *Original,* Jan 1957

Let's Get Together[3], *Infinity,* Feb 1957

The Author's Ordeal, (poem), *S. F. Quarterly,* May 1957

Blank! (short-short), *Infinity,* June 1957

Does A Bee Care?, *If,* June 1957

A Woman's Heart, (short-short), *Satelite,* June 1957

Profession[17], (novelet), *Astounding,* July 1957

A Loint of Paw, (short-short), *F & SF,* August 1957

Tale of the Pioneer, (poem), *Future,* #33

Ideas Die Hard, *Galaxy,* Oct 1957

I'm in Marsport Without Hilda[17], *Venture,* Nov 1957

The Gentle Vultures[17], *Super-Science,* Dec 1957

Galley Slave[3], (novelet), *Galaxy,* Dec 1957

Insert Knob A in Hole B, (short-short), *F & SF,* Dec 1957

S, as in Zebatinsky[17,20], *Star,* Jan 1958

Oh, That Lost Sense of Wonder, (poem), *Original,* Jan 1958

Lennie[3], *Infinity,* Jan 1958

The Feeling of Power[17], *If,* Feb 1958

I Just Make Them Up, See[17], (poem), *F & SF,* Feb 1958

Silly Asses, (short-short), *Future,* Feb 1958

All the Troubles of the World[17], *Super-Science,* April 1958

Buy Jupiter, (short-short), *Venture,* May 1958

The Up-to-Date Sorcerer, *F & SF,* July 1958

Lastborn[17,21], (novelet), *Galaxy,* Sept 1958

It's All How You Look At It, (poem), *Future,* Oct 1958

A Statue for Father, *Satellite,* Feb 1959

Anniversary, *Amazing,* March 1959

Unto the Fourth Generation, *F & SF,* April 1959

Obituary, *F & SF,* August 1959

Rain, Rain, Go Away, *Fantastic Universe,* Sept 1959

The Covenant[22], *Fantastic,* July 1960

Thiotimoline and the Space Age, *Analog,* Oct 1960

Playboy and the Slime God, *Amazing,* March 1961

The Machine that Won the War, *F & SF*, Oct 1961

My Son, the Physicist[23], (short-short), *Scientific American*, Feb 1962

Starlight[23], (short-short), *Scientific American*, Oct 1962

Author! Author![14], (novelet), 1964

Eyes Do More than See, (short-short), *F & SF*, April 1965

The Man who Made the 21st Century, *Boys Life*, Oct 1965

The Key, (novelet), *F & SF*, Oct 1966

[1] *Appearing in all other versions as "Robbie"*
[2] *Included in "I, Robot"*
[3] *Included in "Rest of the Robots"*
[4] *Under the pseudonym "George E. Dale"*
[5] *A "Probability Zero" feature*
[6] *Included in "Foundation"*
[7] *Appearing in all other versions as "Escape!"*
[8] *Included in "Foundation and Empire"*
[9] *Included in "Second Foundation"*
[10] *In collaboration with Frederik Pohl*
[11] *Appearing an all other versions as "The Stars, Like Dust—"*
[12] *Included in "Earth is Room Enough"*
[13] *Included in "Martian Way and Other Stories"*
[14] *Appeared originally in an anthology*
[15] *Appeared originally in a newspaper*
[16] *A Boston University publication*
[17] *Included in "Nine Tomorrows"*
[18] *Appearing in all other versions as "Gimmicks Three"*
[19] *Appearing in all other versions as "Strikebreaker"*
[20] *Appearing in all other versions as "Spell my Name with an S"*
[21] *Appearing in all other versions as "The Ugly Little Boy"*
[22] *In collaboration with several s. f. authors*
[23] *Part of an advertisement*

SCIENCE ESSAYS BY ISAAC ASIMOV[1]

PART 1—BOOK COLLECTIONS

ONLY A TRILLION, Abelard-Schuman, 1957
FACT AND FANCY, Doubleday, 1962
VIEW FROM A HEIGHT, Doubleday, 1963
ADDING A DIMENSION, Doubleday, 1964
OF TIME AND SPACE AND OTHER THINGS, Doubleday, 1965
FROM EARTH TO HEAVEN, Doubleday, 1966

PART 2—MAGAZINE PIECES (OTHER THAN THE F & SF SERIES)

Hemoglobin and the Universe[2], *Astounding*, February 1955
The Sound of Panting[2], *Astounding*, June 1955
Victory on Paper[2], *Astounding*, September 1955
The Abnormality of Being Normal[2], *Astounding*, May 1956
Names! Names! Names!, *Astounding*, December 1956
Planets Have an Air About Them[2], *Astounding*, March 1957
The Unblind Workings of Chance[2], *Astounding*, April 1957
The Trapping of the Sun[2], *Astounding*, May 1957
The Sea Urchin and We[2], *Astounding*, July 1957
Axioms for Everybody, *S. F. Quarterly*, August 1957
The Unrare Earths, *Fantastic Universe*, September 1957
Overflowing the Periodic Table, *Astounding*, October 1957
The Clock Paradox, *S. F. Quarterly*, November 1957
I Feel it in My Bones *F & SF*, December 1957
The Whenabouts of Radioactivity, *Astounding*, December 1957
Fecundity Limited!, *Venture*, January 1958
The Atmosphere of the Moon, *Venture*, March 1958
The Littlest, *Original*, March 1958
The Big Bang, *Venture*, May 1958
Point of View, *Future*, June, 1958
The Clash of Cymbals, *Venture*, July 1958
Point of View: Mercury, *Future*, August 1958
Our Lonely Planet[3], *Astounding*, November 1958
Point of View: the Moon, *Future*, August 1959
The Unused Stars, *Amazing*, July 1959
The Unartificial Elements, *Astounding*, July 1959
Microdesign for Living, *Astounding*, March 1960
The March of the Phyla, *Astounding*, May 1960
Beyond the Phyla, *Astounding*, July 1960
The Matter of Space, *Analog*, September 1960

PART 3—THE F & SF SERIES

The Dust of Ages, (Astronomy), Nov 1958
Catching up with Newton[3], (Astronomy), Dec 1958
No More Ice Ages?[3], (Earth Science), Jan 1959
Love Those Zeroes, (Mathematics), Feb 1959
Nothing, (Astronomy), March 1959
Life's Bottleneck[3], (Chemistry), April 1959
Of Capture and Escape[3], (Astronomy), May 1959
Planet of the Double Sun[3], (Astronomy), June 1959
Battle of the Eggheads[3], (General), July 1959
The Ultimate Split of the Second[4], (Physics), Aug 1959

Varieties of the Infinite[5], (Mathematics), Sept 1959
The Height of Up[4], (Physics), Oct 1959
C for Celeritas[6], (Physics), Nov 1959
Thin Air[3], (Earth Science), Dec 1959
Those Crazy Ideas[3], (General), Jan 1960
The Sight of Home[3], (Astronomy), Feb 1960
The Flickering Yardstick[3], (Astronomy), March 1960
About Time, (Earth Science), April 1960
A Piece of Pi[5], (Mathematics), May 1960
The Bug-Eyed Vonster, (Physics), June 1960
Beyond Pluto[3], (Astronomy) July 1960
Catskills in the Sky[3], (Astronomy), Aug 1960
Tools of the Trade[5], (Mathematics), Sept 1960
Stepping Stones to the Stars[3], (Astronomy), Oct 1960
The Element of Perfection[4], (Chemistry), Nov 1960
Now Hear This[4], (Physics), Dec 1960
Here it Comes; There it Goes[3], (Astronomy), Jan 1961
Order! Order![4], (Physics), Feb 1961
The Imaginary That Isn't[5], (Mathematics), March 1961
My Built-in Doubter[3], (General), April 1961
Heaven on Earth[3], (Astronomy), May 1961
Four Steps to Salvation, (General), June 1961
Recipe for a Planet[4], (Chemistry), July 1961
The Evens Have It[4], (Physics), Aug 1961
Not as we Know It[4], (Chemistry), Sept 1961
That's About the Size of it[4], (Biology), Oct 1961
Dethronement, (General), Nov 1961
The Trojan Hearse[4], (Astronomy), Dec 1961
The Modern Demonology[4], (Physics), Jan 1962
Superficially Speaking[4], (Astronomy), Feb 1962
That's Life[4], (Biology), March 1962
The Weighting Game[4], (Chemistry), April 1962
By Jove[4], (Astronomy), May 1962
The Egg and Wee[4], (Biology), June 1962
Hot Stuff[4], (Astronomy), July 1962
The Light Fantastic[5], (Physics), Aug 1962
The Shape of Things[5], (Earth Science), Sept 1962
Slow Burn[5], (Chemistry), Oct 1962
Pre-Fixing it Up[5], (Mathematics), Nov 1962
One, Ten, Buckle My Shoe[5], (Mathematics), Dec 1962
He's Not My Type[5], (Biology), Jan 1963
The Lost Generation[5], (Biology), Feb 1963
You, Too, Can Speak Gaelic[5], (Chemistry), March 1963
The Rigid Vacuum[5], (Physics), April 1963
Just Mooning Around[6], (Astronomy), May 1963
The Light That Failed[5], (Physics), June 1963

The Isaac Winners[5], (General), July 1963
T-Formation[5], (Math), Aug 1963
Who's Out There?, (Astronomy), Sept 1963
Twinkle, Twinkle, Little Star[5] (Astronomy), Oct 1963
Welcome, Stranger[6], (Chemistry), Nov 1963
Rollcall[6], (Astronomy), Dec 1963
Round and Round and—[6], (Astronomy), Jan 1964
The Slowly Moving Finger[6], (Biology), Feb 1964
Forget It[6], (Math), March 1964
A Piece of the Action[6], (Physics), April 1964
Ghost Lines in the Sky[6], (Astronomy), May 1964
Heavenly Zoo[6], (Astronomy), June 1964
Nothing Counts[6], (Mathematics), July 1964
The Days of Our Years[6], (Earth Science), Aug 1964
The Haste-Makers[6], (Chemistry), Sept 1964
First and Rearmost[6], (Physics), Oct 1964
The Black of Night[6], (Astronomy), Nov 1964
A Galaxy at a Time[6], (Astronomy), Dec 1964
Begin at the Beginning[6], (Earth Science), Jan 1965
Harmony in Heaven[7], (Astronomy), Feb 1965
Oh, East is West and West is East[7], (Earth Science), March 1965
The Certainty of Uncertainty[7], (Physics), April 1965
To Tell a Chemist[7], (Chemistry), May 1965
Future? Tense![7], (General), June 65
Exclamation Point![7], (Mathematics), July 1965
Behind the Teacher's Back[7], (Physics), Aug 1965
Death in the Laboratory[7], (Chemistry), Sept 1965
The Land of Mu[7], (Physics), Oct 65
Squ-u-u-ush![7], (Astronomy), Nov 65
Water, Water, Everywhere—[7], (Earth Science), Dec 1965
The Proton-Reckoner[7], (Astronomy), Jan 1966
Up and Down the Earth[7], (Earth Science), Feb 1966
The Rocks of Damocles[7], (Astronomy), March 1966
The Nobelmen of Science[7], (General), April 1966
Time and Tide[7], (Astronomy), May 1966
The Isles of Earth, (Earth Science), June 1966
Balancing the Books, (Physics), July 1966
BB or Not BB, That Is the Question, (Astronomy), August 1966
I'm Looking Over A Four-Leaf Clover, (Astronomy), Sept 1966
Portrait of the Writer as A Boy, (General), Oct 1966

[1] *In science fiction magazines only*
[2] *Included in "Only a Trillion"*
[3] *Included in "Fact and Fancy"*
[4] *Included in "View from a Height"*
[5] *Included in "Adding a Dimension"*
[6] *Included in "Of Time and Space and Other Things"*
[7] *Included in "From Heaven to Earth"*

NON-FICTION BOOKS BY ISAAC ASIMOV

BIOCHEMISTRY AND HUMAN METABOLISM[1,2], (Biochemistry), Williams & Wilkins, 1952
THE CHEMICALS OF LIFE[3], (Biochemistry), Abelard-Schuman, 1954
RACES AND PEOPLE[3,4], (Anthropology), Abelard-Schuman, 1955
CHEMISTRY AND HUMAN HEALTH[5,6], (Chemistry), McGraw-Hill, 1956
INSIDE THE ATOM[3], (Physics), Abelard-Schuman, 1956
BUILDING BLOCKS OF THE UNIVERSE[3], (Chemistry), Abelard-Schuman, 1957
THE WORLD OF CARBON[3], (Chemistry), Abelard-Schuman, 1958
THE WORLD OF NITROGEN[3], (Chemistry), Abelard-Schuman, 1958
THE CLOCK WE LIVE ON[3], (Astronomy), Abelard-Schuman, 1959
WORDS OF SCIENCE[3], (General Science), Houghton-Mifflin, 1959
REALM OF NUMBER[3], (Mathematics), Houghton-Mifflin, 1959
THE LIVING RIVER[7], (Biology), Abelard-Schuman, 1960
THE KINGDOM OF THE SUN[3], (Astronomy), Abelard-Schuman, 1960
REALM OF MEASURE[3], (Mathematics), Houghton-Mifflin, 1960
BREAKTHROUGHS IN SCIENCE[3], (Science History), Houghton-Mifflin, 1960
SATELLITES IN OUTER SPACE[8], (Astronomy), Random House, 1960
THE WELLSPRINGS OF LIFE[7], (Biology), Abelard-Schuman, 1960
THE INTELLIGENT MAN'S GUIDE TO SCIENCE[7], (General Science), Basic Books, 1960
THE DOUBLE PLANET[3], (Astronomy), Abelard-Schuman, 1960
WORDS FROM THE MYTHS[3], (Mythology), Houghton-Mifflin, 1961
REALM OF ALGEBRA[3], (Mathematics), Houghton-Mifflin, 1961
LIFE AND ENERGY [7], (Chemistry), Doubleday, 1962
WORDS IN GENESIS[3], (Bible), Houghton-Mifflin, 1962
WORDS ON THE MAP[3], (Geography), Houghton-Mifflin, 1962
THE SEARCH FOR THE ELEMENTS[3], (Chemistry), Basic Books, 1962
WORDS FROM THE EXODUS[3], (Bible), Houghton-Mifflin, 1963
THE GENETIC CODE[7], (Biochemistry), Orion Press, 1963
THE HUMAN BODY[7], (Biology), Houghton-Mifflin, 1963
THE KITE THAT WON THE REVOLUTION[3], (Science History), Houghton-Mifflin, 1963
THE HUMAN BRAIN[7], (Biology), Houghton-Mifflin, 1964
A SHORT HISTORY OF BIOLOGY[7], (Science History), Doubleday, 1964
QUICK AND EASY MATH[3], (Mathematics), Houghton-Mifflin, 1964
PLANETS FOR MAN[7,9], (Astronomy), Random House, 1964
ASIMOV'S BIOGRAPHICAL ENCYCLOPEDIA OF SCIENCE AND TECHNOLOGY[7], (Science History), Doubleday, 1964
A SHORT HISTORY OF CHEMISTRY[7], (Science History), Doubleday, 1965
THE GREEKS, (History), Houghton-Mifflin, 1965

THE NEW INTELLIGENT MAN'S GUIDE TO SCIENCE[7], (General Science), Basic Books, 1965
AN EASY INTRODUCTION TO THE SLIDE RULE[7], (Mathematics), Houghton-Mifflin, 1965
THE ROMAN REPUBLIC[8], (History), Houghton-Mifflin, 1966
THE NEUTRINO[7], (Physics), Doubleday, 1966
ENVIRONMENTS OUT THERE[8], (Astronomy), Abelard-Schuman, 1966
UNDERSTANDING PHYSICS[7], (Physics), Walker & Co., 1966
GENETIC EFFECTS OF RADIATION[7, 10], (Physics), Atomic Energy Comm., 1966
THE NOBLE GASES[7], (Chemistry), Basic Books, 1966
THE UNIVERSE[7], (Astronomy), Walker and Co., 1966
THE MOON[8], (Astronomy), Follett, 1966

[1] *Intended for medical students*
[2] *In collaboration with B. S. Walker and W. C. Boyd*
[3] *Intended for teenagers*
[4] *In collaboration with W. C. Boyd*
[5] *Intended for student nurses*
[6] *In collaboration with B. S. Walker and M. K. Nicholas*
[7] *Intended for the general public*
[8] *Intended for grade school youngsters*
[9] *In collaboration with S. H. Dole*
[10] *In collaboration with T. Dobzhansky*

NOTE: This bibliography does not pretend to be complete. It does not include the shorter non-fiction pieces written for newspapers, reference works or for magazines other than science fiction. Nor does it make any attempt to indicate reprints, anthologizations, or foreign translations.—I. A.

BACK COPIES OF OTHER SPECIAL ISSUES

F&SF has published two other special issues similar to this month's Isaac Asimov issue. The September 1962 issue was devoted to Theodore Sturgeon and May 1963 to Ray Bradbury. Both issues have become collector's items, and the Sturgeon issue is now out of print. However, we do have a limited supply of the Ray Bradbury issue, which featured two original stories by Bradbury, a bibliography, a cover by Joe Mugniani, and a profile by William F. Nolan. Copies of the Ray Bradbury issue are available for $1.00 each from: Mercury Press, 347 East 53 Street, New York, N. Y. 10022.

During the eight years in which this column has appeared, the editors of F&SF have given Dr. Asimov a completely free hand in both subject and treatment, operating under the sound notion that Dr. Asimov is the possessor of an uncommon wealth of information and ideas and, more important, the ability to communicate both successfully. For this special issue, we did press Isaac Asimov to write about himself and his writing; and he has happily obliged, with the same warmth and vigor which distinguish his science articles.

PORTRAIT OF THE WRITER AS A BOY

by Isaac Asimov

I'M NOT AT THE BEATLE LEVEL AS far as getting fan-mail is concerned, but I do get some, and almost all of it is very gratifying, I'm glad to say.

Some items, however, plunge me into frustration, for while I am anxious to accommodate those who take the trouble to write me, such accommodation is sometimes impossible. There is the case of the youngster, for instance, who writes that he is engaged in a science project on the Solar system, so would I please send him a copy of everything I have ever written on the Solar system plus any other material I might have.

Invariably, this letter concludes with a hasty P.S., "Please answer at once as the project must be completed by the 15th." Just as invariably, I receive the letter (forwarded by way of a publisher) on the 16th. It's a slow week in the school term when several letters like that don't arrive.

My frustration grows worse when accommodation is not actually impossible, but merely demands more of my industry than I am willing to give. For instance, there seems to be an increasing number of teen-agers

who, for their term-papers in English Literature, are choosing to write critical reviews of the writings of your humble servant. (Well, of *me,* for those of you who don't recognize me by that description.)

That's fine, and delightful for the ego, but what do I do when I am instantly bombarded by dozens of questions like: What got you interested in writing? What writers most influence you? What are your favorite stories? What do you consider the importance of science-fiction to society?

I have to write each eager young scholar that I cannot answer such letters in proper detail because if I did there would be no time left to do any other writing and future eager young scholars would suffer a dearth of new material to work with.

It has occurred to me, however, that in view of the nature of this present issue of F & SF, I might well devote my column now to the answering of a few of these questions. Of course, it pains my modest and self-effacing nature to talk about myself, but I think I can manage it for one issue.

1. *What got you started writing, Dr. Asimov?*

The answer to that, I'm afraid, must be lost in the dim mists of antiquity. At least as far back as I remember, I was telling myself stories.

I can pinpoint quite accurately, however, the moment at which I first began to think of myself as a "writer." It came about in the fall of 1931, when I was 11 and beginning the ninth grade.

At the time I was an avid science fiction reader as a result of events I will describe later. I was also earnest in my devotion to the series-books (see Avram Davidson's excellent article on this subject in the first issue of *P.S.*).

There was one serious catch to the devoteeship, unfortunately; it lacked much of an object. The public library didn't have copies of "The Rover Boys," "Tom Swift," "The Darewell Chums," "Poppy Ott" and the others. I lacked money to purchase any. My friends had few copies they were willing to lend me, particularly since if my father found them in my possession, he would confiscate them. (My father had high standards of literature.) Consequently, only two or three such books ever passed under my avid eyes and I read them and re-read them (in secret) with dogged persistence.

And then, one golden day, it occurred to me that I could repair the dreadful lack of reading matter, by writing my own books. I was always constructing stories, so why not bend that construction into a specific imitation of a series book, and place it down on paper?

A nickel copybook (that is what they cost those days) I could afford: a pen I had—and what more did I need? Only time. So that evening I sat in the corner of the kitchen and began a tale which I entitled "The Greenville Chums in College."

I wrote a chapter and a half in that first flush of ardor. The setting was a small-town college, and I leave it to you to estimate how much knowledge an eleven-year-old product of the Brooklyn slums could have of either small towns or colleges, but no one had yet told me that I should write only of that which I knew. (For that matter, I never did succeed in learning that elementary rule of writer's conduct, so that eventually I wrote long novels dealing with the far reaches of the Galaxy, even though I have no direct experience with those regions either.)

With the chapter and a half done, I felt in a curiously exalted state. I found myself caught in my first attack of that serious disease I call Writers' Folly—the most severe symptom of which is an irrepressible desire to tell someone all about the great novel you're writing.

I buttonholed the first ninth-grade friend I met the next day during the lunch period. "Listen to a story I'm writing," I said.

"What?" he said, turning to me, lack-luster.

"Listen," I said urgently, and began to tell him the story in the very self-same glorious words I had been putting to paper, for these, naturally, had burned themselves indelibly upon my ringing brain. Slowly, his expression gained interest as I spoke, reaching a pitch of almost painful concentration by the time I came to where I had suspended operations and had to stop.

He said, "What comes next?"

"I don't know yet," I said.

He gripped my arm hard. "I get the book first after you're finished reading it, okay? Don't lend it to anyone else!"

"Okay," I said, confused, and wandered off, with tumultuous passions surging through my bosom. He had clearly not heard me say this was a book I was *writing*. He thought I was reading an already written book; a professionally-written book; and he found it so exciting he wanted to borrow it.

At that very moment, I realized that I was a *writer*. I had, after all, interested a potential reader and I recognized the need for no other qualification. I never doubted my own position as a writer in the years since and when I finally abandoned "The Greenville Chums" after eight chapters or so, it was only to begin something else.

The next important step in the progression came in 1934 when I was completing my junior year in high-school. My father, observing my scrib-

blings, and having a European respect for "learning" and for even the suspicion of literary talent, decided that I needed a typewriter. The only trouble was that in those days a typewriter fell into the same class with mink coats and yachts; we couldn't afford one.

How long my father scrounged about, and how many leads he followed down, I don't know, but he eventually came upon an ancient upright Underwood No. 5 that worked perfectly and that cost ten dollars.

That wasn't all he did for me, either. He went a giant step farther by insisting on the proper use of the machine. He came upon me a few days later, operating the typewriter. Having gazed at me with paternal fondness for a moment, he happened to note that I was hunting down letter after letter and then striking the necessary keys with one stiff forefinger.

He said, "I see people doing the typewriter with all the fingers like a piano."

I said, "I don't know how to do that, Pa."

So he put his hand on the typewriter and said, "All right, then find out how. I catch you once more doing with one finger—I take away the typewriter."

Since I had learned, a long time before, that my father's unreasonableness was exceeded only by his stubbornness, I didn't attempt to argue. I found a young lady who knew how to type and got her to tell me which finger went with which key. Then, since I typed several hours each day, I soon got the hang of it. My typing became first legible and then speedy. Eventually, I could crank a hand-typewriter at 70 words a minute and now that I have an electric typewriter I recently timed byself at 90 words a minute.

I never forgot the lesson, either. My son, having inherited the gene for typing, has, from early childhood, been interested in my machine. Naturally, he wasn't allowed to touch it, but when he was twelve I gave him one for himself and, trying to imitate my father's lofty Talmudic tone (I lack the natural dignity of a European patriarch), told him I would take it away if he hunted-and-pecked and I showed him where to put his fingers. Now he can type, too.

2. *Yes, yes, Dr. Asimov, but what got you started writing SCIENCE FICTION?*

Ah, yes. My father owned a candy store in my youthful days and to that candy store was attached a newsstand and a magazine rack. The magazine rack was filled with the most delectable fiction you could possibly imagine: "The Shadow," "Doc Savage," "Detective Stories," "Ar-

gosy"—Even today, the thought of it all makes me faint with desire.

Yet all of it, from beginning to end, was forbidden by parental ukase. "Thou shalt not read of the fruit of the rack," came the thunder from above and at the age of six I was given a library card and told to make free, instead, of the learned books on the library shelves.

Well, the library was better than nothing, and I worked my way through it with my eye-glasses glinting feverishly. And yet—my eye-glasses also bent with unflagging yearning toward the magazine-rack.

Came the day in 1929 when a copy of *Science Wonder Stories* appeared on the rack and attracted my attention. I sneaked a copy down when my father was taking his afternoon nap (my kindly mother was always much more permissive) and looked inside. Spaceships, monsters, ray-guns—WOW! I put it back and waited for my father to return.

He did. I pointed to the magazine and said, "Pappa, would it be all right to read a magazine about science?"

My father stared at it doubtfully. His English was not yet strong, but the cover showed a futuristic airplane that looked very edifying and there was no denying that the word "science" was clearly inscribed on the cover. He said. "All right."

And that is how I became a science fiction reader.

Naturally, as the years passed, and I grew more and more enthusiastic about science fiction, I felt the increasing urge to turn my writing activities to the more imaginative branches of fiction.

After I got my typewriter, and writing began to be less of a purely mechanical problem, I decided to tackle a particularly ambitious project and took to composing an involved fantasy. To save paper, I remember, I wrote single space, both sides, no margins and, according to my estimate, I wrote 60,000 words before fagging out.

The fantasy (title forgotten) involved the chaotic battling of a group of seven men against the awful powers of darkness. I followed them through their separations and reunions and sustained them against the hosts of goblins, magicians and supernatural forces that opposed them.

I thought little of that early effort until last year when I came across Tolkien's "Lord of the Rings" trilogy and finally read it. I realized, to my chagrin, that thirty years ago I had been attempting to forestall Tolkien. Oh, well—

By 1936, I was entering my sophomore year in college and I felt I had gained sufficient depth in science to tackle straight science-fiction. Consequently, I began an interminable novel, whose title and plot escape me now. It, too, went on for many thousands of words.

It was not until 1937, six years after I had become a writer, that I had

a perfectly blinding inspiration. Why novels? Why, for goodness' sake, interminable novels that I inevitably outgrew and abandoned? Why not short stories that I could finish before I tired? What a tribute to my well-known brilliance that this occurred to me after only six years.

No sooner thought than done. In May 1937, I sat down to begin the first short story I ever wrote. It was a science fiction short and was entitled "Cosmic Corkscrew." The thesis was that time was shaped like a helix and that, under certain conditions, it was possible to cut across the coils of the helix. Each coil advanced time about a century, so that one could travel a century into the future, or two centuries, or three, but never, say, 125 years or 263 years into the future or past. I had, in effect, quantized time-travel. (I've never, to this day, seen this notion used anywhere else.)

The actual plot dealt with a man who travelled a hundred years into the future and found the Earth deserted of all animal life, but showing every trace of recent occupation in peace and security. There was no hint of any reason or explanation for the catastrophe and there was no way he could slide back in time just a few days to find out what had happened.

About the only other thing I can remember about the story is that I casually mentioned the Verrazano Bridge between Brooklyn and Staten Island only I didn't call it that. I called it the Roosevelt Bridge. Well, you can't be perfect.

I worked away on that story for over a year even though it was only 9,000 years long.

3. *I understand, Dr. Asimov, but how did you first come to PUBLISH a science fiction story?*

Oh!

Well, in writing "Cosmic Corkscrew" I had some dim notion of submitting it for publication. The trouble was, though, that I didn't know how that was done and I lacked the intelligence to ask anyone. So my interest in the story flagged a bit and I think that, but for a purely fortuitous circumstance, it might never have been submitted, or even finished, and that my professional writing career, if it came at all, would have been much delayed.

In those days, you see, I was such an avid science fiction reader that my entire life revolved about the instants of arrival of the various magazines, particularly *Astounding*. Since my father still had a newsstand and magazine-rack, I knew the exact day and hour when the magazines might be expected and those days were marked in purple and gold for

me. *Astounding,* for instance, arrived on the third Wednesday of each month.

(In fact, until very recently, I still owned the copy of the complete works of Shakespeare that I had used in my 1937 Shakespeare course; a copy that had a row of mysterious numbers marked down the end-paper. Those numbers weren't really mysterious. Each period of that class, while the professor spoke reverently of Shakespeare, I computed the number of hours that must elapse before the arrival of the next science fiction magazine and wrote that number down.)

Then came April 1938 and I waited for the May issue of *Astounding* with an almost maniacal frenzy. A new sequel by Jack Williamson ("The Legion of Time") was to begin and I was an ardent Jack Williamson fan.

Came April 20, and I rushed home on wings. "Where's *Astounding,* Pa?" I asked.

"It didn't come," said my father, too busy with his chores to grasp the magnitude of the blow he had levelled at the very core of my being.

I was stunned. It was Wednesday. The third Wednesday.

"I'll be back," I said hastily, and set off. I knew every newsstand within a mile of our own (they were competitors!) and there wasn't one I missed. I came back hours later, with a drawn, wild countenance that greatly alarmed my mother (who is four-feet-ten, was already prematurely gray even then, and who has always had enough alarm-potential to fill someone with three times her cubic volume).

Astounding was nowhere to be had!

The next day, no *Astounding;* nor the next. I went through my school work with dull detachment; I performed my share of the labor in the store with an aching heart, for always I had to stare at that mocking wall of magazines, minus *Astounding.*

I had only one hope. Some jerk at Street and Smith had miscounted Wednesdays! Surely that was it! Surely *Astounding* would come out on April 27, the fourth Wednesday.

It didn't!

I had to face the ultimate. I had enough experience at the magazine-rack to know that magazines sometimes ceased publication. If that had happened to *Astounding,* my own life was over. I would have to join the Foreign Legion to forget.—But first I had to know for sure.

Desperation nerved me to wild expedients. I looked up Street and Smith in the phone book and taking a nickel from the cash register, I called them up. "Where is the May *Astounding?*" I asked, faintly.

The young lady at the other end informed me with carefree idiocy

that publication date had been changed from third Wednesday to fourth Friday and the magazine would be out on April 29.—And so it was.

To this day, I cannot condone the criminal indifference of the higher echelons at Street and Smith. How dared they make such a change in publication date without informing the readers? Vile executives! Heaven knows how many youngsters died during that unexpected nine-day drought.

That incident affected my writing career in two ways. In the first place, the period during which I feared that *Astounding* had died scarred me permanently. It was from then on that I grew aware of mortality. I realized that I must not delay finishing my short story; I was not immortal. So I got to work and finished.

Secondly, I had *called* Street and Smith. The organization actually existed—not in some strange Galaxy but a mere half-hour by subway from my home. At that organization were real people, ordinary human beings, who *talked* to me. Why not simply go there then (the offices were at 79 Seventh Avenue in those days) and hand in my story?

In June 1938 I did just that. I walked up to the reception desk and in choked tones managed to whisper a request to see Mr. John W. Campbell, Jr. (the new editor of *Astounding*) in order that I might deliver a manuscript.

The receptionist called Mr. Campbell and I closed my eyes and waited for the decapitating blow to fall. Instead she said, briskly, "Mr. Campbell will see you!"

I was directed through huge rooms filled with bales of paper and piles of magazines (including the next [! ! ! !] issue of *Astounding*). I shall carry the odor of the place with me all my life. Even today, the smell of old pulp magazines will make me an 18-year-old again.

John Campbell spoke to me for an hour, put me at ease, acted delighted at my having submitted a story. John is still editor of *Astounding* (under its new name of *Analog*) and I have seen John many times since then. Naturally, he treated me with every consideration in later years when he was anxious to have stories from me; but he treated me with *just as much consideration* when I was a frightened 18-year-old whom he had never heard of.

If you expect the story to end with an account of how John accepted the very first story I submitted to him and that I was instantly recognized as a science-fiction great, forget it. That may have happened to A. E. van Vogt and to Robert A. Heinlein, but not to me. John read the story that evening and mailed it back the next day with a two page letter, pinpointing my errors and containing much gentle encouragement.

It is impossible to describe the encouragement of a rejection like that. After that I wrote science fiction stories at the rate of one or more a month and brought each one in to John Campbell. Each time I came, I was invited in; each time there was a long friendly talk; each time he rejected the story with a helpful letter; each time I was all the more encouraged.

As a writer, I owe John Campbell everything; and I know for a fact that I am not the only science fiction writer who does.

Each story that John returned went next to the two other science fiction magazines that then existed: *Amazing Stories* and *Thrilling Wonder Stories.* The rejections piled up and in the space of four months, I had piled up half a dozen.

It didn't faze me, for in addition to John Campbell's goodness to me, my father committed an act of faith that in turn committed me irrevocably to pushing forward.

The rejections bothered my father not at all. He prized my ambition and drive and his values were untarnished by consideration of either fame or financial success. That I *try* was all he required of me.

My learned stories, he felt, were deserving of more than an old relic of an Underwood upright. Somehow, therefore, he managed to raise $65 with which to buy me a *brand-new* Smith-Corona portable; a typewriter I still own to this day.

With that gleaming portable lying before me, it would have taken a much more unfilial person than myself to avoid making the resolution to earn back that money for my father if it took me ten years.

It didn't take ten years after the purchase, thank goodness. It took more like ten weeks.

In October 1938, there came an envelope from *Amazing Stories* and in it was a check for $64. It was my very first professional earning and it paid off the typewriter.

The envelope also contained a very kind letter from Ray Palmer, then editor of *Amazing,* telling me how much he liked my story. I was in no position to frame the check, so I framed the letter of acceptance.

The story I sold was "Marooned Off Vesta." It was the third short story I had written and, I might add, I had written it on my old relic.* It was published in the March 1939 issue of *Amazing* which reached the stands in January, just a couple of weeks after my nineteenth birthday. With that, I became a published writer.

Meanwhile, I kept up the monthly bombardment of John Campbell

* *In 1939 I sold the second short story I had ever written—"The Callistan Menace" —but I never sold the first story.*

and finally my ninth story ("Trends") was accepted by him. It appeared in the July 1939 issue of *Astounding Science Fiction*, the same issue which contained A. E. van Vogt's first story, "Black Destroyer" and the issue before the one which contained Robert A. Heinlein's first story "Life-Line."

4. *And whatever happened to the stories you wrote before you were published?*

Gone, gone, all gone!

In fact, in my life, I have written six short stories, I think, that were never published—all of them between 1938 and 1940. Not one of them remains. I don't know where they went; in the viscissitudes of life they vanished.

I don't particularly regret these six stories. They were not too different in style from those earliest stories of mine that *were* published.

However, those interminable novels I wrote in the early 1930's—those I do miss.

In particular I would give a large sum to have that nickel copybook again; the one in which I wrote the eight chapters of "The Greenville Chums in College."

I love being a writer; I always have loved being a writer; and I would very greatly value the story that made me realize I was a writer.

But alas, longing will not bring back that which is gone!

THE PRIME OF LIFE

It was, in truth, an eager youth
Who halted me one day.
He gazed in bliss at me, and this
Is what he had to say:

"Why, stars above, it's Asimov,
A blessing on your head!
For many a year, I lived in fear
That you were long since dead.

Or if alive, one-fifty-five
Cold years had passed you by,
And left you weak, with poor physique,
Thin hair and rheumy eye.

For sure enough, I've read your stuff
Since I was but a lad
And couldn't spell or hardly tell
The good yarns from the bad.

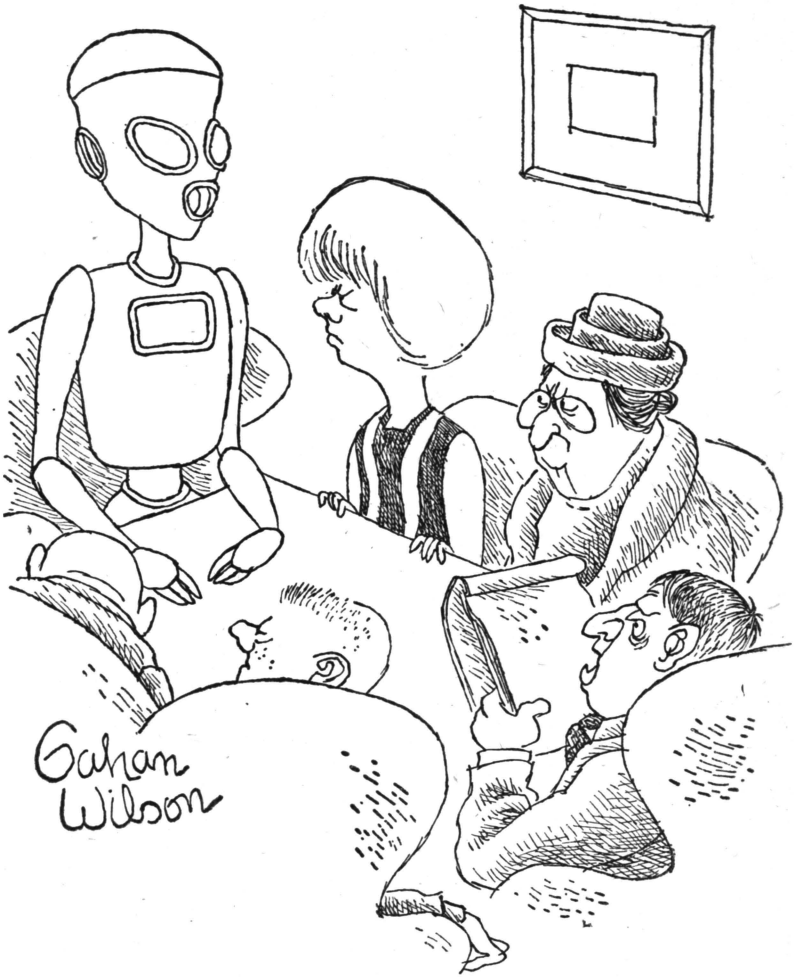
My father, too, was reading you
Before he met my Ma,
For you he yearned, once he had learned
About you from his Pa.

Since time began, you wondrous man,
My ancestors did love
That s.f. dean and writing machine
The aged Asimov."

I'd had my fill. I said, "Be still!
I've kept my old-time spark.
My step is light, my eye is bright,
My hair is thick and dark."

His smile, in brief, spelled disbelief,
So this is what I did;
I scowled, you know, and with one blow,
I killed that rotten kid.

—Isaac Asimov



"I must confess that the terms of Dr. Asimov's will are unique in my experience."

In which the versatile Arthur Porges reinforces our belief that there is no fiction more gripping than a skillfully handled, unpretentious story of horror.

THE MIRROR

by Arthur Porges

"A MAGNIFICENT OLD HOUSE," the agent said expansively. "Just the thing for a large family—with taste. Not one of these ticky-tacky modern cracker boxes with no room to breathe."

In his heart, Mr. Avery agreed completely, but knew he mustn't let his feelings show. Not if a bargain was to be made. So he tried to look shrewd and tightfisted, much as a dormouse might counterfeit ferocity. His was not a poker face; it registered emotions quite similar to those that once flickered in contrasty muggings across the silent screen. He yearned for the huge house, all gingerbread, with its cornices, attics, and above all, the thirty-by-forty foot living room that boasted a seventeen-foot ceiling and a fireplace big enough for half a redwood tree. And there were ten acres of brushy land, offering wonderful privacy. What a spot for the kids! With five of them, all active, outgoing, creative, and impulsive—just like Dad—finding a suitable house was no simple matter. Yes, this one, almost hidden by towering, leafy oaks was a prize—a lucky stroke.

"It's not bad," he said cautiously, quite unaware that his soft, brown eyes shone like beacons. "But, after all, Mr. Doss, the place has been shut up for over thirty years, and what with the stories, that would scare most customers off. Everybody isn't as free from superstition as I am, you know."

"Nothing to all the talk," the agent assured him. "The owner just didn't care to rent or sell. He inherited the property at a fairly early age, but never lived there—

probably because it was too big for one person alone. That's reasonable enough. One man in a thirty-room house! Of course," he added quickly, seeing that a question was trembling on Avery's lips, "it needs some work, but that's why the ad called it a 'fixer-upper.' A handy man will get a real bargain, whereas if we had to call in regular contractors . . ."

Mr. Avery was not merely a dedicated do-it-yourselfer, he was a remarkably good one, having a knack for cabinet work, masonry, electrical outlets, and even plumbing. He looked forward with pleasant anticipation to the job of renovating the house. The family could stay in the old one, several hundred miles away, while he toiled in peace, making the nest ready for them. There was no need to consult Lottie; she knew his taste was impeccable and that he definitely headed the family. Mr. Avery, in fact, often thought of himself as a modern paterfamilias in the Victorian tradition, and imposed the image rather successfully on his brood.

He and the agent soon agreed on terms, with Doss giving a little, very graciously, and Avery yielding much more than necessary, but feeling no pain, so skilfully was he manipulated.

There followed a period of intense and enjoyable activity on his part, as he began to put the old house in order. There were rotten boards and panels to be replaced; stairs that quivered at even a light tread; wallpaper to be hung; gallons of paint needed inside and out; and furniture, including suitable antiques, to be bought.

Finally there was the interesting puzzle of the mirror.

This enormous installation was let into the wall above the fireplace, also a giant, intricately carved and decorated. For some reason, the glass had been covered with many brush strokes of heavy, black enamel. After thirty years of drying, the stuff refused to soften even under the most potent chemicals, and Avery was reduced to a kind of slow, tiresome scraping and chipping that made his wrists ache.

He mentioned the mirror to the only man in town who remembered anything about the house, but learned little that was new. Instead the fellow rehashed the story of the murders.

"Nasty business," the old man said, delighted, obviously, to have a fresh victim. "Colton had a big family—eight kids—but one was out that night. Anyhow, Colton went nuts and killed all of 'em, and then jumped out an upper window to the flagstones, and he died, too. Son that was out—he come home found them all dead—ones inside all chopped or torn to bits, they say. So horrible the coroner never did talk about it in court. Boy sealed up the house

right after. Don't think it was his idea—just a kid. Old Wright, the coroner, he musta told him to. All pretty mysterious. Some think Colton didn't do it—that house is haunted." He spat. "Me, I wouldn't live there for a million."

"Did the coroner have the mirror painted over, too?"

"Dunno about that. Didn't know 'twas done. Painted over, y' say? Now I did hear once that some of the kids claimed they saw things in it."

"I've got it pretty well cleaned," Avery said dryly. "And it's just a mirror. In fact, my family will love it. I've always wanted one that big over the fireplace. Might even make up some good stories about it." He winked. "Stolen, basically, from Lewis Carroll." The old man looked at him blankly, and Avery coughed. Maybe the guy would recognize a name like *Herzog* or *The Spy Who Came in From the Cold,* but he wouldn't bet on that, either. Probably the sports page was his limit . . .

As Avery expected, his family was enthusiastic about the house. Even children brought up to be more worldly and cynical would have enjoyed exploring such a pile, with its many fascinating nooks, storerooms, attics, cupboards, and crawl-spaces. Since they ranged in age from five to thirteen, the Avery kids were fully able to make the most of the place. They walked, ran, jumped, and climbed until they knew every inch of the house.

There was only one disappointment: the mirror was still a mess. The lowest layers of paint were particularly resistant; they seemed to have been brushed on to form a grating, with regular horizontal and vertical strokes. In time, of course, Avery would get the glass clear, but for the present, there were more urgent matters requiring his attention. The well, in particular, was acting up in spite of the new electric pump Avery installed; perhaps the casing had a leak. And water was certainly more important than the mirror.

But the time did come, finally, when he could give the glass his full attention, and by using a heavier blade plus a steaming device, Avery removed the last of the black enamel.

Although the mirror was obviously quite old, it gave a clear, undistorted reflection. With his family grouped around a blazing fire, Avery talked, with verve and imagination, about the looking-glass world to be seen—in part—over the mantel. To one side was an archway identical to their own, but they could see only part way into its shadowy depths.

Mr. Avery's fancies, which owed so much to Carroll, found an intent audience; even his wife listened. The oldest boy, Larry, more science-minded at thirteen, showed less interest until his fa-

ther, with shrewd premeditation, raised the question: why are left and right interchanged, but not up and down? That puzzle kept Larry occupied for the rest of the tale.

Janie, who was eight, had a complaint.

"The looking-glass room is just like ours," she pouted.

"Not really," her father said. "See the picture on the wall? In our room, the man's on the left; in there, he's on the right. Besides," he added quickly, aware that the distinction didn't impress her markedly—how could it at her age?—"we don't know what's in the rest of the house, through the archway and in all the other rooms. They may be altogether different. And the ones who live there stay out of this room which we can see." He was too perceptive and intelligent to invent any unpleasant tenants; the worst was a fat, elfish creature named Gnolfo, who robbed the refrigerator in the kitchen and could never be seen from this location. Once during the story Avery pretended to glimpse Gnolfo peering through the arch, and Bill verified it, adding rather uneasily, that the elf was small and hairy—but Bill was only five and not held to be a competent witness by his siblings . . .

It was a charming tableau for a paterfamilias: the five children, all look-alikes in their dark hair and big, brown eyes, but with different temperaments. Janie and Marcia were impish and apt to be challenging, while the three boys were more physical, taking Avery's logic as dependable even when the girls intuitively doubted. And Lottie—she belonged in the picture, too, he felt. Almost a Victorian wife: meek, biddable, sweet, and yet no lightweight mentally. She knew many classics, and played the piano like a concert artist. If only she didn't like Poulenc and some even more wild moderns so much—that didn't fit—yes, he was a lucky fellow to have such a family. Father had been so taken with his first three grandchildren that he'd put a nice sum of money in trust, and now Avery didn't need to do much work as a lawyer—lend the old family name to Winslow, Talcott, and Avery and show up at the office a few hours each week.

"Where does Gnolfo stay?" Brian demanded, standing close to the mirror. He was ten, and mature enough to act as babysitter for his juniors, a job usually ducked by Larry as unworthy of a thirteen-year-old. Both boys were strong and vigorous, and Larry owned a .22, which he could shoot with considerable skill. Any prowler who came looking for trouble while the parents were away might be in for a shock, Avery thought, looking approvingly at Brian's sturdy body and resolute, if rather bovine, eyes.

"Upstairs," he told his son. "Not

that it's laid out just like ours; I rather think it isn't. But then, we'll never know, will we?"

"Maybe we could get through some time," Janie suggested half-heartedly. She wasn't at all sure, at eight, that the mirror had another side facing a different world. Yet older people knew so many things kids hadn't learned yet, how *could* one be sure Daddy was making it up?

"It's possible—some day," Mr. Avery agreed, smiling. "Alice did, and she was a real girl—Alice Liddell." And when Larry, expecting this once to catch his father out, scoffed, he was shown, much to his annoyance, the facts in the encyclopedia. The squelch did wonders for Avery's status; the younger children would now just as soon doubt the next day's sunrise.

"The story will be continued tomorrow," Mr. Avery said at nine-thirty. "Now it's bedtime, except for Larry; he gets his extra half-hour."

"Not tomorrow, dear," Lottie reminded him. "We're going to the Randalls', remember?"

"I forgot, confound it," he said, irritated. He enjoyed his role at the fireside, monarch of all he surveyed. The one alotted him in other homes was considerably less exalted, thanks to his dormouse appearance and total lack of interest in modern matters. Then he said crisply: "Larry will be in charge, and all of you must stay in the house; I don't want anybody outside when there are no neighbors handy like in our old place. Anyhow, we'll be back by midnight. See that they're in bed at the usual time, son. And be there yourself before eleven."

Neither he nor his wife had any misgivings when they left the following evening. Although the house was isolated to a degree, the heavy doors locked, as did the windows. Larry was a manly fellow, and the .22 could be taken from the closet without his father's permission in an emergency.

After dinner, previously prepared by their mother, the children gathered in the living room, where a nice fire burned. If they felt reluctant to run about the upper floors while alone, it was perfectly natural. By day the children tended to split up into groups, pairs or even individuals, according to mood or type of play, but at night even a courageous thirteen-year-old had no pressing business in the dark attics above . . .

"Tell us about the looking-glass rooms," Bill lisped. "And the fat little boy with the funny name."

Larry felt flattered; it was seldom they treated him so like a second father. But he doubted his capacity as a bard.

"Well," he said uneasily, "there's not much to tell. It's a whole big house just like ours—"

"Daddy said it isn't," Janie interrupted.

"I mean it has other rooms, some on the same floor and some upstairs. But Gnolfo, he likes the kitchen, where the food is." He did his best from then on, but knew his audience was restive. He had almost lost them completely; only Bill watched the glass, when suddenly the child gave a squeak of dismay.

"I saw something!" Bill cried. "It was in the arch there."

"Don't be silly," Larry said. "If it was there, it would be in our arch here, too."

"Why?" Marcia demanded. "Who said so? That's a different room, actually; Daddy said so."

"I saw it," Bill said, his chubby face pale and strained. "I don't like that—that Nolfy. He's hairy and funny and jumps around . . ."

"Where did he go?" Brian asked.

"He came right into the looking-glass room, and over to the fireplace—*his* ol' fireplace, where you can't see it."

"Great!" Larry said in a sardonic voice. "You're the clever one." He grinned at the others. "Billy knows we can't prove Gnolfo's not behind the mantel—that's part of the looking-glass room we can't see." Then his face went blank with thought. "Wait a minute. If we had another mirror, and moved it back from the fireplace a few feet, and then looked in the big mirror—sure, then we'd see their fire. And that's one even Dad didn't think of!" he added proudly.

"Mom's got a pretty big mirror on her dresser," Brian said. "You and me could carry it down here easy, I bet."

"That's right," Larry said. "And that's just what we'll do. You kids wait here, and in a minute you'll see all the rest of the looking-glass room. We'll have some fun with Dad tomorrow, too."

He and Brian raced up the stairs, too excited to have any fear of the dark landing, and soon returned carrying the dresser mirror, lifted from its gimbals by four strong, eager hands.

They maneuvered it to the cen-

ter of the room, while the other children darted in and out to keep tabs on the reflection. Finally Larry found a spot where, on peering into the bigger one, they could see in the smaller one's reflection, the fireplace of the looking-glass room.

Marcia saw it first, and whimpered; Bill began to scream; and Larry just froze, his eyes pits of horror.

The thing crouching there may have felt the children's collective gaze, for it rose to its full height of some three feet to glare at them. It had teeth and talons and great blank eyes, pitiless as the sun; dark, matted hair covered its body, which rippled continually with a terrible vitality like that of a centipede. Then it was on the mantel, first on the looking-glass side, and almost immediately on theirs . . .

When the Averys came into the house at eleven-forty and saw the living room, Lottie began to scream—shrill, toneless, repetitive notes that sounded like mechanical whistles. She kept them up for hours, even under heavy doses of morphine, and was silent only in death, two days later.

Mr. Avery looked at the remains of his children, and knew that all but one were dead. Janie's eyes showed that she was still alive, but it also held a wordless plea, as if she understood what was best; and her father, without knowing why, did what had to be done, giving the child release. Only then did he begin to whimper in a high, quavering voice nothing like his normal rich baritone. Later, he was indicted for murder, but a vegetable cares little about such things. . . .

Vic Chapman's biographical sketch informs us that he was born in Canton, Ohio on the day that World War I ended. A foundling of unknown parentage, he was raised in Canton by foster parents, married at 21, and served with the U. S. Marine Corps in World War II (as a radar technician on Okinawa). Employed as a chemist, Chapman describes himself as "a moonlighter at heart" (has operated a print shop, photographic studio and is a professional artist of some local reknown). This is his first story for us—about Dr. Gilmore Mason and his fateful experiments with two beautiful women—a compelling tale with a logically shocking ending.

COME BACK ELENA

by Vic Chapman

APPARENTLY, IT ALL STARTED during the week of the Feast of the Seven Angels, although the plan must have been in Gil's mind for a long time. He had closed the Research Center up here on Mt. Gilmore, and everyone else had gone down into Mason City to spend the Sacred Seven Days in worship —or in drunken orgies, according to the dictates of their individual consciences.

I had just flown to Novosibirsk to confer with Dr. Matrilovski and had ended by staying there for six weeks, working with him in an all-out attempt to crack the "Schoenhauer Paradox." The day after we succeeded in solving this complex hormonal problem, I started for home.

Only now, two months later, have I begun to gather together the documents pertaining to the weird sequence of events that commenced during my absence. I have extracted a number of letters from the files here at the Center and copied pertinent passages from Gil's Journal. Together with my own ob-

servations, they cover the important facts.

My younger brother, Bryant, will be home in a few days, and he will have to know everything that happened. Gil, ten years my senior, was born fifteen years before Bryant, and since the death of our father twenty years ago, Gil has headed the family and has been beloved brother, father and teacher to both Bryant and me.

When the 4th Biological Expedition to Venus returns to Earth next week, Bryant's tour of duty will be over, and he will, I hope, return to take his place at Mason Research Laboratories, the nerve center of our family business. It behooves me to have the documentation in good order so that he can be brought quickly up to date after his months of extraterrestrial isolation.

Even though I will be at FENAPLEX (Federated Nation Planetary Exploration Service) Headquarters when Bryant returns, I have written him an extensive letter to accompany the file of documents and quote from it here:

Mason Research Center
Gilmore Mountain
September 12, 2051

Dear Bryant,

By the time you read this, we will have had some conversation, and you will know something of the strange episode here on the mountain. In the attached file are a number of papers which you will want to study privately and at some length. This letter fills gaps not covered by those papers and includes my personal comments.

For a quiet scientist who had chosen to live apart from the personal entanglements so frequent in the lives of most men, Gil seems to have conceived a strange and exotic plan during recent years—a plan he discussed with no one. Knowing Gil as we did, the whole episode is so fantastically unlike him that you will scarcely believe it possible, but the accompanying material—some of it from his own Journal—bears it out beyond argument.

You will want, now, to go deeply into this business between Gil and Libbi Henraye and Saul Edwards, Elena's father. I'm almost certain that you have never met Libbi. I don't think you ever saw her either, and now that she has left, it isn't likely that you ever will.

She is an extraordinarily beautiful woman, as was Elena. She looks much as Elena looked ten years ago—in fact, that was one of Gil's reasons for choosing her. She is tall and slender with that same incredible grace—all steel springs and molded velvet. Combine that with Elena's fairness and personal vitality, and you get the picture.

I saw her once—that is, before she came here—in a performance

of Litvov Chevterov's "cubed cycle" operas. She was lead coloratura for the series and a great voice. She was, and is, a magnificent woman.

Apparently, Gil had known her slightly for some time, and the first document from which I quote is a letter he wrote inviting her to visit here.

Viktor

Mason Research Center
Gilmore Mountain
April 23, 2051

My Dear Miss Henraye,

Perhaps you may have heard of me. I am told that every schoolboy the world over has. Such are the questionable values of our culture, that it may be true. If this is so, then the magnificent Libbi Henraye may know of me, also.

Several years ago, in Ulan Bator, I had the pleasure of meeting you, but I hardly dare hope that you will have remembered this (to you) insignificant event. A decade past, I had the honor of being temporarily associated with your revered father in a commercial venture, but it is doubtful that you will recall this, either.

The only reason I mention these things at all is to bolster my own courage in writing to you—the hope that I do so not as an utter stranger.

It was with considerable delight that I learned that you were planning to visit Heaven Valley to take in the skiing during the week of the "Feast." Heaven Valley is something less than twenty miles from Gilmore Mountain, the seat of Mason Research Center.

If time permits, I should deem it the greatest honor to conduct you on a tour of our Institution. There is much to be seen here that would interest you. I believe this is true even though our professions are worlds apart.

Needless to say, there is something of importance about which I wish to consult with you, but it would be best if I left that unexplained until you have seen something of the work being done here.

Awaiting your reply with hope, I remain

Yours in admiration,
Gilmore Mason.

Malburn Apts.
New York City
April 27, 2051

Dear Dr. Mason,

Thank you for the invitation. I shall be happy to accept.

Contrary to your modest assumption, I do remember our meeting in Ulan Bator. When you came backstage, you were smoking a white "face pipe" and told me that you had been so overwhelmed by my loveliness (flatterer!) that you kept forgetting to listen to the music! Remember? Or could it be that our meeting remains more vivid in my memory than in yours?

May I visit you on Monday,

May 3, during the morning? A message left for me at the Lodge at Heaven Valley will reach me.

I will look forward to renewing our acquaintance with much pleasure.

Respectfully,
Libbi Henraye

P. S. Your cryptic allusion to "something of importance" has me burning with curiosity. Don't you know that this is pure cruelty?

L. H.

Gilmore Mason's Journal
May 3, 1051 2300 hours

Well . . . and well! Spent the better part of the day with the glamorous Libbi Henraye. She is even more beautiful than I remembered her, and more gracious and brilliant with the passage of these last five years.

Took her through the Surgery, the Analyzer Lab, the Mutation Lab and the Growth Rooms. She will return tomorrow to see the Neuro-erador and the Memory-Implanter.

Since she hasn't grasped the whole picture yet, I decided not to say anything about Elena. Better to wait until tomorrow. She is consumed with curiosity—and that is all to the good.

She bears a startling resemblance to Elena, a bit taller, I believe, slightly more heavily boned, perhaps, but the coloring and features are *remarkably close* for two totally unrelated individuals. The desirable mutations will not be forbiddingly difficult—that is, if she consents.

Had the damndest time trying to explain to her how the analyzer works. Libbi has had no scientific training whatsoever, and naturally, found the chemical composition of the genetic molecule frighteningly complex. Just try to tell an opera singer how a gamma ray diffraction spectrometer works! Or how the Polymicrovac VII operates. That damned computer is so complex, I scarcely comprehend it myself.

She finally understood (I think) something of the nucleotide structure of the gene, and I believe that she got some conception of the principle of the Trent Mutator. Understanding or not, she was fascinated and a bit awed by the possibilities of what we're doing here. If I can arouse in her the desire to take part in the future of all this, half my battle will be won.

One of her ova and a few cells for analysis. On the surface, this seems little enough to ask. Just a few cells taken painlessly and without inconvenience to her. Infinitely less than a blood donation, but it's the purpose she may take exception to.

And yet . . . why not? I've made a tremendous contribution to biosynthetic advancement, and I see no reason why I shouldn't find some joy in living. In the ten years since Elena died, I've worked

eighteen hours a day. I have benefitted mankind immeasurably, and still the bitter taste of futility lingers in my mouth.

May 4, 2051, 2330 hours

The issue is still in doubt. I have talked myself hoarse today, and still she hesitates.

Libbi came this morning at ten, and we finished the tour. Thanks to "Feast" week and Viktor's trip to Novosibirsk, I had her completely to myself yesterday and today.

We started off the day's tour with the Neuro-erador Lab. Why did she keep calling it the "brain-washer?" Was she subtly needling me, or will the lay mind always fear its possibilities? Just because the instrument can wipe a human memory as clean as a new pane of glass is no reason to assume that it must be put to evil purposes!

New as it is, we have already rehabilitated seven otherwise unreclaimable criminals with it. To be able to take a hopeless sociopath with his stubborn loathing for society and wipe away all the ugliness and pain, all the shame and fury, and take this marvelously cleansed brain—pure as that of an innocent newborn—and implant into it the memory of a wonderful childhood, the education of a physician (let us say) and the personality of a loving, co-operative, socially-oriented member of the community—that is the greatest gift one could give this individual. Brain-washing, indeed! From whence did she resurrect this archaic term, anyway?

I induced her to stay for dinner and for the evening in spite of her reluctance to further neglect the friends who share her holiday. During dinner I had a strong impression that she was intrigued with me—in a personal way. She was . . . should I say . . . flirtatious? Seemed like it. I suppose that among her associates, all sorts of emotional liaisons are common. She may have expected me to make some sort of "pass" at her, and I wonder now whether she would have resisted me if I had. My image, in her mind, may be more than a little glamorous—my life and work being so utterly alien from hers. I wonder . . .

When I told her what I had in mind, she was temporarily overwhelmed and disoriented. I think she was both tremendously flattered and slightly disappointed. She thought the whole thing might be monstrously immoral, and yet . . .

Time to think about it, she wanted. Time to think! My God! What is so hard to decide?

Las Traverias
May 11, 2051

Dear Gil,

I promised to let you know my decision as soon as I had made one, and I think I have, but my mind is still in a whirl. I want very much to have some small part in

the magnificent work you are doing at Gilmore Mountain, but this seems so . . . oh, so terribly personal!

I always thought of scientific research as being cold and pure like the geometry of a snowflake or even like the harmony in an old Bach fugue, but your proposal is not like that at all.

It is so awfully intimate, much more intimate than sleeping with you—every bit as intimate as marriage would be. If you had asked me to share your bed, I could have refused or accepted as the mood was on me—and I can easily imagine conditions under which I might not have refused you. Sex can be as personal or as impersonal as a woman wants it to be, but what you want me to agree to . . . there is no conceivable way in which it *can be* impersonal.

If I say yes, I will be hopelessly involved, emotionally, and there is so little I will get out of it personally. Does that sound selfish? It should. I *feel* so very selfish about this, Gil.

In some respects, it would be thrilling to have you create another "me." That feeds my vanity, flatters me, but when *you* love and unite with this "other me," the reality of the experience is all yours, and there is nothing for the original "me," the "*me* me." And then, you say you want to change this other "me." That hurts! If you don't want me as I am, why start with me? Of course, I know what you will say to that. I am so like your Elena, have such a "fine mind." Oh God, I don't want to say anything about *her*. Anything I say will hurt you, Gil.

I wonder why we couldn't have met and come to know each other before there ever was an Elena, at a time when this thing you propose would not have been desirable to you—before it would *even have been possible.*

I wish right now that it were impossible. If it were, then perhaps you could forget this poor girl who died ten years ago, and there might be a chance for something between us—just you and me, as we are, without any mutations or memory banks or any of this awful . . . stuff. But, that is just the raving of a frustrated woman. What you propose *is* possible, I guess, and since it is, you will never be satisfied with anyone but your Elena.

I suppose that by now you think I have made a negative decision, but that isn't so. I like you very much, Gil—perhaps even love you—and if this is what you want, I will agree, even though it is so much, Gil—perhaps even love you what I would prefer.

Giving you what you want, as you explained it to me, will be possible in about two weeks. If you still want me to go through with it, May 26 will be the time. Let me know if you want me to be at the

Center on that date, and I will come.

Yours in disappointment
Libbi Henraye

Mason Research Center
Gilmore Mountain
May 15, 2051

Dear Libbi,

I am terribly sorry that my request has caused you so much concern and actual anguish. Had I anticipated that it would do so, I would have hesitated to broach the matter to you.

I wish, too, that we had renewed our acquaintance under more auspicious circumstances, that my fixation on Elena might never have come to exist, but although this is not the case, I shall still have something of you, always.

May 26 will be fine. If you can arrange to arrive here on the 25th, we will be able to commence the operation the following morning. If your schedule will permit, you will be most welcome to remain during the entire course of things and for as much longer as you desire.

As I said during our last conversation, the removal of the ovum will be painless and simple. You will not be incapacitated in any way—even for a day.

The gamma ray diffraction spectrometer will be capable of mapping your complete genetic pattern in less than an hour, and the Polymicrovac, being used as a read-out and interpretive instrument, will complete the task with such speed that your ovum can be placed in the Trent Mutator for alteration before the close of the first day. By nightfall, electrolytic fertilization will enable us to start the process of maturation.

Only yesterday, we finished the installation of a new and radically advanced Marshall Growth Accelerator. Unless unforseen difficulties arise, your daughter-cell will have passed the foetal stage, become an embryo and be at the normal birth stage in about four days.

From this point to the finish (I am planning to take your daughter only to the age of 32) will consume some three weeks of accelerated growth. At this time we will start the program of testing, memory eradication and re-implantation. At the completion of this work, she will be ready to commence normal life, and you can become acquainted with her as a person.

Exotic as it may sound to you, she *will* be your daughter. She will be more totally yours than any natural offspring could possibly be, since she will have no father.

Thank you again, Libbi, for agreeing to my proposal in spite of the doubts that have bedeviled you. Believe me, my dear, there is nothing immoral in what I propose to do. It is simply the newness of the idea that has stunned you. I look

forward to seeing you on the 25th, and . . .

Your debtor forever,
Gil Mason

Mason Research Center
Gilmore Mountain
May 15, 2051

Saul Edwards, Ph.D., D.Sc.,
F.F.N.B.S.
Biotics Department,
New Los Angeles Polytechnique Institute,
New Los Angeles, New Mexico.

Dear Saul,

It has been so long since we have communicated with each other, this will come as something of a surprise.

Saul, I've done it! Your beloved daughter, Elena, dead these ten long years will live again! Not, of course, in the same body, but in one acceptably similar.

As you will recall, before Elena's death, while she was assisting me here in basic research, we accumulated the most complete data on her body and mind that had ever been compiled on any human being, and now I am so thankful that we did—and that all of this information has been carefully preserved.

We have a complete mapping of her genetic code and tapes of her memory bank from the instant of her conception up until three weeks before she was killed. The equipment with which we recorded her memory bank was crude compared to that which we use today, but I feel certain that the data is perfectly usable.

I have been very fortunate in finding a woman with the desirable qualifications who is willing to donate an ovum. If you would like to be present during the time when the mutation and growth periods take place, here is the information you will . . .

Gil Mason

Cranston Memorial Laboratory
University of Montreal

Dear Gil,

Your letter was forwarded here where I am temporarily engaged in research on the Schoenhauer Paradox. I hear by the grapevine that Viktor is presently engaged on the same problem with Matrilovski in Novosibirsk. I hope they meet with more success than La Rue and I have been having.

Yes, your letter came as quite a surprise—a shock, even. Gil, you can't do it! I should say that *you must not do it.* From what I read in the Journals, I'd say that it is probably quite *possible* for you to do it, but it would be *wrong!* Elena, as you say, is dead these ten long years, and while the loss of her was quite as painful a wound in my heart as it was in yours, I do not believe that it would be morally right to attempt what you propose. This morbid obsession you have carried with you all these years must not be indulged. The poor child is dead; let it rest that way.

There is no sure way to check the quality of those ten-year-old tapes of Elena's memory bank. You have no way of knowing what subtle deterioration might have set in. If the signal you feed into this new child's brain is not perfect in every way, there is no possibility of predicting what the effect might be.

Maartens in Leyden has done some work along this line, and he has had some highly unfortunate results.

However, I won't lecture you on that basis. You probably know his work better than I do. Let me warn you though, as an old friend, that if this effort goes wrong—and there is a grave danger that it might—the results may hurt you as long as you live. Go slowly, Gil, for your own sake.

If there is nothing I can say to dissuade you, however, let me know, and I will join you on the 25th and remain at your side until the conclusion is clear.

Your old friend,
Saul Edwards

Gilmore Mason's Journal
May 25, 2051, 2330 hours

The principals are gathering! Libbi came in this morning, and Saul arrived just prior to dinner. In a way, I wish Viktor and Bryant could be here, but it will be even more pleasant to surprise them with the *fait accompli.* How magnificent for them to return and find Elena alive and married to me as though time had been set back ten years and the tragedy had never occurred.

Libbi is as nervous as though she were about to make her first opera debut. Saul is the same gloomy old fool that he has always been, but I can't stay angry with the old bear, nevertheless. I don't know why I asked him to come, but then, he *was* Elena's father. When she comes out of transition, she will remember him just as though she had never died, and it may help *her* to have him at her side at that time.

Libbi sought me out this evening for a private word. I believe the woman *has* fallen in love with me! She asked me to call off the whole project and marry her! I was stunned! Good God, if I were not so in love with Elena, what an exciting possibility that would be. She is quite a woman, but there is no question of it. No one would ever do except Elena, and it will not be long, now, until we are reunited.

Saul had to catch me alone, too, and get in his bit. He thinks I'm some kind of morbid neurotic for trying to bring Elena back, but the old fox had to be here just the same. He's as anxious to see his daughter live again as I am.

May 27, 2051, 0130 hours

One-thirty in the morning, and I am in that peculiar state of dreamy euphoria that comes with

the wedding of total exhaustion and unrivalled success. I am on the way! Elena is born and growing!

By 1000 hours I had analyzed Libbi's tissue sample and charted her total genetic code. With that stored in the Polymicrovac's memory circuits, I fed in Elena's code and programmed the instrument to give us a list of the differences.

As I predicted, they were not too drastic. There were only 1732 differences and nearly 1500 of them were superficial and could be disregarded. The other 241 were, for the most part, fairly simple to change. Only three were severe, and none but one of those gave me anxious moments. I am almost certain that Libbi's ovum came through undamaged.

The Trent Mutator performed marvelously, albeit we have only used it a dozen times before and in those cases for simple alterations.

It was but a few minutes work to put the ovum through electrolytic fertilization and then into the Growth Accelerator in its amniotic bath. Marshall is staying on duty all night in the growth lab to see things through the crucial first few hours. He couldn't be more proud of his new Accelerator. There's no better biotics design engineer this side of Novosibirsk, and I don't think that Matrilovski has anyone better. I'll stop in the growth lab and check on things before I retire . . .

May 30, 2051, 2345 hours

Took Libbi in this morning to see her brand new baby daughter. We took Elena (I've named her Elena, officially) out of the amniotic bath and placed her in the second stage of Acceleration this morning. She's a beautiful and very perfect infant.

Flew Dr. Granger in from Denver to examine her before we put her back to Growth. He's supposed to be the finest pediatrician west of the Atlantic coast. His examination took three hours and turned up no trace of imperfection! Ha! The project couldn't be going any finer.

Libbi cried. I think that if there were any way she could have done it, she would have taken the baby and fled with her. Never saw the maternal instinct more fully aroused. Sobbed on my shoulder for ten minutes. You'd think I was the father and that she had carried the child herself.

Saul looked the perfect picture of the doddering grandfather. Haven't had a word of carping out of him since Saturday. Just wait out the next three weeks and see what he thinks when I give Elena back to him after these ten years of death!

June 9, 2051, 2300 hours

Elena has been under development for ten days now. She is just past her fifteenth birthday, growing at a rate of 18 months for each

day in the Accelerator. She reached puberty yesterday and is as exquisitely beautiful an adolescent as I have ever seen.

Marshall works day and night, trusting nothing to his assistants. Dr. Granger left this morning. I think he wanted to stay on to the finish even though Elena no longer needs a pediatrician, but his practice would not permit his continued absence. Our own specialists can handle things from here on—except for neuroradiography. Behrenson arrived today to take over on this. We have our own man, but Behrenson is the best, and I will be satisfied with nothing less for Elena. He takes the first of a series of tests in the morning.

We know that her body is developing perfectly; every organ system is functioning and growing flawlessly. The NRG's* will reveal the same about her nervous system, I know. I am so proud and happy I could burst . . .

June 10, 2051, 2350 hours

That bastard, Behrenson, thinks something is going wrong. Can't put his finger on any gross evidence —more of a feeling than anything specific revealed by the neural radiation. He says that all of the tests are satisfactory except the Q wave, and it looks completely normal to me. Could it be that Behrenson is a bit jealous that our work here is so much more advanced than his own? I wonder if he is interpreting the tests in some warped, highly subjective manner and that . . .

June 11, 2051, 2300 hours

Elena still progressing wonderfully. Sent that damned fool, Behrenson, packing this morning. Our men can do the job as well as he. He was getting everyone jumpy with his dirty insinuations. One negative personality like that can destroy all the morale built up through months of successful work. Sorry I ever brought him in.

Had a cable from Viktor. Apparently, he and Matrilovski have succeeded in cracking the Schoenhauer Paradox. Great work! That boy is living up to all of my hopes for him. He says he will be home on the 13th. It will be good to have Viktor back. It is getting to the point where there are not too many here I can trust.

Mason Research Center
Gilmore Mountain
September 12, 2051

Dear Bryant,

At this point in the file, I felt that I could best detail the story for you by giving some of my own personal impressions.

I returned from Novosibirsk on June 13th to a home that had changed radically. I had left on April 30th with everything calm and the regular work proceeding smoothly. When I returned, I came

*Neuroradiographs

back to an atmosphere as taut as an overblown balloon—one pinprick and everything would have gone sky-high.

Gil had changed alarmingly. His quiet strength seemed near the breaking point. He was at times over-hearty, talking too much, too loudly and too rapidly. At other times he was silent and too much withdrawn. At still other times, he seemed sullen and snappish, but for the most part, he struck me as being manic in mood, and his enthusiasm during these periods seemed forced.

Libbi . . . ah, there is a lovely woman, if ever I met one. Poor thing, she seemed living on the edge of disaster. I'm sure she had fallen in love with Gil, and each day saw her hopes recede further from fulfillment. Her feelings about Elena II had become an odd mixture of curiosity and revulsion. Her excessive love for the newborn child had changed as fast as Elena had developed. However, if Gil had returned her love and had produced Elena to be their child, even though its conception and growth had taken place in this abnormal manner, her attitude might have been vastly different. Poor Libbi.

Saul has aged immensely since either of us saw him last. He gloomed about most of the time in silent disapproval. There was no open strife, but it was plain to me that he was sorry that Gil had ever conceived the idea.

The staff were plainly on edge. Their own director was no longer cool and objective as in the past. There was not one of them who would not have preferred to be cleanly out of it, as you can well imagine. Even the servants were affected by the atmosphere.

As for Elena II, I only saw her once before her removal from Growth, and then without Gil's premission. Dane Marshall smuggled me into the lab for a few minutes on the night of the 17th. Elena lay suspended in the huge glass floatation chamber like the master-work of some superhuman sculptor.

She had reached the stage of development of a 27-year-old woman, who—if you can imagine such a thing—had a body that had *never suffered the most infinitesimal injury!* No harmful virus, no noxious bacterium or fungus had ever infected a cell of this lovely body. No slightest scratch or abrasion had ever flawed the unimaginable perfection of her skin. No restrictive foot-gear, no constriction of clothing had ever chafed her skin or sludged the circulation of her blood. No indigestible confection, no culinary disaster had ever outraged her alimentary canal. No smoke or fume, no unwholesome stench had ever irritated the lining of that exquisite throat or clogged the bronchioles of those immaculate lungs.

The unparalleled purity of her

features, the total absence of expression reflected the non-existence of any worry, frustration, fear, shame or fury in a brain devoid of anything except magnificent potential. Here, indeed, floated a body undamaged by living, and yet she had attained the physiological age of 27.

Even though connected with a myriad of tubes and wires, her esthetic sublimity was staggering. Even in the cold merciless light of the laboratory, her beauty was breathtaking. I was overwhelmed.

Her body hung suspended from the effects of gravity at the boundary between two layers of immiscible fluid. The purest oxygen sustained her precipitant anabolism. A carefully controlled balance of amino acids, fatty acids, glycerin, glucose, vitamins and minerals eliminated the cumbersome process of digestion. Periodic electrically induced clonic spasms kept her entire musculature at the peak of tone. The layer of liquid above that upon which she floated swept away all waste products as fast as they were formed.

My dear Bryant, even though I think of myself as a dedicated biochemist, no thoughts of science passed through my mind as I looked upon her. I was devastated by her loveliness. I could think only that Gil had risen to the level of the very Gods in this feat of laboratory creation, and yet, Dr. Behrenson had left a warning that all was not proceeding as well as it should.

The next two days crept by with steadily increasing tension. Gil virtually moved into the Growth Lab where Marshall had already been sleeping for days. They were continually closeted with our own neuroradiographer. I saw the NRG's myself, later, but my contact with this field has been too sketchy to enable me to interpret them.

As the hours passed, even Gil had to admit that the evidence was worsening. On the 19th, at 1500 hours, Gil decided to put Elena into transition, the difficult phase of bringing her from the Growth Accelerator into a normal life environment. This shift, taking about an hour, is similar to birth and far more risky, for Elena had existed for the equivalent of 30 years in an environment of total protection, and her body's natural defenses had to be brought to bear before the hostility of our natural environment could do her irreversible damage.

The indications of the NRG pattern seemed to show some progressive cerebral abnormality developing, and Gil's decision to go through transition without further delay was made in the hope that this disturbing trend might have been the result of excessive growth acceleration and would disappear after transition.

At this point, I quote again from Gil's Journal.

Gilmore Mason's Journal
June 19th, 2051, 2340 hours.

Sleep. Sleep. I haven't slept over an hour at a time for nearly four days, but I think we have come through the worst of it. I think my darling is going to be all right.

It galls me to admit it, but that damned Behrenson was right. There is something abnormal about the Q wave. I couldn't see it, myself, while he was here, but it has begun to differentiate more strongly every day since he left. The C, F, M and L waves are ideal and the Raaban bands are OK. The Lavaretti beat couldn't be more perfect, but that damned Q wave! I hope we brought her through transition in time.

She is resting quietly now and quite out of danger. I'm glad we decided to take her through the neuro-erador without delay. She will sleep like a vegetable until morning, and we can start feeding Elena's memory tapes into her memory bank, and by this time tomorrow night, *she will be Elena in every way.*

Even Saul admitted that he would swear that she were his own daughter if he didn't know the whole story. He cried like a child when he saw her.

I am certain, now, that we set the acceleration too high. When we check that Q wave, tomorrow, I'm sure we will see an improvement. I am too exhausted to write more!

June 20, 2051, 2200 hours

I have just left Elena. She is terribly confused at the moment. The original Elena was 35 when she died, and the new Elena is only 30. Unfortunately, we couldn't feed the old memory tapes any faster than the normal rate, so the new Elena lacks the last five years' memory of the original Elena. Rather like awakening from a troubled night's sleep and finding that fifteen years have elapsed.

She is terribly upset that her father and I have aged so drastically —especially, her father. The original Elena was a highly educated biophysicist, and our progress in that science during the past fifteen years has been fantastic, so the new Elena feels that she has awakened into a different world.

We haven't told her anything of the real story, yet, and now, I see that it is going to be more difficult than I had thought. Saul wants to get a top psych man in to do the job, but I can't see the need of it. The original Elena was in love with me, even at the age of 30, and there is no reason why I can't tell her the whole story myself. Love will help her recover from the shock. After all, the new Elena owes me everything. She would never have existed if it were not for the years I have worked and planned and fought to bring her into the world. I created her with my own hands and my own brain. I will get through to her.

During the transmission of the memory tapes, we monitored the NRG pattern. The Q wave still has that odd differential warp, but at least, no worse.

She thinks that she has been ill and has suffered an amnesia that has robbed her of the past fifteen years—jumped to that conclusion, herself, and for the time, we are letting it stand that way.

She has had an exhausting day, and Saul is trying to calm her enough so that she can get to sleep. The passage of time will help.

Libbi is cutting rough again. From her actions, I could swear that she hates the girl—and that, coming after her violent burst of maternalism three weeks ago surprises me. While Elena was in Growth, Libbi tried twice to . . . what shall I call it? Seduce me? I believe that would describe it. Could she actually be jealous of her own daughter? My God! Why does she insist on hanging around. She knows that as soon as Elena has accepted the conditions of her creation, we will be married.

Saul has been a tremendous help. I'm thankful that he stayed.

Viktor has been stumbling around trying to be helpful ever since he got back. All he succeeds in doing is getting in the way. Why the devil didn't he stay in Novosibirsk another month?

June 21, 2051, 2300 hours
This has been the most difficult day of my life since the day the original Elena was killed. I told the new Elena everything. She didn't take it all the way I thought she would. Her memory bank now contains a fine scientific education. She was easily capable of following the steps involved in her creation—and yet, she called it a horrible crime against human individuality! She doesn't want to be Elena, claims she would rather be dead than go through life being someone else who already lived and died.

She wanted to talk to Libbi, and the bitch wouldn't see her. She refused to have anything more to do with Saul—said he wasn't her father, that that was just something we'd planted in her brain.

I don't know what we are going to do with her. Wouldn't eat. Locked herself in her room at six tonight and refuses to talk to me.

I'll give her the night to quiet down, and then if she refuses to be sensible, I guess I'll have to take Saul's advice and get a good psych man up here to work with her.

Mason Research Center
Gilmore Mountain
September 12, 2051

Dear Bryant,

Those were the last words Gil ever wrote. Around 0200 hours the following morning, someone drove a Mitford scalpel into his heart as he lay asleep in bed. When morning came and his body was found,

we searched the house. Elena was missing. Later that day, they found her body at the foot of the east cliff. The official findings left the whole thing wide open—homicide by person or persons unknown. Unofficially, they think that Elena killed him and threw herself over the cliff, and in this view, I personally concur. If there is any other explanation (and there could be), there is no evidence to support it.

The fingerprints on the scalpel were too smeared for identification, and no one heard anything during the night.

You may want to examine the records dealing with the official investigation. If so, they are available in the archives down in Mason City, but you will find all of the evidence negative. The police know no more than I have told you.

It is my fondest hope that you will choose to remain here and work with me on a project that has been in my mind for some time now. I have a complete genetic code on file for Gilmore, and a full tape of his memory bank that comes up to about five months ago. If we can find the proper donor of a good ovum . . .

Robert Louis Stevenson, best known for TREASURE ISLAND, KIDNAPPED, *and* THE STRANGE CASE OF DR. JEKYLL AND MR. HYDE, *also wrote many short fantasies, of which this interesting and little-known fable is an example. (Our thanks to Lawrence A. Perkins for bringing it to our attention.) Stevenson, who suffered from tuberculosis, was forced to travel in search of health. His last five years were spent on the South Sea island of Samoa, which undoubtedly provided the background for this tale.*

Something in It

by Robert Louis Stevenson

THE NATIVES HAD TOLD HIM many tales. In particular they had warned him of the house of yellow reeds tied with black sennit; how anyone who touched it instantly became the prey of Akaanga, and was handed on by him to Miru the Ruddy, and hocussed with the kava of the dead, and baked in the ovens and eaten by the eaters of the dead.

"There is nothing in it," said the missionary.

There was a bay upon that island, a very fair bay to look upon; but, by the native saying, it was death to bathe there. "There is nothing in that," said the missionary; and he came to the bay and went swimming. Presently an eddy took him and bore him towards the reef. "Oho!" thought the missionary, "it seems there is something in it after all." And he swam the harder, but the eddy carried him away. "I do not care about this eddy," said the missionary; and even as he said it, he was aware of a house raised on piles above the sea. It was built of yellow reeds, one reed joined with another, and the whole bound with black sennit; a ladder led to the door, and all about the house hung calabashes. He had never seen such a house, nor yet such calabashes; and the eddy set for the ladder.

"This is singular," said the missionary, "but there can be nothing in it." And he laid hold of the ladder and went up. It was a fine house, but there was no man there; and when the missionary looked back he saw no island—only the heaving of the sea. "It is strange about the island," said the missionary, "but who's afraid? My stories are the true ones." And he laid hold of a calabash, for he was one who loved curiosities. Now he had no sooner laid hand upon the calabash than that which he handled and that which he saw and stood on burst like a bubble and was gone; and night closed upon him, and the waters, and the meshes of the net; and he wallowed there like a fish.

"A body would think there was something in this," said the missionary. "But if these tales are true, I wonder what about my tales!"

Now the flaming of Akaanga's torch drew near in the night, and the misshapen hands groped in the meshes of the net, and they took the missionary between the finger and the thumb and bore him dripping in the night and silence to the place of the ovens of Miru. And there was Miru, ruddy in the glow of the ovens; and there sat her four daughters, and made the kava of the dead; and there sat the comers out of the islands of the living, dripping and lamenting.

This was a dread place to reach for any of the sons of men. But of all who had ever come there, the missionary was the most concerned; and, to make things worse, the person next to him was a convert of his own.

"Aha," said the convert, "so you are here like your neighbors? And how about all your stories?"

"It seems," said the missionary, bursting into tears, "that there was nothing in them."

By this time the kava of the dead was ready, and the daughters of Miru began to intone in the old manner of singing, "Gone are the green islands and the bright sea, and the sun and the moon and the forty million stars, and life and hope. Henceforth is no more, only to sit in the night and silence, and see your friends devoured; for life is a deceit, and the bandage is taken from your eyes."

Now when the singing was done, one of the daughters came with the bowl. Desire of that kava rose in the missionary's bosom; he lusted for it like a swimmer for the land, or a bridegroom for his bride; and he reached out his hand, and took the bowl, and would have drunk. And then he remembered, and put it back.

"Drink!" sang the daughter of Miru. "There is no kava like the kava of the dead, and to drink of it once is the reward of living."

"I thank you. It smells excellent," said the missionary, "but I am a blue-ribbon man myself; and though I am aware there is a difference of opinion even in our own

confession, I have always held kava to be excluded."

"What!" cried the convert. "Are you going to respect a taboo at a time like this? And you were always so opposed to taboos when you were alive!"

"To other people's," said the missionary. "Never to my own."

"But yours have all proved wrong," said the convert.

"It looks like it," said the missionary, "but I can't help that. No reason why I should break my word."

"I never heard the like of this!" cried the daughter of Miru. "Pray, what do you expect to gain?"

"That is not the point," said the missionary. "I took this pledge for others; I am not going to break it for myself."

The daughter of Miru was puzzled; she went and told her mother. Miru was vexed, and they went and told Akaanga.

"I don't know what to do about this," said Akaanga; and he came and reasoned with the missionary.

"But there *is* such a thing as right and wrong," said the missionary. "Your ovens cannot alter it."

"Give the kava to the rest," said Akaanga to the daughters of Miru. "I must get rid of this sea-lawyer instantly, or worse will come of it."

The next moment the missionary came up in the midst of the sea, and there before him were the palm trees of the island. He swam to the shore gladly, and landed. Much matter of thought was in that missionary's mind.

"I seem to have been misinformed upon some points," said he. "Perhaps there is not so much in it as I had supposed; but there is something in it after all. Let me be glad of that."

And he rang the bell for service.

MORAL

The sticks break, the stones crumble,
The eternal altars tilt and tumble;
Sanctions and tales dislimn like mist
About the amazed evangelist.
He stands unshook from age to youth
Upon one pin-point of the truth.

Here is a good story about a $60,000 wager between Ramirez, an artist and Carter, an industrialist. Ramirez is challenged to produce a work which will satisfy Carter as being completely new and unquestionably beautiful, a work of art. Does he satisfy Carter? Does he satisfy you? Read on.

THE PICTURE WINDOW

by Jon DeCles

"YOU'RE BANKRUPT WHEN IT comes to originality," said Carter. "Face it, Ramirez! This is the end for your kind of art. There just can't be any more. The world moves too fast; technology has advanced too far. Where can you find a man today who is familiar enough with all the different facets of life to create *real* art?"

"And you want to help it along!" said Ramirez bitterly. "Aid its demise." He was a small, brown-skinned man with flashing black eyes and black curly hair that tumbled on his forehead in clipped disarray. He raised one of his huge, wrinkled hands, licked salt, gulped down his tequila, and bit into the lemon.

"No," said Carter, "it's not like that at all." The big, balding man leaned back in his chair and flipped on the massage unit. A pleasant tingling went up his spine and some of the tension left him. "Actually, I'd like to see something new. But I just don't believe it's possible. Art calls for an understanding of the basic pattern of human life. And that pattern has become so complex that no one man can see it all.

"In the past a man could, if he were one of the really rare and observant kind, see that pattern just by participating in it. Look at Da-Vinci, and Michaelangelo. Even Piccaso was a participant in life and drew his art from what he experienced.

"But today, what *is* life? A vast maze of specialization. One man learns about computer program-

ing, another about food production, still another studies planetary conditions. What common ground do they have? From what could you build your art? The foods they eat, the products they use? Advertising uses that in excellent academic composition to the point that it has nothing to offer but sales appeal.

"No, Ramirez, you have to have common experience between the artist and his audience. And people just don't have that any more. They *can,* some of them, appreciate art that's already here. Because the older artists produced something so simple and pure that it goes beneath the grain of the times. It might even be possible to build an artificially simple environment and create new works of that kind of art. Still life painting, portraits. But that's begging the question. It isn't new art. It isn't of our times. It isn't *ours!* You know, the last new art was the cinema. Everything that's been done since then is mere technology."

Ramirez gestured absently with his empty glass. Maria Carter came up quietly behind him and refilled it. Carter looked at her and raised his eyebrows sharply. He thought that Ramirez was already a little beyond his depth in liquor, but Maria stared at him enigmatically for a moment, and he decided not to press the matter. Ramirez was really Maria's guest. Her friend, rather. Carter liked the man well enough, but he wouldn't have called him out to tell him the bad news personally, not if Maria hadn't insisted.

"You have it all wrapped up, don't you?" Ramirez said. He looked sharply, accusingly into Carter's eyes. "Art is not just that, you know. No. . . ." He downed the tequila. "Art is . . ."

"Go on," encouraged Carter, trying to wave Maria and the bottle away. But she filled the glass and set down a fresh wedge of lemon from a little china tray.

"Art," said Ramirez, not drinking, rolling the glass back and forth between his palms. "Art is . . . making something where nothing was. Showing something that nobody ever saw before. You remember that fellow, the one who coated the fifty-foot canvas with orange paint? He called it 'Orange painting', and it showed people orange, and that's all it showed them. But some of them. . . . They'd never seen orange by itself. They thought about orange sweaters, or orange walls, but they'd never seen orange. That's art. Or making something live a little longer, that's art too. Making something go on after it has stopped existing. Making people care about a woman who's been dead four hundred years. The Mona Lisa, that's art."

"Precisely!" said Carter. He sat forward and turned off the mas-

sage. "Now how could you go about making people today care? How could you make people give a bloody damn about, oh, say my wife Maria? She's just as beautiful as la Gioconda, but do you think you could make her *that* important, once she was on the canvas?"

"No," said Ramirez, "not that important."

"The vital thing," continued Carter, "the thing that you'd have to see and feel, and then put on the canvas, is the common experience. And it just isn't there. They were running into that problem at the beginning of the twentieth century, when they started experimenting with the plastic reality of the canvas in two and three dimensions. Even then they were beginning to realize it. And once they had gotten that far, why, there was nothing much left. Just a few innovations. Its no good, Ramirez, you can't make things immortal any more. Art is something for and from the past. All our immortals have been born, our Shakespeares, our Cervanteses, our Tolkiens, as the line goes."

Ramirez seemed to be looking inward, at something on the lens of his eyes. He didn't speak for a long time. Carter swirled the ice in his gin and tonic, listening to the tinkle of it against the glass. Still Ramirez didn't move. Carter looked up at the clock and realized that he had an appointment soon. A business appointment, and business must always come first, if you are going to be successful at it. He cleared his throat. Ramirez looked up suddenly.

"I could make you something," said Ramirez. "I could make you something that would make you care very much."

"Don't be absurd," said Carter, standing. "I like your work well enough, but . . . well, you painted a picture of Maria for me last year. It was beautiful, and strong, I'll grant you that. But it doesn't stir me nearly as much as being with my wife, *in person,* so to speak. And it doesn't show me anything new about her, or about anything. It's a fine painting, but I wouldn't call it art."

Ramirez gulped down the tequila. He was breathing faster now, and Carter was afraid that he might call for another drink. But instead he stood and smashed the glass on the stone floor of the terrace.

"You want something new, don't you?" cried Ramirez. "You always want something new. And you want something beautiful."

"Don't get excited," said Carter sharply. Ramirez was now much too drunk for his liking. "It won't do you any good. I only called you up here because you are a personal friend. The other people simply got a letter and a sheriff's notice."

"Oh, go to hell," said Ramirez.

"I know that canyon means a

lot to you," Carter said, "but there are a lot of people in Mexico who will have food and decent shelter because of this dam. Thousands of them. Think of that. It should have been done long ago."

"Stop dodging," said Ramirez. "You're building that dam because it will bring you billions of dollars. It will make you a hell of a lot richer. That's all you are building it for."

The chimes of the door sounded and Maria glided across the living room to answer it. In the foyer Carter heard Jake and Elspeth Prior, early for their appointment. It wouldn't do for them to have to wait long. Elspeth was an important electronics engineer. He had to get rid of Ramirez quickly, and without a scene.

"Look," he said, "I may be making a profit on the deal, but I really am sorry that you had to get hurt by it. Don't you realize that someone *always* gets hurt? If it will help any, I can send you a cheque over and above the amount the corporation pays for land in this project."

"That's right!" said Ramirez, a little loudly for Carter's taste. "That's right. Try and buy everything. But you still won't really care. And that makes you a damn fool, because I could make you care. You say there's no more common ground, but there *is*. I could show it to you! I could make you care!"

Jake and Elspeth came around the corner of the hall fountain and Jake headed for the bar. Elspeth gave Carter a look that indicated she wanted him to talk with her *immediately*, no matter what he was doing. She was that kind of woman.

"Look, we can discuss this some other time," Carter said to Ramirez.

"There won't be any other time!" Ramirez shouted. "You goddamned dirty pig, there won't be another time! You got the government over a barrel so you can take my land away, and then you offer me a piddling little bit of money to make up for it. And you don't give a damn! You don't give a damn who you hurt."

"Ramirez, will you shut up?" Carter said.

"I'll make you care, though," said Ramirez. Carter tried to steer him toward the door, but he planted his feet firmly in the carpet, determined to have his say. "I'll show you your precious common experience. I'll make you a real work of real art. I'll show you something immortal. I'll make you care."

"All right, Ramirez, that's enough," said Maria.

Ramirez pulled back from Carter. The wildness ebbed from his face, but there was still something there that was harsh and full of purpose. He stared into Carter's eyes, coldly, sanely.

"How much?" said Ramirez, quietly, evenly, deadly. "How much, Keneth Carter, if I bring you a work of art, something I have done myself. Something that makes you care. Something that jolts you, that means something to you. That has that common experience, but completely new, and beautiful. How much will you give me?"

The room was quiet. There had been questions, but Ramirez had not said them as questions. They had been statements, as if he were musing aloud.

"Fifteen thousand?" Ramirez asked.

Carter thought for a moment. "Well . . ." he began.

"I know that look," said Ramirez. "Carter, I know that look. Collectors get it when they hear of something they want. Listen, Carter, *fifty* thousand is what I want. Fifty thousand for an original work of art. You paid that once for a Miro."

Carter's mind raced. He could feel Elspeth's eyes boring into him, impatient. He only wanted to get rid of the artist now.

"Yes, I'll pay that, if you can give me what you claim. But I doubt it, Ramirez. You know art, but you haven't been around the rest of the world. Haven't associated with it all. I don't think you'll do it, but I'm a sporting man. I will give you fifty thousand for it, if you can do it."

"Record it," said Ramirez.

"Call the archives and record it," amplified Maria when Carter didn't move.

"I want it all down in red tape," said Ramirez, "so you can't chicken out. But protect yourself, by all means. You don't have to pay me unless it satisfies you."

Carter went to the visiscreen and called the Public Archives. At first they gave him the wager listing section, but the call was transferred when he gave his name. Technically it was a bet, but his importance allowed him to be listed with private business extrapolation.

When the call was complete Ramirez walked silently to the bar. He pulled the cut crystal stopper from the bottle of tequila and downed three mouth's full.

"To art, Mr. Keneth Carter. To art and to my canyon. Will you drink to that?"

"Please leave," said Carter.

"Drink to it!" said Ramirez.

Carter drank from his gin and tonic.

"Don't bother showing me the door," said Ramirez. He walked across the room to the foyer. He was unsteady on his feet, but he stood straight, with a disturbing sense of pride.

Before she married Keneth Carter she was Maria Teufel, and before that, she was Helen Ogilvey. She arrived in Hollywood

with a forty-five inch bust, a twenty-eight inch waist, and thirty-five inch hips. Her hair was black, and the teeth in her lower jaw were not quite straight. A producer saw that she had talent: he had her hair dyed blonde, fixed her teeth, and starred her in several movies, with a minimum of plot and a minimum of clothing. The box office remained cool, but the producer refused to be discouraged. She became Norwegian, and her name was changed to Maria Teufel. The producer was not interesetd that she learned Norwegian slowly, between takes on the set, could not be bothered with whether "Teufel" was even a marginal possibility as a Norwegian name. He was interested only in her talent. He took off more of her clothing for the next picture. She met with success. It agreed with her.

The producer was surprised when he discovered that Maria Teufel could act. That she was, in fact, a very fine actress. She went on to take an Oscar. And then, at the height of her career, at the pinnacle of her success, she married Keneth Carter, an industrialist. For some women it would have been the end of a career, for many a prelude to unhappy conflicts of interest, and for most in her position, a divorce. But the marriage lasted, and Maria gained stature and ability with each year. Her hair went black again, and she entered the legitimate theater and triumphed. She became an institution, and her name was synonymous with taste of a high order.

Her hair was silver grey now, but she was still very attractive. Carter watched her intently, waiting to detect something around her eyes, some sign, as she stared at the picture hanging on the wall of Ramirez's studio.

"How does it work?" she asked at last, her eyes never moving from the picture.

"Molecular breakdown," said Ramirez. "I have made it so that what the picture shows is governed by the random breakdown of molecules in the power source. It will continue to function long after the Mona Lisa has chipped and fallen into dust. But it will never look the same from one moment to the next. Always the same scene, but as constantly changing and altering as reality itself. And that, Mr. Carter, is the 'common experience' which you have been so at odds to find in art. Change. For everything is in constant change, and no one can escape *that.*"

Carter looked squarely at the painting. Curious . . . He couldn't seem to form an opinion about it. It was about four feet long and three feet high, and several inches thick. Ramirez had explained about the thickness; it was self-contained, all the machinery and

power and everything. It looked like much more than a month's work. Perhaps the artist had already begun when the foolish bet was instigated.

It was undeniably beautiful. A long view of a narrow canyon. Deep cut red walls shot up from a trickling small stream. In a hot blue sky, condors, or perhaps eagles, soared back and forth gently, not black specks, but very far up. In the foreground a beach ran up from the stream to a little field in which stood an adobe house. There was a small vegetable garden in front of the house, which faced the water.

"That's your house, isn't it?" Maria asked Ramirez.

"Yes," said the artist. "In my canyon."

"Oh, so that's it!" said Carter, turning to the little man. He suddenly found himself quite angry. "You think you can pull off some sentimental miracle and get me to stop my dam project! What kind of a fool are you, Ramirez? What kind of fool do you think *I* am? You've made an ass of yourself already over this, at my place, last month. If you continue to bring the matter up every time I see you, I'll have to ask you to stay away. The issue is closed."

"Mr. Carter," said Ramirez tiredly, "if your wife hadn't guessed, or if you hadn't asked, you would never have known that this was a picture of my canyon."

"I'll just bet . . ." snapped Carter.

"But since you know, you should also realize why I chose this subject. Is it really so strange for an artist to choose a subject for which he feels love? If the artist did not really care about his subject, do you think he could make *you* care? Of course not! It is you, not I, whose mind is clouded on the issue. You own a painting of Madame Picasso; was *he* trying to influence you when he painted it? Look, Carter, I am here talking to you to make good our wager. You didn't specify a subject, so I chose one. I don't see that this violates the terms of our agreement."

"I wagered that you make me a work of art that was *real* art, and that was new and original," said Carter.

"And this is," said Ramirez. "It is a painting, but done with electronic equipment instead of brushes. It is something quite new. And it will make you care, it will move you."

Carter felt uneasy. There was something in Ramirez's manner that suggested a predator.

"It's art, Keneth," said Maria.

Carter turned and looked at her with mild shock. For a moment he had forgotten her. Forgotten the painting while he chased a furtive suspicion. The scene was much the same in the picture, but there were subtle changes.

"There's no denying it," continued Maria. "Look at the color and the composition. The way everything moves with a stately perfection. The form is always balanced. It's the way the sides of the canyon rise to either side that does it. Just right. It's art, Keneth. And it's unlike anything I've ever seen before."

Carter turned to the artist, fighting down a feeling of panic. In half of his mind he knew that he should be very glad that the artist had won. But in the other half was a meaningless fear of something he couldn't pin down.

"Tell me, Ramirez," he said with studied contempt, mustering acid for his voice, "when do the condors start flying in the same patterns over and over again? What makes it better than a tri-di tape put in a loop?"

"I told you," said Ramirez, "it will never repeat itself. To do so would violate the Heisenberg Principle."

"I've been watching it, Keneth," said Maria. "It's not a loop. I know enough about loops to tell you that. A loop can't give you the infinite variation of light flickering on water that this picture has. Water running has infinite convolution, and a tape loop doesn't. To do what I've seen here already you'd need more than a mile of tape." She hadn't taken her eyes off the picture since the unveiling.

Carter felt at bay. Maria knew more about art than he did. If she said the thing was art, then there was little question. There seemed to be no escape.

"Then this is for real?" he asked.

"Yes," she answered. She continued to gaze at the picture. It was three dimensional, as were most of the new color constructions, and from time to time she moved her head slightly to try and 'see around' something.

"All right, then," said Carter, "I'll accept that it's true, what you say about the painting. But it takes more than a few minutes to decide how well you like something."

"Of course," said Ramirez. "Take it with you. Hang it on your wall. Watch it for a few weeks. Then tell me how you like it. Tell me if I have gripped you, have made you care. Then you should be able to decide whether it's art or not."

"Good," said Maria. "We'll do as he says, Keneth. I've already made up my mind, and I think you'll agree with me in a week or so. And even if you don't, I think I'd like it in the house for a while. It fascinates me."

"You really like it, Maria?" Carter said carefully.

"Yes."

He turned to Ramirez. "We'll take it home with us. But first we phone the archives and notify them that this does not constitute

agreement to purchase, or in any way signify that the terms of the wager have been met."

"Very well," said Ramirez. "However, since you mention the archives, I think it would be good to add something further in the way of stakes to our transaction."

"You mean you want to up the ante?" asked Carter.

"Yes. I have met certain expenses that I did not anticipate, and I would like to recoup the loss."

"What are your terms?" asked Carter. "And what can you offer me?"

"If you find that the picture meets with your approval, you will pay the fifty thousand, plus ten thousand more for the trial period. For having it in your home before purchase. And you will pay the money by transferring it to the accounts of certain charities which I shall name."

"For the trial period!" said Carter. "Ten thousand for what amounts to *rent!* Who do you think you are, Ramirez?"

Ramirez drew himself up and spoke with cold dignity.

"I am Ramirez. And I have made this picture. I have put my life and soul into it. I am an artist. I do not think I ask too much."

"Why are you so upset, Keneth?" Maria asked. She finally turned away from the picture and looked at her husband with a quizzical smile. "You don't stand to lose anything unless you really consider the picture worth sixty thousand."

"All right!" Carter said. The blood pounded in his temples, and he felt a second fury at not understanding why he was angry. "All right, but don't be too confident about getting rich quick, Ramirez."

"Keneth!" Maria said sharply. "Stop playing the fool. You have manners, use them. There's no need for you to be so crude over a little money."

"Don't talk to me that way!" Carter shouted, turning on her.

"Bring the painting," Maria said. She stood, walked to the door, drew on her gloves and left.

She is so cool and poised, thought Carter. So calm. So unconcerned. He hated her when she was like that. Damn it, she had no right to be so far above him!

"The call," said Ramirez.

Suddenly Carter didn't feel angry any more. The artist was just another business acquaintance. It was only a routine matter to go with the man to the visiscreen, call the archives, and notify the public records of the alterations in their contract.

That done he went to the painting and stared at it hard, trying to sense what he could not see, a thing that made him uneasy.

"Give me a hand with it, will you, Ramirez," Carter said.

"You won't need help."

Carter lifted it off the hook and found it much lighter than he expected. The frame was cherry veneer over plastic. The back was a smooth white plastic. It didn't weigh more than ten pounds. He put it under his arm and glanced down. There were thin white cirrus clouds moving across the azure sky. He went to the door.

"One last thing," he said, turning to Ramirez. "All that money: assuming you get it, are all those charities for real? Are you really giving it away?"

"Yes."

"Why? You could buy another canyon for yourself."

"No, Mr. Carter," Ramirez smiled, "there is no other canyon. I give the money away because there is nothing left for me to buy with it. The extra money which I ask is only to reimburse me for extra expenses. Goodbye."

Carter wanted to say something, but he didn't know what. He pulled the picture tight under his arm and left.

It didn't have Carter completely in control yet. Not the way it had Maria. It was still a recreation for him, not a preoccupation. If he went through the living room it was because he wanted too. He could have gone through the kitchen. Or, on sunny days, he could have gone the long way around, via the terrace.

It was just that he wanted to see the picture, hanging on the wall next to the French windows.

The heavy maroon drapes were drawn and it was dark, so he switched on a table lamp to get to the front door of the apartment. The living room was littered. Maria had refused a maid years ago, but now. . . .

Maria sat on a divan, turned so that she could watch the picture. She wore a blue silk dressing gown, and her silvery hair was undone.

"How's the weather?" Carter asked.

"It's raining. The river is all muddy," she said.

Carter didn't know how long she'd been up watching. Probably since sunrise. A sunrise in a small Mexican canyon.

"The water is rising again," she said. "I don't think it will be as bad this time as it was last week. I don't think his garden will be ruined after all."

There was a man in the picture now. He was too far away to be seen clearly, but they knew it was Ramirez. Carter had been furious when he appeared, two days after they brought the picture home. But Maria refused to let him return it. She found the miniature artist fascinating, like a tiny perfect doll. She enjoyed playing with dolls of flesh and blood, whether they were characters in a play or the people she met.

Carter got the morning paper and glanced through it.

"Do you think he'll find a way out?" he asked, standing near the table light so that he could read without disturbing her.

"There must be another way out of the canyon," Maria said firmly. "Behind the place where he stood when he made the picture. Don't you see, we're on a gentle rise from this view. There must be trees and a path. Somewhere out of sight. If only he hadn't cast that boat adrift!"

"Hmmm. This weather report," said Carter. "There is going to be some flooding. The men who've been evacuating people from those little side canyons have been turned back by rapid water. That means we can't go ahead with the dam until the flooding is over."

"What's going to cause the flood if not your dam?" Maria asked. There was interest in her voice, but her eyes stayed fixed on the picture.

"Mountain snows. More than usual this winter."

"I hope," said Maria, "that our canyon doesn't flood."

"Maria, it's only a picture," said Carter. "It works by random breakdown in the power source. Remember what Ramirez said? If there is a flood in the picture, it won't have anything to do with real snow."

"Yes," she said.

But Carter saw that she wasn't listening to him. She was watching a tiny Ramirez come out of the house wrapped in his poncho and disappear around the corner. There was a goat on the other side of the house, probably kept in a shed. It fed sometimes where they could see it.

When the food in the freezer was nearly gone, Maria wakened from her trance for a while and went shopping. She grudged the time, but it was necessary. That left Carter alone in the apartment with the picture.

About noon (in the picture) Ramirez was in the garden hoeing a row of some low, broad-leafed green plants. Suddenly he staggered back and struck with his hoe at something on the ground. Again and again he struck. After a while he stopped and leaned on his hoe, heavily. Then he stood straight and, using the hoe as a staff, limped back to the house.

Had he been bitten by a snake? Rattlers, maybe coral snakes; what else did they have in Mexico? Scorpions! He might have been stung by a scorpion. And there, in a valley isolated from all the world, without medical help, he might die painfully of the wound.

Suddenly Carter jumped up and turned away from the picture. Damn fool! he thought. To find himself worried over a *picture*. As if he were watching a real man. It

was as foolish as being concerned for a character in a play.

By two o'clock he was sitting on the sofa again, watching for signs of life in the tiny cabin. He had reasoned the matter to his own satisfaction. If it was foolish to feel concern for a character in a play, it was also entertaining. And that was the purpose of a play. It failed miserably if you didn't become involved. It was a temporary concern, true, but invaluable as a cathartic. There was nothing ridiculous about feeling for the figure in his picture, just as a man would have to be made of stone or bronze himself not to feel the pathos in the faces of Rodin's *Burghers of Calais*, or Epstein's *Social Justice*.

And there was another advantage to the picture, aside from its entertainment value. Maria spent almost all of her time in front of it, silently watching. She was not always at his side now. When people came to visit, she was not nearly so charming. Not so ready to show them that he had married someone too good for him. To show him up in public and private on every occasion. She was less concerned now with running his life for him. That alone was worth sixty thousand.

When Maria came home he told her about the incident with the snake . . . scorpion . . . whatever it was. She made coffee and they both sat on the sofa speculating until midnight. A flickering kerosene light came on in the cabin, telling them that Ramirez was still alive, and they went to bed.

"Hello Keneth," said Elspeth Prior. "Where's this marvelous picture of yours? I don't believe in it, so you'll have to show me." She walked past him into the apartment, taking off her coat and dropping it over Jake Prior's waiting arm. Carter closed the door and followed them past the foyer fountain into the darkened living room. Maria sat in front of the picture. Elspeth took a moment to let her eyes adjust to the darkness, then went to Maria's side. Jake took the coat to the closet, hung it, then found his way to the bar. His shaking hands mixed a whiskey with a little water, then he too went to the picture. Carter stood back from them, watching the people as much as the picture.

"Nice view," said Jake.

"You're drunk again," said Elspeth, matter-of-factly.

Carter shook his head slowly. Jake was pathetic. He was a good businessman, but Elspeth had ruined him as a man. Jake had grown worse since he had discovered that he couldn't make a living without Elspeth's knowledge of electronics, and since he had found out that whiskey (or gin, or brandy, or rum) made it possible to live with Elspeth. Carter went to the blinds and opened them. A

grey rain pattered on the stone floor of the terrace.

In the picture it was warm and sunny, and the people in the apartment gathered around its red and brown and purple light as if it were a small hearth, cheerful and blazing.

"It isn't possible," said Elspeth after studying the picture for a while. "In more ways than one. It just isn't possible. Look, Keneth, that's a molleton screen he's got there. You won't have heard about them yet. They're very new. And very expensive. They've been perfected to this point, but they still cost like hell. And even if he managed to get his hands on one, he couldn't build this thing in such a small space. Not to do what he claims."

"Explain," said Carter.

"Well," sail Elspeth," the only way you can get three-dimensional color is on a molleton screen. At least, moving three-dimensional color. Unless you rig up something with stereoptic glasses. We've been working on the problem for a long time, and the molleton screen is the first success we've had that's even vaguely promising. But it's still not feasible to use them in television because of the cost. As for the molecular breakdown business, it would take one hell of a big set-up to do it at all. Miles and miles of money just to do the research."

"Sixty thousand?" Carter asked.

"Wouldn't begin to finance it," said Elspeth. "I mean really big money. Millions. And then years of work. And no guarantee of getting it anytime soon. No, this isn't possible. Jake, give me that tester."

Jake went to the closet, fished around in his raincoat pocket, and came back with a small black instrument with dials and an aerial. Then he went to the bar for more whiskey.

Elspeth took the instrument, plugged in to a wall outlet, and moved it around the picture.

"Right. Here, a carrier beam," she said in triumph. "The image is being broadcast from a much bigger setup somewhere. You could do that. Make a television to receive the image. It would just cost you about forty thousand, with the screen and a broadcaster."

"That leaves you twenty thousand, plus whatever he might have saved, to build the molecular breakdown device," said Certer. "He couldn't do it."

Jake had been listening to the conversation intently. "Why," he said, "couldn't he just set up a broadcasting camera at the point we're looking from? Just a television image of what's really happening there in the canyon."

"We thought of that," said Carter. "We thought he might have tried something of that sort. But we weren't about to confront him openly. If he did that he'd have a

reason. But we didn't discount the possibility.

"My dam was finished a while back, and the flood gates were closed. We sat here and watched this picture to see if the canyon would fill with water while the real canyon *must* be filling with water. We even had a copter ready to go and get him, by force if necessary, if that turned out to be the case. But you can see that the canyon isn't full of water, and my dam is full enough now that the real canyon is well inundated."

"Why, Keneth," said Elspeth coyly, "you must be going soft. Planning a daring last minute rescue." She laughed shrilly.

Carter felt a flush of anger. "Not soft," he said, "but if somebody thinks he's going to pull the wool over my eyes, he'd better be ready to pay for it. I'd have had him jailed for fraud. I think I can probably do that anyway, if you're right about the mechanism. He told us the thing was completely self-contained."

"Look!" cried Maria.

The rest of them had let their eyes wander from the picture while they conversed. Now they turned back. Carter stepped quickly to the window and drew the blinds.

Ramirez was coming toward them up the gentle slope. It was difficult for him. He'd made himself a crutch, but it must have been difficult to use it, or to stand at all. His leg was ruined. They could see it, swollen and purple, with red ugly lines running up it from the ankle. He'd cut away the leg of his dungarees and attempted to treat the wound. A tourniquet was tied tightly around the thigh.

"Gangrene . . . " whispered Jake.

"He must have got the poison out, but . . ." said Carter, under his breath.

It took him a long time to come close. There was no real path, and the hillside was rocky. They were glad when he was close enough for his leg to be out of sight. By then they could see his face clearly.

It was the first time they had seen him so close. He was wild now. And much older. There was great pain in his face, and the muscles moved involuntarily, making his eye or cheek twitch while he tried to hold his features calm and impassive.

He peered out of the picture now, staring at them. But it was not at them, it was around them, or beyond them, or through them. They knew he couldn't see them. Carefully he reached inside his shirt and brought out a piece of folded cardboard. It was white, shining white, probably some special stuff used for painting or illustration. It gleamed. He laboriously unfolded it, balancing against the crutch and his one good leg. They tried to catch the writing before he held it up, but he

seemed to divine their intention, and, grinning, dallied in so doing.

It was a hideous smile, one wracked with pain, with loathing, which he turned on them. They shuddered as he grinned out of the picture for a long, endless time. But the eyes, the drunken eyes set in leathery wrinkled sockets, held also a kind of compassion that was beyond their understanding. It was close to hatred, close to love, neither, and full of understanding and pity. It was intolerable.

He held up the shining white cardboard. It was so clearly before them that they could see every wrinkle of the folds. In large, elaborately scrolled letters it read: THE WATER IS RISING.

Ramirez dropped the cardboard, turned, and hobbled back to his house. A moment later they saw the goat run, without her tether, down to the garden. She began to eat the vegetables. Ramirez went inside.

They watched in mute fascination as the brown muddy flank of the river lapped delicately among the green growing things that were closest to the beach.

It was over now. Carter sat with his head in his hands and tried very hard to want a drink. To want his brain to be numb to the picture on the wall. But it was no good. The phone had to ring, soon, and that would be too much, but he had to see it through.

The brown muddy water had crept slowly out of its course, rising to the door of Ramirez's hut, swirling up around the windows and into them. The goat was gone, seeking higher ground. Carter hoped that it had escaped.

About that time he remembered making a call and sending out a helicopter to make sure the canyon really was flooded. It was, and now not even a jagged rock stuck out of the water to mark the place where its walls had once risen. He'd tried to resist, after that. But it was no good. The water moved up the hill, the canyon filling, and then over the rim of the picture. Slowly the frame was filled with roiling brown water.

Night came to both places, and the bright, sharp stars in Mexico were washed away and drowned as surely as were the rain shrouded stars outside his apartment. Carter called the dam authority and had divers sent to the place where the canyon was submerged. Once in a while he saw some strange fish come at him in the picture frame. Now he waited for the call.

"I should have expected some piece of cheap melodrama!" he exploded. "Some attempt to get back at me. This is all just a trick, you know. Just something to hurt me. But he's wrong if he thinks I'm going to pay sixty thousand for a lousy trick. I'm not stupid."

Jake started for the bar again. Elspeth wanted to leave, but Car-

ter wouldn't let her. He'd kept her here all night, and he'd keep her all day if he wanted. She needed his money, like all the other people who ever visited the Carters. Jake came back with a drink and Elspeth took it from him and drank it.

The phone rang.

Maria rose from the sofa and walked to the phone. She picked up the receiver, said "Hello?" and listened for a long time.

"It's the dam authority," she said, relating what she heard, piece by piece. "They're back. The divers. They found the house in the canyon. Up the hill there was a laboratory. Quite large. Some sort of camera equipment built into one wall, with multiple lenses. The whole place was blown out, of course. The water short circuited everything. There was a broadcasting tower."

Carter found a glass of whiskey in his hand. He gulped it down.

"They went into the hut. There was a body there. Been there a week or more, at least since the place was flooded. The fish have been at it. But one leg was in specially bad shape. And he'd apparently put a bullet through his head."

"Shut up!" Carter shouted. He threw the empty shot glass away from himself. It smashed through the glass of the terrace door and shattered outside in the raining night.

Maria said goodbye and hung up the receiver.

Light flashed from the picture. The water boiled and eddied. There was another flash, then nothing. The area within the frame cleared. Colorless, empty. Elspeth switched on a light.

Not empty. Inside were the small twisted wires of particle accelerators, a darkened jumble of wiring and components.

"How did he do it?" Carter asked.

Elspeth thought a moment. With a long sigh Jake sat down in an easy chair and passed out. Elspeth turned to Carter.

"I'll venture a professional guess, nothing more," she said. "This thing was apparently battery powered. When transmission stopped, a code relay shut it off. The way it is now."

"But transmission stopped last week, or two weeks ago," said Carter.

"From the tower in his canyon, yes," said Elspeth. "But not from the transmitter where the signal activating the picture came from. He probably broadcast his signal, had it taped, then re-broadcast a couple of weeks after it happened. It can be done automatically. And it's quite feasible. With twenty thousand he could afford to do it, though I don't see why he would."

"He was an artist," said Maria.

"An artist, hell!" said Carter. "A damned fool. Did he actually think

I'd pay off just because he was dead? That wasn't the bargain I made."

"Just what *was* the bargain you made?" Maria asked. She was very cool, very distant from him. Carter felt a chill as he answered her.

"That I would consider *this* . . ." he gestured contemptuously at the blank frame ". . . a consummate work of art. That, or I wouldn't have to pay for it. And there it sits. Not even a picture. Just a broadcast of real things."

"He knew what he was doing," said Maria quietly. "Oh, Keneth, he knew what he was doing. But it wasn't making a picture. And you haven't even seen it yet."

"What are you talking about?" Carter asked uneasily.

"I'm an artist too, Keneth. I'm an actress, remember? Or have you forgotten that I lead a life of my own, apart from being your wife? And acting is also an art, like painting. I think Ramirez meant the picture for me. You see, it was a *triumph* of the dramatic art. A superb tragedy, Keneth, with you and me and the rest of the world participating. All written, directed, guided, and controlled by Ramirez. And he played the lead as well. You know, we could have rescued him at any time, had we but known.

"Had we but known! Oh, how sweet and ironic those words sound. How many times have they rung down the boards? But no mind! He knew that you'd build your dam and ruin his canyon no matter what he did. So, if this tragedy had to happen to him, he at least could make it worth while. Not merely random and unreasoning ugliness, but beautiful and well ordered tragedy. The very highest kind of art. Real living art. The manipulation of life itself into the artistic mold. An *engineered* tragedy, Keneth, and a great one. Something with common experience for the artist and his audience. Something new and beautiful and completely our own. That's what you wanted from him, wasn't it, Keneth? Isn't that what you wanted?"

She stood very tall and she was breathing hard. Her eyes glittered. One lovely hand rested on the couch, the other fell beside her.

"Write the cheque, Keneth," she said. "Go on and write the cheque. It's worth it. Give the money to those charities. He probably would have given it to them in his will. He wasn't poor, you know. He was a very great artist. People loved his paintings. It was well worth sixty thousand. The show was well worth the price, Keneth. Go on and write the cheque. Damn you, Goddamn you, *write it!*"

Maria was crying.

Carter looked at her, judged the effect of the incident upon her, compared it with the sum he'd have to pay. He took out his cheque-book. ◄

Though Protest Movements are now a way of life, that is not to say that we are rapidly learning to live with or learn much from them. There is still a reluctance to admit to the power and efficiency of such extreme emotional demonstrations as the Buddhist immolations in Vietnam, even though they have toppled one regime and seriously threatened another. Brian Aldiss's story deals with the future, when man has spanned interstellar distances, but its implications are clearly for the present.

BURNING QUESTION

by Brian W. Aldiss

CAPTAIN ZACHARY TEBBUTT came slowly down the alien street. Although he was in a hurry to get back to base, he had picked up enough alien savvy to know that for the cardards, slowness meant dignity—and a man needed dignity on Turek, where the smallest adult cardard topped a spindly six feet six.

Many of the cardards stared at Tebbutt, although, the Earth base having been established nearby for two years, they could hardly find him strange any more. Their little round eyes, fringed with facial fur, told him nothing. More than their stares, he was interested in the burdens of wood many of them carried, going in his direction.

The village ran downhill from an afforested mountain, stopping abruptly where the plain began, with a neatness characteristic of the cardards. In the last two years, the village had grown enormously, as aliens from all over Turek came here to look at and study the Earthmen, but no shanty towns had arisen: just more neat spindly houses.

Confronting the village, standing foursquare on the edge of the plain, was the base. Its main block, the administrative building, was massive, uncompromising, built of prefabcrete sections, the only example of terrestrial architecture on the planet. In front of it, the cardards were building a pile of logs and sticks.

Avoiding the activity around the pile, Tebbutt marched slowly to the barrier and showed his pass. As

the sergeant signalled for the boom to raise, he asked Tebbutt, "They aren't going to try anything stupid like an attack on us, are they?"

"Nothing so simple," Tebbutt said curtly.

Beyond the guard room was the administrative block, and then the usual clutter of offices and temporary living quarters. Beyond them lay the dead flat plain, the flattest stretch of ground on Turek, fringed on its far side by mountains. On the plain stood two ships. One day, the plain would be a field where a hundred ships could comfortably land, a complete and mighty spaceport—if everything went according to plan. Earth's plan.

Tebbutt hardly gave the ships a glance. He turned into his office and sat down at his desk. For three minutes he sat without moving, gazing in thought at his typewriter. Then he pulled the machine toward him and fed it a report form. As he did so, the phone rang.

"Tebbutt, Intelligence," he said, flipping on.

The face of General Jackson's secretary appeared in the tank. "Zac, will you get over to General Jackson right away? He has the Vice-president with him, and they want to talk to you."

"Okay."

He forgot the report and rose at once. He had gone chilly with apprehension. Having a vague idea what was in store, he felt this was —he tried to keep the pretentious phrase from his mind, but it kept crawling back again; as he read the situation, this was one of the turning points for the human race. As he went across to the door, he tried to figure out a way to put that notion over to the visiting Vice-president.

Vice-president Kingsley Durranty wore the only grey flannel suit within fifty light-years, which was the distance back to Earth. He filled the suit well, a neat, solidly-built man with black eyebrows and a mass of greying hair, a man without mannerisms who was making history by being the most high-ranking politician ever to set foot on another planet than Earth. He looked restful, but was merely watchful.

General Sidney Jackson was a different type entirely, a bulky man who could give Durranty ten years, shiny and knobbly of face, thin of hair and generous of gesture, as if he was always ready to burst into action rather than words.

He was telling Durranty about Tebbutt. "He's a shrewd young man, a mite nervy, has done better than anyone towards getting some sort of rapport with the locals. Language difficulties, as you know, are immense, but Tebbutt's evolved a sort of pidgin Turek he uses with them. I must warn you, though, that precisely because of that, he has a deal more sympathy with the

Turekians than the other personnel, so he'll be prejudiced."

"That's to be expected, I guess."

The general stuck out a hand, palm upwards. "Sympathy is always interpreted as weakness. I have a hunch Tebbutt's sympathy has encouraged Badinki, this native leader who's giving us the trouble."

"Yes. You've met Badinki?"

"Who knows? All Turekians look alike to me."

Shouts outside interrupted them. Jackson glanced out the window and then beckoned the Vice-president over. Like the men down in the yard, they stared skyward. Three dragons were flying over.

Their bodies were long and serpentine, covered with yellow scales, their wings were leathery, yellow striped with green, and had a wingspan of at least thirty feet. They moved through the sky in great jerks, as if their mighty wings were inexpertly used oars which hauled them through the air.

"Local fauna," Jackson said. "Damned things are always flying over. The boys in the laser tower will get them."

The dragons had swooped over the two grounded ships. Now they headed in the direction of the base buildings and the alien village, gaining height as they went. They were almost overhead when the laser gun scored a hit. One of the dragons faltered as its wing blackened, smoked, and burst into flame. It writhed in the sky like some great wounded serpent, losing altitude rapidly. Its two companions swooped about it and then flew away fast while they were still unscathed. Captain Zachary Tebbutt was admitted to the general's office before the dying creature had hit the ground.

When Jackson had introduced Tebbutt to the Vice-president, he poured drinks all round and asked, "Is the suicide still planned for tomorrow?"

"They are still going ahead with the preparations, building the pyre," Tebbutt said. "Badinki will burn himself at noon unless we guarantee to leave this plain."

"If they are inflexible, we are equally inflexible," Durranty said. "Captain Tebbutt, the General tells me you have some regard for these people, but we cannot afford to be sentimental, and the terrestrial attitude must be made quite clear to them. It is fortunate that I happen to be here while this trouble is brewing."

"It's no coincidence, sir. Tomorrow's immolation is arranged for your benefit."

The Vice-president gave no indication he had heard the reply, nor did he stir. He said, "I will just run over the general situation as it presents itself to our government on Earth.

"Manned interstellar travel is now eleven years old. In this pe-

riod, we have investigated huge areas of space. The cost of this investigation has been—I use the term in all seriousness—astronomical. We have received almost nothing back in the way of direct return. The Soviet bloc is in roughly the same serious position; in view of the continuing Russian-Chinese struggle over Procyon V, we may be glad that they are slightly worse off than we are.

"In the considerable area of space our ships and mariners have investigated, we have discovered seven habitable planets. Only seven in eleven years. Three of those seven can only be regarded as just marginally habitable. Up until a year ago, Turek—or Beta Hydri to give it its old name—was by far our best find. Now, as you know, the three New Planets have been discovered beyond Turek, each well suited to human life and none occupied by any dominant species, as far as the preliminary reports go.

"This new discovery puts us ahead of the Soviets. It also makes Turek a very desirable stopover point. We must have this base here, and develop it to the limits of our ability. The rest of the planet the locals can keep.

"Instead of being at the end of a neck of the woods, Turek is going to be right on the main highway to the stars. Things have been quiet here, but that has to change, and my mission is to make an official treaty with the Turekians."

"The cardards," Tebbutt said.

"Eh?"

"The locals call the planet *Turek* and themselves *cardards,* analogously with Earth and humans."

"You'll excuse me if, like your general, I call them Turekians, analogously with Earth and Earthlings. I wish to make the treaty with the Turekian leader, Badinki, and I can't do that if he burns himself, can I?"

Tebbutt said, "You will be unable to make any treaty with any of them, Mr. Vice-president, until you comply with their simple request."

General Jackson stood up and said, "Zac, we aren't open to simple requests, and you know it. There's too much involved. The United Free Nations can't trade with these Stone Age scarecrows—this Badinki is so keen to set himself alight because they've just discovered fire these last few centuries. It's a novelty! Don't lose your sense of proportion!"

"When we were putting up the defense perimeter two years ago, the word was that we were supposed to be protecting the cardards!"

"We can't protect them from setting fire to themselves," Durranty said, "and frankly we don't much mind if one or two of them do just that. We can't afford to mind."

"Okay. But there are people on Earth who are going to mind."

"I'm aware that owing to a journalistic scoop a year ago, the press

got hold of Badinki's name, and there has been some favorable publicity for him—but I came without journalists, Captain Tebbutt, and the public is not going to know if he dies."

"Censorship!"

"It is merely that his death is unimportant." Without moving, Durranty sat and looked at the intelligence officer, no hostility or emotion of any kind on his face. Tebbutt stared back challengingly, and finally Durranty asked, "Why aren't you with us, Captain? The issue's simple enough. What's on your mind? Are you trying to turn all this into some sort of ethical problem?"

"I simply afraid, sir."

"Then the Vice-president and I will be brave for you," General Jackson said. He laughed.

"What's this simple request you say the Turekians are making?" Durranty asked Tebbutt.

Not liking to be ignored, the General answered sharply, "I informed you, sir, that the locals demanded that we leave this site and shift to a smaller and similar one on the other side of the planet. We can't do it."

"I hope you told the Vice-president why the locals are asking—not *demanding*—that we leave here, and why they are offering us a similar site elsewhere." Tebbutt turned to Durranty. "All this plain is a holy place to them, sir—the holy spot of the planet. We destroyed a modest temple on our first landing. They are simply asking—"

"Sure, we knocked down a goddamned stone cairn," Jackson said. "Who ever heard of a sacred *plain*? Hills, yes, or maybe a grove, but an eighty-mile square *plain*? We can't mess around with all their nonsense, Tebbutt, and you know it!"

"You must appreciate that there are political and economic factors which make it impossible to move the base, even if the situation were more urgent than this appears to be," Durranty said. "We just need them to sign the treaty so that we can get moving on the spaceport as fast as possible."

Tebbutt said nothing. After a moment, Jackson started loudly to say something, but the Vice-president cut him off with a gesture.

"Captain Tebbutt, I should like to go down and examine the body of the dragon which was shot down. Would you be good enough to accompany me?"

General Jackson followed them as far as the door; then he turned back into his room, heading toward the whisky bottle.

Durranty started talking before they were at ground level.

"You may be quite an important figure in this matter, which we want to get through as expeditiously as possible. I'd like to hear what's on your mind. Perhaps you

will talk more freely without your superior officer present."

"What is on my mind is unimportant, sir. It's the cardards who are important—and not only in their own right but because the way we treat them is going to be the signal for the way the human race treats any other alien races it may stumble across."

"Do you think I don't know that? I've probably had a better chance to study the matter with detachment than you. I appreciate that we may start a global uprising of the locals, or Badinki may, but we must face the situation with courage."

Tebbutt stopped still. "Begging your pardon, sir, but I think it would be better to face it with cowardice."

The Vice-president stopped and contemplated him, concentrating more on his mouth than his eyes, as if wondering what it had said.

"We need courage, Captain, or we may be swept off the planet. We can't afford to climb down in this question of shifting base. We certainly can't afford to show ourselves intimidated by Badinki's threat to set himself alight. That would be cowardice."

"Evolution favors the coward."

"Are you afraid, Captain?"

"Sir, I am afraid. Not so much for myself as for humanity in general. We're going to spread out to the stars. It's bad enough that we go as two partly warring camps, always shackled by this hostility to the Soviets. But let's at least honor the things we are supposed to honor. Let's not desecrate the cardards' holy place for the sake of a few lousy million credits, which is all it would cost to shift the base round the planet, when interstellar affairs cost us a megacredit a minute. If Badinki dies a martyr's death, let's not hush it up and go on pretending we're just dealing with a bunch of furry animals. Let's get frightened about the situation we've created and do our best to set it right, rather than huff and puff and brazen it out and steamroller the opposition."

"That is a highly inaccurate summary of my position, young man."

"I didn't mean it to be that, sir."

At the double-edged remark, Durranty raised one eyebrow and permitted himself a momentary smile.

Round the dragon, a bunch of off-duty staff was gathered.

The beast looked pathetic in death, its unburnt wing broken under it as if it huddled for sleep on an old tarpaulin. Its tail ended in a pair of indeterminate spikes. Over its one great multi-faceted eye, a thick grey membrane had slid. A cook with a sharp knife was trying to hack its head off, laughing and calling to his mates as he did so.

"Turekian livestock isn't always as unlovely as this," Tebbutt said.

"I could drive you into the village, sir, if you'd like, to see how the people live at first hand."

"I will drive through the village with an escort, thank you, when affairs have quieted down."

"Very well, sir. Then if you have no further use for me, I will leave you."

"You won't!" For the first time, Durranty spoke sharply. "You seem to pride yourself on speaking out, but I notice you've said nothing so far worth saying. I need exercise after the confinement of the ship —walk part way across the field with me and we will talk privately, and you can come to the point, if you have one."

Tebbutt looked back. Two uniformed men of the Vice-president's guard were standing at a safe distance. He guessed that Durranty was in constant radio contact with them, so that their every word was relayed and recorded. Since he was already in deep trouble, he fell in with the older man's step without protest, and they started to walk away from the cluster of man-made buildings. Durranty's neutral attitude gave him no comfort.

"To begin with—what did you mean by saying evolution favors the coward?" Durranty asked.

"A good point to begin with, if I may say so, sir; since you must be better briefed on the situation here than I am, there's no point in saying anything about the facts, merely in the policy to fit the facts. I think cowardice would be the soundest policy. We'd be wise to be alarmed."

Seeing that the Vice-president was determined to say nothing, Tebbutt continued, "The state that continued longest in history was Byzantium—a thousand years, wasn't it? Yet of all states, Byzantium's geographical position was the one most impossible to defend. For most of the time they were surrounded by enemies, for much of the time they were almost incapable of defending themselves. They took the coward's way out—they bought off their enemies, with land or flattering treaties or gold; they hesitated and intrigued and were generally craven—and flourished for ten centuries.

"There was another state that proclaimed it was going to last as long—the Third Reich. Hitler knew no fear. He was too crazy for caution. He took on all comers. His so-called empire lasted just twelve years. Evolution favors the herbivores, the vegetarians, the placid dinosaurs who saw out millions of years."

"Since we are not dinosaurs, we can leave them out of the argument. History is made by the brave. It echoes with the names of Leonidas, Genghis Khan, Napoleon, Nelson; whereas the cowards are dead and forgotten."

"Your choices are in the main extremely unfortunate, sir. Those men may have left their marks—

scars, more likely—but they never made so big a mark as the shirker who invented the wheel because he couldn't bear pushing the sled, or the weakling who was so useless in a bare-fist fight he had to develop the sword, or the squeamish idiot who roasted his joint over the camp fire because he couldn't face the taste of raw meat."

"You're not making points in a college debate, Captain. Whether we are cowards or heroes, we have our duty to do, and there's an end to it."

"Okay, sir, the brave go out and die like heroes. The cowards stay home and breed in their warm beds. If we keep at it long enough, thank heaven, all the combative streak may be bred out of the human race."

"You amuse me! Are you claiming bravery is anti-survival?"

"It may be that way in future, sir, whatever it was in the past. Now may be the turning point. If we do our duty, as you call it, here on Turek, we'll trample down the rights of these people, and we don't know what trend of events we set in motion by so doing. We aren't nineteenth-century European imperialists in some backwater of Africa! We can't afford to turn a whole planet against us."

"You exaggerate."

"On the contrary, I underestimate. We have been here only two years—twenty-three months, in fact, which is rather less by Earth-time, and tomorrow they are going to set up their first martyr against us. What are they going to be like in a hundred years? What's mankind's relationship going to be with other intelligent races he comes up against? *You* can set a pattern, sir, for good or ill! Let us be honorably defeated by Badinki with his passive resistance. Let's start anew, let's fear something, let's do the cowardly thing, let's clear off to the other side of the planet and leave them in peace with this plain and their poor little ruined cairn."

Durranty stopped and said, "I think we have walked far enough. You are neurotic, Captain. I will speak to General Jackson about you and see that you are relieved of your duties. If the destiny of the Western World had been entrusted to men like you a century ago, the Western World would have crumbled in 1948-49, at the time of the Berlin air lift, the first act of defiance against Soviet aggression."

"You can't dismiss my whole argument just by calling me neurotic."

Now the Vice-president was signalling to the two uniformed men, who moved forward smartly. For a moment, Durranty and Tebbutt were alone, the alien village and its mountains before them now that they had turned round, the whole blank mystery of the new planet behind them.

"I dismiss your argument, such as it is, because it is easier to let

Badinki burn tomorrow than shift our base one yard. There is no difficulty in keeping news of his act from Earth—we are far more anxious about reactions among neutrals there than about anything the Turekians can do here."

The guards came up. Durranty nodded to them. Before walking off between them, Durranty turned and nodded to Tebbutt, his manner as neutral as when they had met.

Tebbutt was left standing alone. For a moment he stood there, then marched smartly toward the barrier, before anyone could block his pass.

From the rooftop of the spindly building, the crackling of the great bonfire could be clearly heard. Only once had Tebbutt peered over the up-curling eave, when the first shavings had been lit with torches; he had not dared to look again. He crouched on the wooden tiles, listening to the growing murmur of the crowd below. It would be soon now.

He was shaking like a jelly—amazingly, for he and Badinki were stiff with cold from exposure—they had hidden here all night while the base troops searched the village for him.

"Have not any fear, Zachary. All will be end in a hand span in time," Badinki said, resting his heavily furred hand on Tebbutt's arm.

"In one hand span in time is thousand deaths."

"They take us in cart, push into flame, we make great jump into flame—is ended. Bad but short!"

Through his chattering teeth, he said, "Badinki, I not understand. All many time we lie here, you talk only of little things, not big things."

"Big things always take care of themselves."

"But—you not have any fear, Badinki?"

The heavy dark head rolled in a cardardian affirmative. "Have much fear, Zachary—but great more big fear of shame by my people if now I not go in flame after boasting."

Tebbutt was feeling too sick to laugh. He said, giving up the struggle to maintain pidgin, "They may be able to hush up your death among them, but they can't hush up mine! My friends are going to see me die, and news of it will leak back to New York sooner or later. Another thing—I'm going to rob your death of all its shine, aren't I?"

"You feel too bad. You no have to do this, Zachary, never!"

He merely shook his head. He could see the trap door opening. Furry black heads and paws appeared, helping and pulling them down through the slender house. They were so big, the cardardians, so strange, so helpless, and at present so harmless. They got him and

Badinki into a sort of small covered wagon, and trundled it forward down the uneven street. Tebbutt and Badinki huddled together.

Tebbutt felt hysterical, had a sense of unreality, started to shout aloud.

"Cowards run away to fight another millenium! I'm the exception that proves the rule, Durranty! Are you watching, up on the watch tower, watching hard? Watch your defeat! Defeat's good for the human race! That's how we started, in defeat—when our ancestors were kicked out of the trees, the victors went on to become true apes, and there must be at least a thousand of 'em alive in zoos today! Long live defeat! Long live the losers!"

He broke off, coughing violently. The smoke from the pyre was choking.

One of the fascinating things about children is their sense of wonder about the simplest of objects and sounds. We envy them this, and sometimes we wonder if their sensitivity enables them to see where we cannot. This thought has given birth to many fantasy stories involving children, but few have been as convincing as this superior contribution by Sally Daniell.

AN EXTRAORDINARY CHILD

by Sally Daniell

THE FIRST TIME MATTHEW heard the peculiar language of the Strays, on a Wednesday, he didn't recognize it as speech. It was just a sound—searching, meaningless, deep without precise pitch like an old 78 rpm record playing on 33—no odder than many of the strange phenomena which daily touched his wounded senses. At the time he was on the vacant lot building a useless machine out of rusty wire and cans, and after a minute of pondering the funny noise he simply ignored it.

He could do that, turn things off or on as he pleased. Having been told so often enough, he knew he was an extraordinary child. He had been born with an injured brain which gave him unreliable reflexes, occasional tics and stutters and a generally violent appearance, difficulty with writing, an ugly limp and uncanny moments when the things going on about him made no sense. On the other hand, he read books from the high-school library and knew, although he rarely dared to say so, that his sensitivity to people's motives allowed him to understand their actions far better, a lot of the time, than they did themselves.

On Friday his mother sent him to the neighborhood store for a loaf of bread, and there he upset a pyramid of crackers. "Clumsy!" roared the clerk. "A boy your age oughta be able to see where he's going!" Mat-

thew tried to replace the scattered boxes but only managed to squash his bread.

Outside the store he had to pass the gang that hung out on that corner, spraying the pavement with butts and bottlecaps and accosting passersby. "Here comes the genius," one jeered. "What's with you, cat?" They began to kick pebbles and bottlecaps in his path, hoping to confuse and trip him. "Hey, sport, doing errands for your mama?"

"I guess so," Matthew muttered, lunging by.

"The genius *guesses* so," one snickered, and casually flipped a small stone toward Matthew's head, which barely missed as he retreated.

Matthew mused on this incident as he made his way over the vacant lot. Would he ever utter the magic combination that would put him in right with those hoods or silence them once and for all? He considered them less a threat than a nuisance; he knew they picked on him because he looked a cripple and thus must be a fool. He never thought, being only seven, that no act of his could possibly change his image in their eyes.

About halfway across the lot Matthew stopped and listened. There was that sound again. It seemed less random, more urgent than last time; the half-realized rhythm of it made him think of the small dark clouds which can appear from nowhere in a summer afternoon sky, swarming but not advancing, rent by a wind unfelt on earth. Now the heavy babble was all around him, quite close to the ground. It might really be something.

He lay the bread on a hummock of dry grass and squatted, listening hard. "Hey sport, watch out," he heard, and jerked with surprise. Quickly he looked in all directions; certainly the lot was deserted except for him. It contained only one possible hiding place. He rose and limped toward a sprawling heap of broken metal under a low clump of thorn bushes. "We're here, man. Do you read us?" Matthew peered wide-eyed at each dark recess in the labyrinth of brush and junk, wary but too curious to retreat. He decided nobody could get in such little places but asked just in case, "Who's there?" His words sounded squeaky above the constant rumble from which the voices he heard seemed to emerge.

"I said so, he's switched on."

"He's blind, man."

"Clue him in, then."

These voices melted into a chaos ridden with irregular pauses and then Matthew heard, "Okay sport, now try to see me. Are you concentrating? Concentrate!"

Matthew stood absolutely still, staring at the murmurous heap, straining with every nerve to plumb the void. Nothing happened. The lot stayed as empty as before. He turned and began to run

in an awkward hobble toward the hummock upon which he had left the bread loaf.

It was gone. He hunted along the dusty path, finding only a blue scrap of glass, some dirty paper shreds and a small clean-picked bone, probably a bird's. An enormous silence surrounded him. Had the sound really ceased or had he turned it off? Something unnatural was happening here, or had already happened, and he was helpless, unfit to comprehend or influence it. His scalp crept. He swung around for a last furtive inspection and clambered homeward as fast as his disobedient legs could carry him.

He found his mother in the kitchen rinsing a stack of cookie sheets. His mother! Matthew clutched at her printed apron, pressed his face against the sky-blue flowers, smelling cinnamon and soapsuds. "Where's that bread?" she asked, and shook him off.

Matthew stared at the floor, which was tan linoleum spattered with little colored dots to disguise stains. It was always gleaming anyway. "Answer me, young man!" she demanded.

Musing, he noticed even rows of cookies cooling on the counter behind her. "Well, in the vacant lot I put it down for a minute," he mumbled.

"Why in heaven's name did you do that?"

"I wanted to look at something. A bone."

"Oh, yes. And I suppose the bread walked away."

"I think some kids took it while my back was turned."

She harumphed and snapped a cupboard door shut. "You *think*!"

"I know." Candidly he met her frown. "Honestly, Mommy, that's the truth."

With a ringing clatter she dumped the cookie sheets into the stove drawer. "Those nasty kids. I hope you never do anything like that." She glared at him accusingly. "Now you'll have to go back for another loaf." Matthew looked sullen. "I can't help it, it's nearly lunchtime, and I can't make sandwiches without bread. Do you have the change?"

He put his hand into his shorts pocket and jangled coins.

"All right, get along then, foolish boy. Don't dawdle."

Slowly Matthew hobbled from the house and back the way he had come, except that he kept on the sidewalk to avoid the vacant lot.

During lunch Matthew was quiet and only nibbled around the edges of his sandwich. "What's the matter, genius," his big sister teased. "Something on your *mind?*" Their little brother Sidney giggled from his end of the kitchen table.

"Daddy doesn't want you to call me that name, remember?"

"Daddy's at work, so ha ha, smarty." Her hand darted across

the table and nipped Matthew's forearm. He lurched away, upsetting his plate. Tuna fish gobs and cucumber slices splattered to the floor.

"What's going on?" said his mother, coming up the cellar stairs with a pile of folded laundry. "Oh Matthew, not again!"

"Poppy made me spill, she pinched me."

"*Me?*" His sister used her trick of wide-open eyes to show innocent astonishment. "You're a liar!"

"Math-thew's a wi-ar," sang Sidney.

Matthew swung his head from side to side, hands on ears and eyes shut. "I don't know what's going to become of you!" snapped his mother. "You ought to do your coordination exercises more often. Have you done them today?"

"Not yet."

"Well, right after lunch, then. Are you children finished?"

"Yes, mother," said Poppy sedately, carrying her plate to the sink. "May I go over to Laura's now?"

"All right, Poppy. Matthew, if you're through could you finish that book for Sidney before his nap? I promised him, but I've got so much to do and this mess. . . ." Matthew slid from his chair and hurried away to find the book, not listening.

He read Sidney a story called "The Brownie who lived under a Lump of Coal" in a book from their grandmother's house. The ripped green binding might be a hundred years old; the stamped gilt and intricate illustrations inside were done in a sentimental, old-fashioned style. Sidney listened intently, curled on the couch, but when the story was over he said "There aren't any bwonies, or fairies either."

Matthew began staring at his little brother as though he weren't there. Sidney wriggled. "Don't wook so funny!" he demanded.

Matthew jerked from his trance and shut the book. "We're through reading, Mommy," he called. When she came into the room he said, "Can I take some cookies down to the ravine?"

"All right, but not too many. I want some left for your father tonight. Don't crumble in the kitchen." She picked up Sidney and kissed his ear. "Naptime, sweetheart."

Matthew limped to the kitchen and stuffed his pockets.

The ravine, a thickly wooded pocket between a street of small houses and the high school, had steep leaf-strewn banks and at the bottom, where water ran in the spring, a fragile, six-foot fern jungle. The soil was crumbly clay that smelled like mushrooms, good for molding little figures. Fallen trees exposed cool caves beneath their woven roots; one of these was Matthew's summer sanctuary. When-

ever he left it he hid the entrance with a mesh of sticks and leaves which was always intact when he returned again.

This time the leaves were scattered and the sticks fallen. He pushed them away and peered inside. Everything was in place—the seat he had dug out above a root, books in a plastic bag, his rubber-sheathed flashlight. "It must have been the wind," Matthew said aloud, "or maybe a squirrel." This was the only place he could talk to himself without being ridiculed. He had spent whole afternoons here constructing conversations with imaginary companions.

For a split second, so brief he hardly recognized it, Matthew heard the sound that had filled the vacant lot. Then someone said, "Sure, man, like it was the wind." There was laughter and other voices, some seeming to come from a distance.

"Where are you, *who* are you?" Matthew cried.

"Just look, you'll see us."

Matthew turned to the steep path he had taken down, wishing he could fly, outraged that even here, his one haven, he was the butt of stupid tricks. Suddenly, through a blur of tears, he began to notice things. He blinked and stared. Leaves crackled, low branches moved ever so slightly; from the ambiguous dance of light and shadow upon root and vine impossible forms uneasily emerged.

The first one Matthew got clearly in focus was decorated with a bright red beard, closely resembling a human being but barely higher than his knee. "Don't blow your cool, man," this small fellow said jauntily. "We're friends."

Matthew couldn't answer. Others appeared, none taller than the first, jabbering at him and smiling pleasantly. They wore pallid rumpled garments rather like Matthew's knitted pajamas, were barefoot and had, every one, a beard and magnificent mane of curly hair. Looking closely, he saw that their faces and shapes were each unique, like full-sized people. When he noticed their infinitesimal, pointed ears, his wariness dissolved. "You must be brownies!" he exclaimed.

At this they quieted and the red-bearded one came a step closer. "Brownies," he said, "are nowhere."

"Then that's not what you are?"

"Oh sure, we're the brownies. Also leprechauns, gnomes, elves and fairies, the whole shebang, that's us." He narrowed his long eyes and said softly, "Only we don't swing just for kicks like we used to. From now on it's all for real." His face relaxed. "We're the Strays."

"Oh, I haven't heard of you by that name," Matthew replied politely, staring. Their size intrigued him, but some quality of their manner intrigued him even more: their stances were careless

but alert, an intelligent sense of irony seemed to light their furry, ruffianish, good-natured faces. They made him want to laugh. He twisted about to make sure nobody was behind him and awkwardly lowered himself to an exposed root. Even seated he was taller than they, and for an instant he pretended he was their king enthroned. Then he said. "Why haven't I seen you before? Where do you live? Does anybody else know about you? Are you all men?"

"Hey, not so fast," laughed Redbeard. "Sure, we've got families. They're laying low until we figure what to do about you."

"Why do you have to do anything?" asked Matthew uneasily.

"Use your smarts, man. If your kind of people don't dig us, they can't find us, put us in cages, use us for toys or feed us to the cat. But you're reading us. You could be a threat, sport, if you're not on our side."

"Oh, I'm with you, man, all the way." The Stray's words fell without effort from Matthew's tongue. He giggled, delighted.

"You're coasting, cat," chuckled a yellow-maned Stray. "Now listen. You know why you haven't made our scene before?" Matthew shook his head. "Because you weren't switched on to the right wavelength. There might be a million kinds of waves, see, and your people keep on one; we've got ours. We were here all the time and so were you, but we weren't meeting. Because all those waves, the ones you know about like sound and light and the others that maybe end up nowhere because nobody can read them, they're always bouncing off us and back to your people, but they don't dig because they haven't got receivers, see?"

"I see," said Matthew breathlessly, fascinated.

"Now suddenly you've got a receiver. How's that?"

"I don't know. I was just turned off, I guess, like you said." He mused. "I bet you Strays are in our stories because other people like me have seen you."

"Yeah," said Redbeard, "they have. But not for centuries." He pondered Matthew. "I don't dig what's with you."

Matthew blushed and said slowly, "I'm not supposed to be right in the head. . . ." He heard a heavy rustle behind him and turned in time to see a large nondescript dog clawing and sliding down the path. When he looked back toward his new friends, they were gone.

The dog paused to sniff, wagged his tail and ambled off, brushing ferns. Where were the Strays? A sense of loss dazzled Matthew like electric shock, surprising him. But maybe they would come back. He sat motionless, watching the shifting forest light, and one by one they reappeared. They were sliding down the trunks of ash and maple and sinuous silver birch, scram-

bling from the lowest pine limbs. "You're good climbers," Matthew smiled, relieved.

"Sure," said a Stray rather sullenly. "How else would we survive? We may be invisible, but underfoot we're nowhere."

"Listen," said Redbeard, whom Matthew decided was some sort of leader, "How come you turned off like that? You lost us."

Matthew looked ashamed. "I guess it was the dog. With him around I didn't concentrate."

"You ought to learn, man. Keep tuned to both waves at once, like we do, and you could be a super-Stray." Several of the little men laughed. A few joined Redbeard and began urgently whispering; the rest murmured among themselves. Matthew wriggled uncomfortably and shifted from foot to foot.

Finally Redbeard separated himself from the group and came closer to Matthew than he had before. He squinted, grave and sly. "Listen, kid," he began softly. "I bet you didn't know there are at least as many Strays as human beings." Matthew looked surprised. "Only we get nothing but the dregs, see. We're burned, put up tight, everything blows at a giant's whim. Ever since ancient times we've had to hide and steal and play tricks for our dinners." He laughed suddenly, watching Matthew. "Really grips you, doesn't it? Now get this: our next trick is the last. After that one *we'll* hang out in the fancy pads and eat the hot chow. Now what do you say?"

Matthew pondered. "Is that what you meant by 'now it's all for real?' "

"Right. Come on, are you with us or not? Because with your size you could help."

Matthew hesitated. "Help with what?"

"Why, with this big trick. You'll go for it, any kid would. It'll be the craziest scene you ever made. You can't put us on, you know, you'd better join us." Matthew frowned, confused. Redbeard made a shrugging gesture of mock amazement, rounding his narrow eyes. "You mean you *don't* want to be a super-Stray?" he laughed.

Matthew smiled. It was just a game, of course he'd play. "All right, I'll join you," he said and instantly felt cheerful again.

"Good. But first you've got to learn how to tune in on them and us together."

"I bet I can. I'll practice."

The assembled Strays, until now very still, began moving; it was as if a breeze close to the ground were lightly brushing each ledge and niche, hollow and slope. Wherever Matthew looked he saw Strays by the hundreds; new ones must have been arriving all afternoon. It was incredible.

"Time to split," said Redbeard. "Keep quiet." And with the others he disappeared into the fern jungle.

After a while, when they failed to return, Matthew began to hear voices from back yards, doors slamming, cars starting. These everyday things sounded unnaturally loud as though they had grown more real during his fantastic meeting. But were the Strays real? He had not touched them nor had they left anything behind. He bent low over the trampled clay and could not find a footprint. So what if he had dreamed them up? That would make them absolutely his own. He could come here whenever he pleased and call them forth to keep him company.

But they were unlike any companions he had invented before. They had said unexpected things, seemed ominous at times as well as friendly. And indeed it might be better if they really existed. The ravine had never been his inviolate sanctuary. Other kids played here, they swarmed through in gangs, cats fought under the ledges, occasional adults ventured all the way to the bottom. There were dozens of paths trodden by countless feet. But with a community of elves behind him Matthew could ward off all intruders and literally rule the place. Of course he would not think of lording it over the Strays, who were clever, independent and grown-up besides. How deftly they had avoided the prowling dog! After centuries of skulking about the edges of human habitations they must have a million tricks up their sleeves. They were a lot like the fairies in Sidney's book, smart as whips, keen as whistles, frivolous as kittens. But they weren't to be envied, living as they did. Tomorrow he must bring them a present.

He remembered the cookies in his pockets, deciding to leave them behind as a token of good will. He reached in and found them broken. Would he insult the Strays by leaving crumbs on the ground like bread for birds? Matthew stood with his hands full, realizing that even now they might be watching. He stuffed his mouth, licked his palms. It would never do to condescend to such proud creatures. As he began hobbling up the path he understood who had stolen his loaf of bread. They couldn't be blamed.

At dinner that night Poppy told a tale about a blinking flying saucer. "Laura *swears* she saw it. She was walking home from the movie with her sister, and when they were passing the high school, they saw this thing in the sky! Laura thinks she should call the newspaper."

"What newspaper would believe a couple of stupid girls?" Matthew muttered. Poppy gave him a dirty look. "Well, what did it look like?" he asked. "Was it moving?"

"I won't tell *you*, smarty." She looked sweetly at her father. "What do you think, Daddy?"

"I'm inclined to agree with your brother," he smiled.

Poppy slammed down her fork. "I don't see why people are so unimaginative!" she wailed, looking tearful. "Nobody will believe anything they can't explain! I bet there *are* flying saucers, and lots of funny things you"—here she fixed her father with a scornful stare—"wouldn't guess at!"

Their parents laughed but Matthew said gravely, "Okay, Poppy, maybe I agree with you. Maybe I know about a funny thing that would make your hair stand on end."

"Oh sure, genius, you're good at making things up."

"Poppy!" snapped her father.

"I'm sorry, Daddy," she said meekly. "But he's always telling the wildest tales, you can't imagine. . . ."

"Those are things I *read,* stupid. If you dumb girls read more books you wouldn't have to invent flying saucers."

"All right, children," said their mother warningly.

Matthew asked for another helping of spanish rice. "He's a pig," said Poppy. "He's bigger around the middle than I am."

Matthew's mother put half a spoonful on his plate and said, "Poppy's not polite, but she's right."

Matthew did not hear her for he was musing on the Strays. They were no less incredible than Poppy's flying saucer, but there was more evidence for their reality than not. Maybe somebody should be told. "You can't put us on, better join us"—that had the ring of a battle cry; what did it mean? "Keep quiet," Redbeard had warned. And if he didn't? Involuntarily Matthew shuddered.

"Matthew, stop that!" Poppy cried.

He jerked to attention. "What did I do?" he asked, surprised.

"You were wagging your head again," replied his father sternly. "Matthew, please try to keep yourself under control. You could if you'd concentrate."

Poppy stood up and wailed, "He was making those *faces!*" Why do I have to have such a wierd brother?"

"What faces?" Matthew shouted, bewildered. "I was only thinking!" His lip trembled.

"There he goes again," screeched Poppy.

"Poppy, stop egging him on," said their mother. "You know it's like his limp, he can't help it."

Matthew turned away, silently weeping. Nobody had any hopes for him, not even his mother.

"All right, Matthew, now pull yourself together," said his father kindly. "Maybe you'll learn someday."

Matthew's mother pushed back her chair. "Poppy, would you go see if Sidney's in bed?" she said. changing the subject. "I thought I heard something upstairs. Come on, Matthew, I need help with the dishes." He trailed into the kitchen,

feeling awkward and weary, pulled a dish towel from the rack, and stood waiting for something to dry.

While his mother washed the dishes he watched her hands deftly moving through the suds, ducking underwater, rising with a steaming dish. He had stood like this a hundred times, watching those familiar, efficient hands; he began to make up a story in which they were bony octopi diving in a frothy sea.

"You're lagging," his mother said suddenly. "What's on your mind?"

Matthew lifted a wet plate from the rack and said timidly, "Mommy if I told you that I really do know about a strange thing like a flying saucer would you believe me?"

"Of course not, silly boy!" When he didn't answer, she added, "But I can see it's bothering you, so tell me anyway."

"I just wish you'd trust me," he mumbled. She shot him a look that meant get on with it so he said, "Well, in the ravine today I saw some little people." She laughed. "I *did,* they're a little over a foot high, and there are as many of them as. . . ."

"Matthew! Now stop that nonsense this second! You're just too old to fill your head with such crazy notions!"

His father ambled in, filling his pipe. "What's all this?" he asked pleasantly.

She shook suds from her hands and opened the drain, which made a sucking noise. "This child is telling me stories about a troop of fairies in the ravine. I think we'd better forbid him to play there if this. . . ."

"Don't take it too seriously," said his father. "He's still a child after all."

"Oh, Daddy, I'm telling the truth," Matthew cried forlornly, dropping the towel.

"All right, I'll finish drying; to bed with you," said his mother briskly. Matthew knew they would have a talk about him, and tomorrow the ravine would be off-limits.

"You'll be sorry," he whispered, and hobbled upstairs to his room.

A dark-haired Stray was seated on the rear windowsill, swinging his legs and humming to himself. Matthew saw that the screen behind him had been raised about six inches. "What's new?" said the little man, so gaily that Matthew felt instantly at ease. In answer he shrugged and smiled.

"Big doings, sport," the Stray announced. "Meet us in the ravine tomorrow morning."

"Okay," said Matthew. Then he heard a giggle and whirled to see Poppy in the doorway. For a second he felt dizzy, disoriented; he looked again at the windowsill and saw the Stray gleefully hopping. So he really could tune in on both at once! The Stray winked and slid under the screen, feet first, to the sloping roof outside. Matthew

wondered what he would use to get to the ground. Probably the drainpipe.

"What are you staring at?" Poppy asked.

"Nothing you could understand, stupid."

She made a face. "Actually, I came to say I'm sorry for being mean to you at dinner. But if this is what I get. . . ."

"Okay, Poppy, I'm glad you're sorry."

She stuck out her tongue and left. Matthew climbed into bed, planning to review all he knew of the Strays in order to decide what to do about them. But he fell immediately asleep, almost as if drugged.

He woke at sunrise, happily expectant, as if it were his birthday. The house was silent, the sun still below the crowns of the backyard trees. Trying hard to be quiet, he dressed and tiptoed down to the kitchen. He felt irresistibly drawn out-of-doors. Furtively he opened the refrigerator, found a new package of American cheese, and forced it into his back pocket. He would go to the ravine right away.

The streets lay deserted beneath an enormous, placid sky which every moment took on a deeper blue. Incandescent light fired the eastern side of houses, and the air was magically still. Matthew remembered a game he played when he was younger, in which he was the last person left on earth, every house was open to him, and every forbidden sweet upon the shelves of grocery stores, every toy, no longer the property of someone else, could be his for the taking.

At one corner a white dog, tied to a clothes-line, growled grumpily, stretched and lay down again. Farther on a cat scampered toward Matthew, crouched and madly flailed the air. Was he chasing a shadow? Suddenly the sun appeared, dazzling above the tall trees which ringed the ravine. Later it would be hot, but now everything was perfect, fresh and promising. Never before had Matthew been abroad so early.

He paused at the ravine's rocky lip and then started down where there was no path. Maybe nobody had trod exactly here ever before; he was an explorer making the discovery which would bring him fame. The descent, usually so difficult, was easy today. Not once did he clutch at branches for support, nor did he fall. He began to feel powerful, as if he were tapping a source of energy hidden within him until this moment.

Since the sun had not yet plumbed the leafy roof, the fern jungle looked befogged, still cloaked in last night's dusk. Matthew's cave was the same as usual. He balanced on the doorstep root and then daringly lept the last few feet to the floor of the ravine, landing upright and astonished.

He caught sight of the Strays at the same time that they noticed him. But none greeted him. There were at least as many as yesterday, seated in a great wheel-shaped throng upon roots and stones, beneath ferns and far up the leafy slopes. At the center of this congregation something lay upon a rock, and every Stray was facing it.

Matthew approached them timidly, his steps kindling the leaf-litter like explosions. He began to notice some of them draped in odd robes like monks' cowls. These must be the women! Immediately he saw tiny beardless ones here and there, with huge, solemn eyes —the children. They were exquisite; he would have liked to pick one up and play with it. "Good morning," he said softly, standing still.

The little faces turned toward him all at once, impassive. Matthew sensed the force of some incomprehensible emotion that gripped them all, infinitely stronger than his own newly-discovered power. He felt afraid and might have retreated had not a black-bearded Stray risen from beside the rock and shouted, "Keep him here, let him see! He's with us now!" Was this the jolly fellow who had sat on his windowsill last night? He was too far away to be recognizable. Matthew moved closer until he stood at the rim of the wheel, peered curiously toward the center.

When he understood what was there, he flinched and shuddered, shocked, nauseous. Upon the rock lay the red-bearded Stray—he was sure it was the same one—grotesquely broken, and beside him a bloodied child. The little man might have been, except for his posture, peacefully asleep. The child's eyes were wide open, blank as black marbles. Matthew sobbed, raising his arms to cover his face. A faint murmur rose from the crowd and someone said, "After all, he's just a kid." In Matthew's head, as though it were a hollow cube, echoed his father's voice: "He's still a child after all." He looked again at the little bodies. "How did this happen?" he whispered shakily.

It was Blackbeard who answered. "Kids on bicycles did it late last night. The small one blew his cool, got trapped; his father tried to help. It happens all the time."

Matthew blanched. Never again would he touch a bicycle or ride in a car. Then he remembered that he alone of everyone in the world might safely do these things. The thought cheered him slightly. He became aware of the cheese in his pocket, which he had planned to distribute as though to servants, and was ashamed.

"This is the last time!" shouted a little woman. Other voices rose uttering mad, incredible threats. Matthew turned bewildered to-

ward Blackbeard and saw him gesturing for silence.

"All right, let's move!" he shouted. "Watchers, stay; children get home. Reserves, to the caves! The rest of you, arm and tail your victim. Strike between sundown and midnight and then report to the caves for further instructions. Reserves will take over for those who don't make it back." He paused and went on more softly, but the great crowd was so still that his small voice rang clearly from slope to slope. "And keep in mind, sports, that it's all or nothing now. If just one of you messes up, we're nowhere." An unpleasant muttering followed this. Unexpectedly Blackbeard howled, raising both fists in the air. It was some sort of signal. Instantly they all took it up, and roaring, bellowing, screeching like lunatics, dispersed.

In no time at all the ravine was as it had always been except for Matthew, Blackbeard and a few women and children who remained near the rock. Blackbeard chuckled, darting Matthew a sly look. "Pretty good show," he grinned.

Matthew just gaped, fascinated and horrified by the small fellow's power. He had about him—they all did, in fact—a fresh, aggressive, warmth, a kind of aura. It was infectious; you had to deal with them in their manner or turn them off.

"Sure, man," Matthew finally answered, trying to lounge back, as the Stray did, without leaning against anything.

Blackbeard liked this. His funny face crinkled in amusement but abruptly sobered. "Listen, kid, you just keep quiet today and don't let on that you notice anything. I'll be seeing you tonight."

"But tonight, what about tonight?" cried Matthew.

"Don't put me on, man. You know what's happening tonight."

Instantly Matthew wanted not to know and realized that he had known, more or less, all along. From the minute he fled the vacant lot he had begun to understand. And was that only yesterday? Every hour since then the Strays' unspeakable objective had grown clearer to him, and now he teetered at the brink of total comprehension. All he needed to do was multiply the dead bodies on the rock by a thousand, ten thousand, by how much?

"But you're crazy, it couldn't work!" he burst out. "This is one little town! What would the rest of the world do to you afterward?"

"Man, we're world-wide," said the Stray serenely. "Didn't you know? We've got a communications set-up like a web, not a strand missing, we've been testing it for a year. It'll be clockwork." He paused. "Sure, some of your people will escape, but we'll get them later. For months each of our men has tailed one of yours; he

can get into every room; he can open any door. There's not a skeleton in a closet we haven't found." Matthew watched him laugh, watched him stuff his little hands into the pockets he hadn't noticed before, struck dumb.

"And of course we've got reserves," Blackbeard went on. "You didn't see anything blow when he got his." He jerked a thumb toward the corpses on the rock. "I'm his understudy."

Matthew nodded uncertainly. "But what about afterward?" he asked in a tiny voice.

"Tomorrow? Why, man, we'll just walk in and take over. Everybody knows his job. First, of course, we'll have to clean up the mess. . . ."

Matthew flinched. The Stray chuckled, said "See you around," and skipped away.

After a while Matthew wandered back past the rock. Redbeard and the child were clean; the women were digging a hole nearby with flimsy small shovels that looked meant for a sandbox. They nodded to him pleasantly, not a sign of grief on the small faces. The children were darting like rabbits through the ferns. Matthew took a last look around, feeling numb, and started slowly up the path.

When he entered the kitchen his mother was there, slicing oranges. He could hear water running upstairs and knew that if he'd gotten home ten minutes sooner nobody would have guessed at his escapade. As it was his mother bombarded him with angry questions, to which he hardly made reply. After she had finished scolding she said, "All right, young man, you'll spend the morning in your room. Maybe that will remind you to get permission first, the next time you feel like an adventure in the middle of the night."

He ate breakfast without uttering a word, even when Poppy kicked him under the table. After his father left for work, Matthew went upstairs and started on a new library book. While he read he heard Poppy giggling on the phone in the front hall, kids riding bicycles in the street, doors slamming, but he never lifted his eyes from the pages. Once Sidney scratched on his door like a kitten but Matthew ignored him.

Around noon his mother came in and said, "Didn't you hear me call you for lunch?"

"Not hungry," Matthew replied sullenly, turning a page.

"That's something new! Do you feel all right?"

"I don't know."

She left and returned with a thermometer. "There's a bug going around," she explained. "If you're getting it, I'd better know." Matthew closed his lips on the thermometer for a minute and then his mother read it, shook it down and said, "It's not high enough to mean

anything. Why don't you have a little nap."

He climbed on his bed and let her cover him with a quilt. After she left he began watching the window curtains, following the colored stripes from top to bottom, counting how many stripes, after they had disappeared behind a fold, he could find again. When he left off this game, his head throbbed and objects upon which he focussed wavered, bloomed and faded as though under water. Deciding he might really be sick, he curled up and closed his eyes.

He smelled food when he awoke and felt hungry. The sunlight of late afternoon streaked into his room, reminding him of morning. Off guard, he fell prey to the dark images he had warded off all day: the dead Strays, the howling mob, Blackbeard's tale. Nobody would believe these things if he tried to describe them; even to Matthew, in his bright, familiar room, they seemed unlikely. If only he had dreamed them! He sat up slowly and realized he was not ill. All right, he would pretend it had been a dream, fight magic with magic. Then maybe nothing would happen.

His mother came in with a cup of orange juice. "You must be starving," she said kindly. "How do you feel?"

"Okay,, Mommy. I don't think I'm sick."

"Probably you were just tired. Drink this, then come on down and have some supper." Her nononsense voice, usually so chilling, sounded sweet as music. Matthew gulped the juice, swung his legs over the bedside and dropped easily to the floor. "That's a lot better, you must have been doing those exercises," said his mother.

"I have," he lied and ran, hardly limping, down the stairs.

She followed and said, "We've already eaten. Your father is outside with the children. I'll give you something in the kitchen." She poured a glass of milk, filled a plate with stew and started the dishes as Matthew hungrily ate. When he had finished he went outside and sat on the back step in the horizontal sunlight.

His father, Sidney, Poppy and her friend Laura were dashing about the small lawn in a four-cornered game of ball. The girls, when they saw him, whispered and made faces. His father yelled "Catch!" and tossed the ball toward the step. Matthew lunged, missed, and the ball bounced off the door-screen, leaving it indented. His father shook his head angrily. "I wasn't ready!" Matthew called.

Ignoring him, his father tossed the ball to Sidney, who caught it neatly in his lap and then threw it straight up, so it landed a foot behind him. Matthew picked it up, threw it underhand to his father and caught it when it came back.

He leapt with joy at his father's smile and then forgot everything in the heat of the game.

They played until dusk. When they went indoors, Matthew's mother said, "You did very well, Matthew. I was watching from the window. Now look, Sidney's in bed and Poppy is at Laura's for the night. You can stay up later than usual, if you want, because of that nap."

Matthew jiggled the ball on his palm, flushed and smiling. "Can I watch TV?" he asked.

His mother looked surprised. "What's come over you? All you usually want to do is read, read, read!" He shrugged. "All right," she smiled, "one program." Matthew tore to his room, got into his pajamas and went downstairs to watch an old movie full of dark streets, fast cars, ambushes and police. When it was over he kissed his parents goodnight and went reluctantly upstairs.

He was just in time to see four Strays ducking into the second-floor hall closet. They stopped, nodded merrily and disappeared inside. He followed and whispered, "What are you doing in there?" No answer.

"Matthew, is your light off?" his mother called from below.

Frantic, he flung the door wide and cried, "Tell me! Why are you in the closet!"

His mother was mounting the stairs. "Talking to yourself?" she asked. Forlornly, Matthew shook his head. "My poor silly boy," she murmured, putting an arm about him and leading him into his room. While he got into bed, she opened one window and pulled the shade of the other, then sat on his bed and said, "Why the long face?"

Matthew began to cry.

"It just can't be as bad as all that," she smiled, and bent to kiss him. Matthew sat up abruptly, knocking into her chin, shouting, "Mommy you've got to listen! Remember what. . . ."

But she broke in angrily, rubbing her jaw. "Matthew *why* can't you be more careful? If you'd only concentrate, you wouldn't spend your life knocking things over and breaking people's chins. I simply don't know what's going to become of you."

He stared at her as if astonished; then whispered, "Would you sleep with me tonight?"

"What? You're not a baby! Why should you want me to do that?"

Matthew's knuckles whitened, gripping his sheet. "Because then you'll be safe. Oh please sleep in my bed!"

His mother looked alarmed and said coldly, "Sometimes I wonder about you." She pushed him down and tucked in his blankets. "Now go to sleep. I'll see you in the morning." She went frowning into the hall, closed the closet door and started downstairs.

Matthew lay open-eyed, wondering between each breath he drew why it was so long until the next. When he moved, his sheets rustled like a million footfalls upon leaves. Finally he got up, turned on the light and opened a book. Some nights he read for hours; nobody had ever found him out. But this time the pages slid through his fingers as he watched the open window. Beyond the screen things rustled, creaked and pattered; once in a while a restless bird chirped; the moon, behind the tallest trees, glimmered like a beacon. Abruptly Matthew bolted from his room and stopped outside the hall closet, wondering why the door was shut. Had they left and closed it behind them?

He tiptoed down the stairs and peeked into the living room. His father was sipping beer and leafing through a magazine; his mother was mending a dress of Poppy's while she watched television. On the screen a man was saying, ". . . clear and unseasonably cool tomorrow, due to this high-pressure area travelling southeast. . . . " He rapped his long pointer against an enormous map.

Matthew turned and slowly climbed the stairs, limping on purpose. At the closet door he paused, then jerked it open. "Strays? Are you still in here?" he whispered. It was too dark to see anything, even if there was something to be seen. He half-closed the door and went into his room. Maybe he *was* crazy. He flung himself on his bed and after a long time, drowsed.

He dreamed of a roadside field where once his family had taken a picnic lunch. But now it was far larger, vast as an ocean and bright as gold in the sunshine. They were all playing tag, his brother and sister and parents. He, Matthew, was running, leaping as though astride a winged horse, and when he came to the picnic blanket, covered with sandwiches and thermoses, he sailed over it. Poppy, chasing him, shouted, "Oh, Matthew, you're too fast for me!" He snatched a football from the air and lobbed it to his father, far across the field. The ball went all the way but his father fumbled. "Clumsy!" cried his mother and came to Matthew to hold him in her arms. He lay there peacefully, eyes closed, chewing on a sweet stem of tender grass. He heard little Sidney, still running, call, "Times, times!"

Matthew opened his eyes, blinking against the golden light, strangely dizzy.

On the pillow near his head squatted a Stray. Matthew stared, not moving. Clutched in the little man's fist was a bright, thin knife not more than two inches long.

"It's time now," said the Stray matter-of-factly. "Get dressed and follow me."

Matthew lurched from his bed, upsetting the Stray, and dashed

into the hall. He collided with the bannister and fell flat, knocking out his wind. When he could breathe again he raised his head and saw another Stray approaching. This one also carried a tiny sword, which was dark and looked wet; the Stray's hands were stained. Matthew pushed himself to all fours. "Hey, sport," said the little fellow pleasantly, coming closer.

"Mommy!" Matthew screamed, "Mommy! Daddy!" He began crawling along the hall toward his parents' bedroom, shrieking and stuttering, but found that he could only inch sluggishly forward, as in a nightmare. He knew it was too late anyway.

COMING NEXT MONTH

Thomas Burnett Swann is an author regrettably too little known in this, his native country. Like many before him, however, he has found rising critical acclaim abroad—where his WHERE IS THE BIRD OF FIRE? was published in the British *Science-Fantasy,* and became one of the most popular stories of the last decade, winning a *Hugo* nomination.

Now he comes to our pages, with THE MANOR OF ROSES.

It is the year 1213, and the setting is England: an England shorn of her men by the Crusades, where the Mandrakes prey upon those who travel the crumbling Roman roads across the Weald, and two young boys and their Guardian Angel have embarked upon a quest—a quest which brings them at last to the hidden Manor of Roses and the secret of its curious mistress.

As he has done before with legends and myths from the Grecian and Roman times, Thomas Burnett Swann brings vividly to life the ancient fantasies of another time and place; writing with uncommon depth, color and poignancy, to create in THE MANOR OF ROSES a story you'll long remember.

THE MAGAZINE OF Fantasy and Science Fiction

MARKET PLACE

BOOKS-MAGAZINES

BACK ISSUE SF MAGS, BOOKS. FREE CATALOG. Gerry de la Ree, 75 Wyckoff, Wyckoff, N. J. 07481.

Fantasy Books and Comics. List 10¢. Gary Duncan, Box 34-A, Pylesville, Md.

SF Bargains. List free. Werewolf Bookshop, Verona 4G, Pa.

Inventory Clearance. Send $1. for seven mystery pocket books—Mercury Mysteries, Bestseller Mysteries, Jonathan Press Mysteries—in good condition. Maximum order, 21 books for $3. Send order and remittance to: Mercury Press, Box 271, Rockville Centre, N. Y. 11571.

WHY buy books? For information write—Science Fiction Circulating Library, Box 1308, So. San Gabriel, California 91777.

SPECIALISTS: Science Fiction, Fantasy, Weird Fiction. Books, Pocketbooks. Lists issued. Stephen's Book Service, 63 Third Avenue, New York, N.Y. 10003.

FLYING SAUCER, OCCULT BOOKS. New. Scarce. Catalog 25¢. John Roby, 1811-C Carfax, Long Beach, California 90815.

BOOKPLATES

FREE CATALOGUE—Many beautiful designs. Special designing too. Address BOOKPLATES, Yellow Springs 4, Ohio.

BUSINESS OPPORTUNITIES

Raise capital fast, easy proven sources—Free information, Advisor, Box 48337-SF2, Los Angeles, Calif. 90048.

HYPNOTISM

FREE Hypnotism, Self-Hypnosis, Sleep learning Catalog! Drawer G400, Ruidoso, New Mexico 88345.

Free Illustrated, Hypnotism Catalogue. Write Powers, 8721 Sunset, Hollywood, California 90069.

LEARN WHILE ASLEEP, Hypnotize with your recorder, phonograph. Astonishing details, sensational catalog free. Sleep-learning Research Association, Box 24-FS, Olympia, Washington.

PERSONAL

English speaking Swedish/German girls seek penfriends/husbands. Photoalbum $5.00; prospectus free!—COSMOCLUB "SILVERTHISTLE", Hamburg 72/SF, Germany.

Escape your bills legally—clear credit, immediate relief—Free details, Advisor, Box 48337—SF1, Los Angeles, California 90048.

1,000 FASCINATING CURIOS, rare gifts. Fascinating illustrated catalog 10¢. WORLDWIDE CURIO HOUSE, Box 5655-SS, Minneapolis, Minn. 55417.

LOSING HAIR? Balding? Dandruff? Free Copyrighted booklet. Dr. Shiffer Laboratories, 583 Euclid Arcade, Cleveland, Ohio 44115.

Do you have something to advertise to sf readers? Books, magazines, typewriters, telescopes, computers, space-drives, or misc. Use the F&SF Market Place at these low, low rates: $3.00 for minimum of ten (10) words, plus 30¢ for each additional word. Send copy and remittance to: Adv. Dept., Fantasy and Science Fiction, 347 East 53 Street, New York, N. Y. 10022

OCCULT

PREDICTIONS WITH DICE!! Ancients believed tossed dice revealed future. New, informative method. $2.00. Enclose stamped, addressed envelope. Californians add 4% tax. Predicta-Dice, Dept. 17, 1722 S. Crescent Hts. Blvd. Los Angeles, Calif. 90035.

SERVICES-AUTHORS

WRITERS! Book manuscripts wanted: fiction, nonfiction. Free brochures furnish tips on writing; reveal how to become published author. Write Exposition Press, Dept. 156J, 386 Park Avenue South, New York, New York 10016.

PUBLISH your book! Join our successful authors: publicity advertising promotion, beautiful books. All subject invited. Send for free appraisal and detailed booklet. Carlton Press, (Dept. FSJ) 84 Fifth Avenue, New York 10011.

MISCELLANEOUS

FOREIGN EDITIONS of Fantasy and Science Fiction Limited offer—Send $1. for any 3 foreign edition copies of F&SF (usually 50¢ each)—French, German, Italian, Japanese, Spanish, or British Venture SF. Mercury Press, Box 271, Rockville Centre, N.Y. 11571.

DIRECTORY Western Ghost Towns, listed with ten maps, roads, locations plus treasure catalogue. Send $1.00. Foul Anchor, Rye, N. Y. 10580.

LIGHTER kits (comic prototypes)—2 for $1.00. P. O. Box 17845, Charlotte, N. C. 28211.

UNUSUAL new comedy record. Side 1 ("Computer, Go Home!" is wild science fiction. Side 2 is "The Naked Interview." Spoken-word mono 12" LP titled THINK FUZZY! (Not sold by discount clubs.) One copy postpaid, $3.98, from "Dogbite Record Co., Dept. FS, Box 532, Arlington, Va. 22216."

YOUR MARKET PLACE

A market is people—alert, intelligent, active people.

Here you can reach 180,000 people (averaging three readers per copy —60,000 paid circulation). Many of them are enthusiastic hobbyists—collecting books, magazines, stamps, coins, model rockets, etc.—actively interested in photography, music, astronomy, painting, sculpture, electronics.

If you have a product or service of merit, tell them about it. The price is right: $3.00 for a minimum of ten (10) words, plus 30¢ for each additional word. To keep the rate this low, we must request remittance with the order.

Advertising Dept., Fantasy & Science Fiction
347 East 53 St., New York, N. Y. 10022

Sixteen years ago, Doubleday published Isaac Asimov's first book.

See what we started?

This Fall we're publishing our 25th Asimov – FROM EARTH TO HEAVEN, a new collection of seventeen science essays which originally appeared in this magazine. This is the fifth such collection.

Doubleday science fiction novels by Dr. Asimov include FOUNDATION; FOUNDATION AND EMPIRE; SECOND FOUNDATION; I, ROBOT; THE REST OF THE ROBOTS; NINE TOMORROWS; and THE END OF ETERNITY.

Doubleday science fact books by Dr. Asimov include his ASIMOV'S BIOGRAPHICAL ENCYCLOPEDIA OF SCIENCE AND TECHNOLOGY; LIFE AND ENERGY; THE NEUTRINO; A SHORT HISTORY OF CHEMISTRY; and A SHORT HISTORY OF BIOLOGY.

All this doesn't mean we're bragging. How could we? Our 25 titles represent only *a third* of the books Isaac Asimov has published in these sixteen years. We're just thankful for our share – and proud to salute one of our favorite authors on the occasion of this special issue of *Fantasy and Science Fiction.*

You'll find Isaac Asimov books by a number of publishers at booksellers everywhere. Doubleday & Company, Inc., Garden City, New York.

DOUBLEDAY

Phillip Leonian