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SF

THE YEAR'S GREATEST SCIENCE-FICTION AND FANTASY

Edited by
JUDITH MERRIL

Selections by
Isaac Asimov
Arthur C. Clarke
Willy Ley
Henry Kuttner
and many others

SPECIAL SECTION:
SCIENCE-FICTION BECOMES SCIENCE-FACT
—Sputnik and Beyond

HERE again are the year's best stories in the field of science-fiction and fantasy, including tales from old favorites and newcomers.

In addition, there is a special bonus—a selection of articles by recognized authorities explaining and predicting the events of the post-sputnik world.

Miss Judith Merril, for years acclaimed as the most imaginative and tasteful anthologist in the field, again supplies notes and comment.

S F '57 – '58

The year science caught up with fiction


SF

THE YEAR'S GREATEST SCIENCE-FICTION and FANTASY

THIRD ANNUAL VOLUME

Edited by JUDITH MERRIL

A DELL FIRST EDITION

Published by
DELL PUBLISHING CO., INC.
750 Third Avenue
New York 17, N. Y.

Published jointly with The Gnome Press, Inc.

Designed and produced by
Western Printing & Lithographing Company

Cover painting by Richard Powers

First printing—July, 1958

Printed in U.S.A.

Copyright Notices and Acknowledgments

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INTRODUCTION

by Judith Merril

Someone was always looking at the stars.

Now it appears the stars may shortly have their chance to look at us.

Only a half century has passed since the first workable aircraft gave men the freedom, figuratively, of their own back yard. Now, this past year, we have succeeded in loosening the gate-latch on the back yard fence. Tomorrow, or next year, or ten years from now—but *soon*—the gate will swing open. Men of Earth will, for the first time, leave their native habitat.

Here on our home world we can, and do, behave in ways the universe around us will not tolerate. Here gravity, like Mom and Pop, can be depended on to catch us when we climb too high. And when we fall, the friendly forces of the atmosphere will always give sound to our yells for help.

In space, a temper tantrum may be fatal. If a man does not know his own strength—or his own weaknesses—he is unlikely to survive. What sort of welcome we make for ourselves in the great world outside our world will depend in large part on our capacity for learning caution, and certain basic courtesies as well, for use among ourselves and toward what- or whomever we may meet out there.

A few years back, the physical possibility of space flight was still enough in doubt to make space travel a favorite subject for science-fiction, which after all, is *speculative* fiction: meaning a story that answers the question, "What if . . . ?" But in order to be *science*-fiction, the answer must not only be imaginative, but logically reasoned from the accepted knowledge of the day.

Right now, the unknown quantities, the "What ifs?" of space flight, are mostly either technical details (requiring

at the least an engineer to know enough facts to reason or imagine *from*), or they arise in areas where basic scientific research has not yet broken enough ground to provide the minimum of factual knowledge (faster-than-light flight, for example).

But it seems that the closer we come to the certainty of space travel, the more uncertain are our qualifications for the job. Accordingly, the interest of the better s-f writers has shifted steadily since the war years toward the field of human behavior. You will find rocket ships and alien planets in these pages, as well as robots, mutated monsters, and strange inventions; but the *science* under examination here is not primarily physics or chemistry. It is biology, psychology, anthropology, sociology, politics, economics—*people*.

—J. M.

LET'S BE FRANK

by Brian W. Aldiss

I should have liked to find a whopping good moon story to start the book off with this year; but failing that, I decided instead on what you might call an all-purpose science-fantasy: it's got a bit of mutation in it and a spot of *psi*, a few new inventions, much history (past and future) and even, eventually, a whole fleet of space ships.

The author is one of a group of talented young writers who are appearing with increasing regularity in the British s-f magazines. In his early thirties, Brian Aldiss is literary editor of *The Oxford Mail* and has published two volumes of short stories: *The Brightfount Diaries*, humorous sketches about a country bookstore; and more recently a volume of science-fantasy, *Space, Time and Nathaniel*.

Four years after pretty little Anne Boleyn was executed in the Tower of London, a child was born into the Gladwebb family—an unusual child.

That morning, four people stood waiting in the draughty antechamber to milady's bedroom, where the confinement was taking place—her mother, an aunt, a sister-in-law and a page. The husband, young Sir Frank Gladwebb, was not present; he was out hunting. At length the midwife bustled out to the four in the antechamber and announced that the Almighty (who had recently become a Protestant) had seen fit to bless milady with a son.

"Why, then, do we not hear the child crying, woman?" milady's mother, Cynthia Chinfont St. Giles, demanded, striding into the room to her daughter. There the reason for the child's silence became obvious: it was asleep.

It remained in the "sleep" for nineteen years.

Young Sir Frank was not a patient man; he suffered, in

an ambitious age, from ambition, and anything which stood between him and his advancement got short shrift. Returning from the hunt to find his first-born comatose, he was not pleased. The situation, however, was remedied by the birth of a second son in the next year, and of three more children in the four years thereafter. All of these offspring were excessively normal, the boy taking Holy Orders and becoming eventually the Abbot of St. Duckwirt, where simony supplemented an already generous income.

The sleeping child grew as it slept. It stirred in its sleep, sometimes it yawned, it accepted the bottle. Sir Frank kept it in an obscure room in the manor, appointing an old harridan called Nan to attend it. In moments of rage, or when he was in his cups, Sir Frank would swear to run a sword through the child; yet the words were idle, as those about him soon perceived. There was a strange bond between Sir Frank and the sleeping child. Though he visited it rarely, he never forgot it.

On the child's third birthday, he went up to see it. It lay in the center of a four-poster, its face calm. With an impulse of tenderness, Sir Frank picked it up, cradling it, limp and helpless, in his arms.

"It's a lovely lad, sire," Nan commented. And at that moment the sleeping child opened its eyes and appeared to focus them on its father. With a cry, Sir Frank staggered back dizzily, overwhelmed by an indescribable sensation. He sprawled on the bed, holding the child tightly to keep it from harm. When the giddy feeling had gone, he looked and found the child's eyes shut again, and so they remained for a long while.

The Tudor springs and winters passed, the sleeping child experiencing none of them. He grew to be a handsome young boy, and a manservant was engaged for him; still his eyes never opened, except on the rare occasions when his father—now engrossed in the affairs of court—came to see him. Because of the weakness which took him at these times, Sir Frank saw to it that they were few.

Good King Harry died, the succession passed to women

and weaklings, Sir Frank came under the patronage of Robert Devereaux, Earl of Essex. And in the year of the coronation of Elizabeth, the sleeping child awoke.

Sir Frank, now a prosperous forty-one, had gone in to see his first-born for the first time in thirty months. On the four-poster lay a handsome, pale youth of nineteen, his straggling growth of beard the very shade of his father's more luxuriant crop. The manservant was out of the room.

Strangely perturbed, as if something inexpressible lay just below the surface of his thoughts, Sir Frank went over to the bed and rested his hands on the boy's shoulders. He seemed to stand on the brink of a precipice.

"Frank," he whispered—for the sleeping child had been given his own name—"Frank, why don't you wake up?"

In answer to the words, the youth's eyes opened. The usual wash of dizziness came and went like a flash; Sir Frank found himself looking up into his own eyes.

He found more than that.

He found he was a youth of nineteen whose soul had been submerged until now. He found he could sit up, stretch, run a hand marveling through his hair and exclaim, "By our Lady!" He found he could get up, look long at the green world beyond his window and finally turn back to stare at himself.

And all the while "himself" had watched the performance with his own eyes. Shaking, father and son sat down together on the bed.

"What sorcery is this?" Sir Frank muttered.

But it was no sorcery, or not in the sense Sir Frank meant. He had merely acquired an additional body for his ego. It was not that he could be in either as he pleased; he was in both at the same time. When the son came finally to consciousness, it was to his father's consciousness.

Warily, experimenting that day and the next few days—when the whole household rejoiced at this awakening of the first-born—Sir Frank found that his new body could do all he could do: could ride, could fence, could make love to a kitchen wench: could indeed do these things better than the old body, which was beginning, just a little, to

become less pliant under approaching middle age. His experience, his knowledge, all were resources equally at the command of either body. He was, in fact, two people.

A later generation could have explained the miracle to Sir Frank—though explaining in terms he would not have understood. Though he knew well enough the theory of family traits and likenesses, it would have been impossible then to make him comprehend the intricacy of a chromosome which carries inside it—not merely the stereotypes of parental hair or temperament—but the secret knowledge of how to breathe, how to work the muscles to move the bones, how to grow, how to remember, how to commence the processes of thought . . . all the infinite number of secret "how to's" that have to be passed on for life to stay above jelly level.

A freak chromosome in Sir Frank ensured he passed on, together with these usual secrets, the secret of his individual consciousness.

It was extraordinary to be in two places at once, doing two different things—extraordinary, but not confusing. He merely had two bodies which were as integrated as his two hands had been.

Frank II had a wonderful time; youth and experience, foresight and a fresh complexion, were united as never before. The combination was irresistible. The Virgin Queen, then in her late twenties, summoned him before her and sighed deeply. Then, catching Essex's eye, she put him out of reach of temptation by sending him off to serve the ambassador at the court of her brother-in-law, Philip.

Frank II liked Spain. Philip's capital was gayer, warmer and more sanitary than London. It was intoxicating to enjoy the best of both courts. It proved also extremely remunerative: the shared consciousness of Frank I and II was by far the quickest communicational link between the two rival countries, and as such was worth money. Not that Frank revealed his secret to a soul, but he let it be known he had a fleet of capable spies who moved without risk of detection between England and Spain. Burly Lord Burleigh

beamed upon him. So did the Duke of Medina Sidonia.

So fascinating was it being two people at once, that Frank I was slow to take any systematic survey of other lurking advantages. An unfortunate tumble from a horse, however, gave him leisure for meditation. Even then, he might have missed the vital point, were it not for something that happened in Madrid.

Frank III was born.

Frank II had passed on the renegade chromosome via a little Spanish courtesan. The child was called Sancha. There was no coma about him! As if to defy the extreme secrecy under which the birth took place, he wailed lustily from the start. And he had the shared consciousness of his father and grandfather.

It was an odd feeling indeed, opening this new annex to life and experiencing the world through all the child's weakness and helplessness. There were many frustrations for Frank I, but compensations too—not the least being closeted so intimately with the babe's delightful mother.

This birth made Frank realize one striking, blinding fact: as long as the chromosome reproduced itself in sufficient dominance, he was immortal! To him, in an unscientific age, the problem did not present itself quite like that; but he realized that here was a trait to be kept in the family.

It happened that Frank had married one of his daughters off to an architect called Tanyk. This union produced a baby daughter some two weeks after the secret birth of Frank III (they hardly thought of him as Sancha). Frank I and II arranged that III should come to England and marry Miss Tanyk just as soon as both were old enough; the vital chromosome ought to be latent in her and appear in her children.

Relations between England and Spain deteriorating, Frank II came home shortly with the boy Frank III acting as his page. The fruits of several other liaisons had to be left behind with their mothers; they had no shared consciousness, only ordinary good red English blood.

Frank II had been back in the aptly named Mother

Country for only a few months when a lady of his acquaintance presented him with Frank IV. Frank IV was a girl, christened Berenice. The state of coma which had ensnared Frank II for so long did not afflict Berenice, or any other of his descendants.

Another tremendous adjustment in the shared consciousness had to be made. That also had its compensations; Frank was the first man ever really to appreciate the woman's point of view.

So the eventful years rolled on. Sir Frank's wife died; the Abbey of St. Duckwirt flourished; Frank II sailed over to Hispaniola; the Armada sailed against England and was repulsed. And in the next year, Frank III (Sancha), with his Spanish looks and English money, won the hand of Rosalynd Tanyk, as prearranged. When his father returned from the New World (with his English looks and Spanish money), it was in time to see in person his daughter, Berenice, alias Frank IV, also taken in wedlock.

By this year, Frank I was old and gray and retired in the country. While he was experiencing old age in that body, he was experiencing active middle age in his son's and the delights of matrimony in his grandson's and granddaughter's.

He awaited anxiously the issue of Frank III (Sancha)'s marriage to his cousin Rosalynd. There were offspring enough. One in 1590. Twins in 1591. Three lovely children —but, alas, ordinary mortals, without shared consciousness. Then, while watching an indifferent and bloody play called "Titus Andronicus," two years later, Rosalynd came into labor, and was delivered—at a tavern in Cheapside—of Frank V.

In the succeeding years, she delivered Franks VI and VIII. Frank VII sprang from Berenice (Frank IV)'s union. So did Frank IX. The freak chromosome was getting into its stride.

Full of years, Sir Frank's body died. The diphtheria which carried him off caused him as much suffering as it would have done an ordinary man; dying was not eased by his unique gift. He slid out into the long darkness—but his

consciousness continued unabated in eight other bodies.

It would be pleasant to follow the history of these Franks (who, of course, really bore different surnames and Christian names): but space forbids. Suffice it to say that there were vicissitudes—the old queen shut Frank II in the Tower, Frank VI had a dose of the clap, Frank IX ruined himself trying to grow asparagus, then newly discovered from Asia. Despite this, the shared consciousness spread; the five who shared it in this third generation prospered and produced children with the same ability.

The numbers grew. Twelve in the fourth generation, twenty-two in the fifth, fifty in the sixth, and in the seventh, by the time William and Mary came to the throne, one hundred and twenty-four.

These people, scattered all over the country, a few of them on the continent, were much like normal people. To outsiders, their relationship was not apparent; they certainly never revealed it; they never met. They became traders, captains of ships that traded with the Indies, soldiers, parliamentarians, agriculturalists; some plunged into, some avoided, the constitutional struggles that dogged most of the seventeenth century. But they were all—male or female—Franks. They had the inexpressible benefit of their progenitor's one hundred and seventy-odd years' experience, and not only of his, but of all the other Franks. It was small wonder that, with few exceptions, whatever they did they prospered.

By the time George III came to the throne and rebellion broke out in the British colonies in America the tenth generation of Franks numbered 2,160.

The ambition of the original Frank had not died; it had grown subtler. It had become a wish to sample everything. The more bodily habitations there were with which to sample, the more tantalizing the idea seemed: for many experiences, belonging only to one brief era, are never repeated, and may be gone before they are perceived and tasted.

Such an era was the Edwardian decade from 1901 to 1911. It suited Frank's Elizabethan spirit, with its bounce

and vulgarity and the London streets packed tight with horse vehicles. His manifestations prospered; by the outbreak of World War I they numbered over three and a half million.

The war, whose effect on the outlook and technology of the whole world was to be incalculable, had a terrific influence on the wide-spread shared consciousness of Frank. Many Franks of the sixteenth generation were killed in the muck of the trenches, he died not once but many times, developing an obsessive dread of war which never left him.

By the time the Americans entered the war, he was turning his many thoughts to politics.

It was not an easy job. Until now, he had concentrated on diversity in occupations, savoring them all. He rode the fiery horses of the Camargue; he played in the orchestras of La Scala, Milan; he farmed daffodils in the Scilly Isles; he built dikes along the Zuyder Zee; filmed with Réné Clair; preached in Vienna cathedral; operated in Bart's; fished in the bilious Bay of Biscay; argued with the founder of the Bauhaus. Now he turned the members of his consciousness among the rising generation into official posts, compensating for the sameness and grayness of their jobs with the thought that the change was temporary.

His plans had not gone far enough before the Second World War broke out. His consciousness, spread over eleven million people, suffered from Plymouth and Guernsey to Siam and Hong Kong. It was too much. By the time the war ended, world domination had become his aim.

Frank's chromosome was now breeding as true as ever. Blood group, creed, color of skin—nothing was proof against it. The numbers with shared consciousness, procreating for all they were worth, trebled every generation.

Seventeenth generation: eleven millions in 1940.

Eighteenth generation: thirty-three millions in 1965.

Nineteenth generation: a hundred million in 1990.

Twentieth generation: three hundred million in 2015.

Frank was well placed to stand as Member of Parliament, for all his alter egos could vote for him. He stood as

several members, one of whom eventually became Prime Minister; but the intricacies of office proved a dismal job. There was, after all, a simpler and far more thorough way of ruling the country: by simple multiplication.

At this task, all the Franks set to with a will.

By the beginning of the twenty-first century, Great Britain consisted only of Franks. Like a great multiplicity of mirrors, they faced each other across counter and club; young or old, fat or thin, rich or poor, all shared one massive consciousness.

Many modifications in private and public life took place. Privacy ceasing to exist, all new houses were glass-built, curtains abolished, walls pulled down. Police went, the entire legal structure vanished overnight—a man does not litigate against himself. A parody of Parliament remained, to deal with foreign affairs, but party politics, elections, leaders in newspapers (even newspapers themselves) were scrapped.

Most of the arts went. One manifestation of Frank did not care to see another manifestation of Frank performing. TV, publishing, Tin Pan Alley, film studios . . . out like lights.

The surplus Franks, freed from all these dead enterprises and many more, went abroad to beget more Franks.

All these radical changes in the habits of the proverbially conservative British were noticed elsewhere, particularly by the Americans and Canadians. They sent observers over to report on the scene.

Before long, the same radical changes were sweeping Europe. Frank's chromosome conquered everywhere. Peace was guaranteed.

By the end of another century's ruthless intermarriage, Russia and Asia were engulfed as thoroughly as Europe, and by the same loving methods. Billions of people: one consciousness.

And then came Frank's first set-back in all the centuries of his polydextrous existence. He turned his reproductive powers toward the Americas. He was repulsed.

From Argentine to Alaska, and all ports in between, the conqueror chromosome failed to conquer.

The massive, massed intellect set itself to work on the problem, soon arriving at the answer. Another chromosome had got there first. Evidence of the truth of this came when the drastic modifications in domestic and public life which had swept the rest of the world swept the linked continents of North and South America. There was a second shared consciousness.

By various deductions, Frank concluded that the long-dead Frank II's visit to Hispaniola had scattered some of the vital chromosome there. Not properly stable at that time, it had developed its own separate shared consciousness, which had spread through the Americas much as the Frank chromosome had spread round the rest of the world.

It was a difficult situation. The Franks and the Hispaniolas shared the globe without speaking to each other. After a decade of debate, the Franks took an obvious way out of the impasse: they built themselves a fleet of space ships and headed into the solar system.

That, ladies, gentlemen and neuters, is a brief account of the extraordinary race which recently landed on our planet, Venus, as they call it. I think we may congratulate ourselves that our method of perpetuating our species is so vastly different from theirs; nothing else could have saved us from that insidious form of conquest.

THE FLY

by George Langelaan

I am not partial to horror stories.

Nor am I ordinarily much influenced by editorial enthusiasms. But when I received a copy of "The Fly" with a covering note describing it as "one of the most suspenseful pieces of horror science-fiction I have ever read," I *was* impressed. *Playboy's* Ray Russell, who wrote the note, is nobody's eager beaver (as those who read his satire on "creature films" reprinted in last year's *S-F* already know); also, he happens to be one of the very few general magazine editors who really likes and knows science-fantasy.

Also impressed, apparently, were film executives at Twentieth Century-Fox, who are producing a motion picture based on the story.

"The Fly" is the first fiction of George Langelaan's to be published in this country. American audiences have seen his work, if not his name, however, for some thirty years—during which time the English (born in Paris) journalist has worked for the Paris staff of AP, UP, INS, and *The New York Times*.

Telephones and telephone bells have always made me uneasy. Years ago, when they were mostly wall fixtures, I disliked them, but nowadays, when they are planted in every nook and corner, they are a downright intrusion. We have a saying in France that a coalman is master in his own house; with the telephone that is no longer true, and I suspect that even the Englishman is no longer king in his own castle.

At the office, the sudden ringing of the telephone annoys me. It means that, no matter what I am doing, in spite of the switchboard operator, in spite of my secretary, in spite of doors and walls, some unknown person is coming into the room and onto my desk to talk right into my very ear,

confidentially—and that whether I like it or not. At home, the feeling is still more disagreeable, but the worst is when the telephone rings in the dead of night. If anyone could see me turn on the light and get up blinking to answer it, I suppose I would look like any other sleepy man annoyed at being disturbed. The truth in such a case, however, is that I am struggling against panic, fighting down a feeling that a stranger has broken into the house and is in my bedroom. By the time I manage to grab the receiver and say: *"Ici Monsieur Delambre. Je vous ecoute,"* I am outwardly calm, but I only get back to a more normal state when I recognize the voice at the other end and when I know what is wanted of me.

This effort at dominating a purely animal reaction and fear had become so effective that when my sister-in-law called me at two in the morning, asking me to come over, but first to warn the police that she had just killed my brother, I quietly asked her how and why she had killed André.

"But, François! . . . I can't explain all that over the telephone. Please call the police and come quickly."

"Maybe I had better see you first, Hélène?"

"No, you'd better call the police first; otherwise they will start asking you all sorts of awkward questions. They'll have enough trouble as it is to believe that I did it alone. . . . And, by the way, I suppose you ought to tell them that André . . . André's body, is down at the factory. They may want to go there first."

"Did you say that André is at the factory?"

"Yes . . . under the steam-hammer."

"Under the what!"

"The steam-hammer! But don't ask so many questions. Please come quickly François! Please understand that I'm afraid . . . that my nerves won't stand it much longer!"

Have you ever tried to explain to a sleepy police officer that your sister-in-law has just phoned to say that she has killed your brother with a steam-hammer? I repeated my explanation, but he would not let me.

"Oui, Monsieur, oui, I hear . . . but who are you? What is your name? Where do you live? I said, where do you live!"

It was then that Commissaire Charas took over the line and the whole business. He at least seemed to understand everything. Would I wait for him? Yes, he would pick me up and take me over to my brother's house. When? In five or ten minutes.

I had just managed to pull on my trousers, wriggle into a sweater and grab a hat and coat, when a black Citroën, headlights blazing, pulled up at the door.

"I assume you have a night watchman at your factory, Monsieur Delambre. Has he called you?" asked Commissaire Charas, letting in the clutch as I sat down beside him and slammed the door of the car.

"No, he hasn't. Though of course my brother could have entered the factory through his laboratory where he often works late at night . . . all night sometimes."

"Is Professor Delambre's work connected with your business?"

"No, my brother is, or was, doing research work for the Ministère de l'Air. As he wanted to be away from Paris and yet within reach of where skilled workmen could fix up or make gadgets big and small for his experiments, I offered him one of the old workshops of the factory and he came to live in the first house built by our grandfather on the top of the hill at the back of the factory."

"Yes, I see. Did he talk about his work? What sort of research work?"

"He rarely talked about it, you know; I suppose the Air Ministry could tell you. I only know that he was about to carry out a number of experiments he had been preparing for some months, something to do with the disintegration of matter, he told me."

Barely slowing down, the Commissaire swung the car off the road, slid it through the open factory gate and pulled up sharp by a policeman apparently expecting him.

I did not need to hear the policeman's confirmation. I

knew now that my brother was dead, it seemed that I had been told years ago. Shaking like a leaf, I scrambled out after the Commissaire.

Another policeman stepped out of a doorway and led us toward one of the shops where all the lights had been turned on. More policemen were standing by the hammer, watching two men setting up a camera. It was tilted downward, and I made an effort to look.

It was far less horrid than I had expected. Though I had never seen my brother drunk, he looked just as if he were sleeping off a terrific binge, flat on his stomach across the narrow line on which the white-hot slabs of metal were rolled up to the hammer. I saw at a glance that his head and arm could only be a flattened mess, but that seemed quite impossible; it looked as if he had somehow pushed his head and arm right into the metallic mass of the hammer.

Having talked to his colleagues, the Commissaire turned toward me:

"How can we raise the hammer, Monsieur Delambre?"

"I'll raise it for you."

"Would you like us to get one of your men over?"

"No, I'll be all right. Look, here is the switchboard. It was originally a steam-hammer, but everything is worked electrically here now. Look, Commissaire, the hammer has been set at fifty tons and its impact at zero."

"At zero . . . ?"

"Yes, level with the ground if you prefer. It is also set for single strokes, which means that it has to be raised after each blow. I don't know what Hélène, my sister-in-law, will have to say about all this, but one thing I am sure of: she certainly did not know how to set and operate the hammer."

"Perhaps it was set that way last night when work stopped?"

"Certainly not. The drop is never set at zero, Monsieur le Commissaire."

"I see. Can it be raised gently?"

"No. The speed of the upstroke cannot be regulated. But

in any case it is not very fast when the hammer is set for single strokes."

"Right. Will you show me what to do? It won't be very nice to watch, you know."

"No, no, Monsieur le Commissaire. I'll be all right."

"All set?" asked the Commissaire of the others. "All right then, Monsieur Delambre. Whenever you like."

Watching my brother's back, I slowly but firmly pushed the upstroke button.

The unusual silence of the factory was broken by the sigh of compressed air rushing into the cylinders, a sigh that always makes me think of a giant taking a deep breath before solemnly socking another giant, and the steel mass of the hammer shuddered and then rose swiftly. I also heard the sucking sound as it left the metal base and thought I was going to panic when I saw André's body heave forward as a sickly gush of blood poured all over the ghastly mess bared by the hammer.

"No danger of it coming down again, Monsieur Delambre?"

"No, none whatever," I mumbled as I threw the safety switch and, turning around, I was violently sick in front of a young green-faced policeman.

For weeks after, Commissaire Charas worked on the case, listening, questioning, running all over the place, making out reports, telegraphing and telephoning right and left. Later, we became quite friendly and he owned that he had for a long time considered me as suspect number one, but had finally given up that idea because, not only was there no clue of any sort, but not even a motive.

Hélène, my sister-in-law, was so calm throughout the whole business that the doctors finally confirmed what I had long considered the only possible solution: that she was mad. That being the case, there was of course no trial.

My brother's wife never tried to defend herself in any way and even got quite annoyed when she realized that people thought her mad, and this of course was considered proof that she was indeed mad. She owned up to the mur-

der of her husband and proved easily that she knew how to handle the hammer; but she would never say why, exactly how, or under what circumstances she had killed my brother. The great mystery was how and why had my brother so obligingly stuck his head under the hammer, the only possible explanation for his part in the drama.

The night watchman had heard the hammer all right; he had even heard it twice, he claimed. This was very strange, and the stroke-counter which was always set back to naught after a job, seemed to prove him right, since it marked the figure two. Also, the foreman in charge of the hammer confirmed that after cleaning up the day before the murder, he had as usual turned the stroke-counter back to naught. In spite of this, Hélène maintained that she had only used the hammer once, and this seemed just another proof of her insanity.

Commissaire Charas who had been put in charge of the case at first wondered if the victim were really my brother. But of that there was no possible doubt, if only because of the great scar running from his knee to his thigh, the result of a shell that had landed within a few feet of him during the retreat in 1940; and there were also the fingerprints of his left hand which corresponded to those found all over his laboratory and his personal belongings up at the house.

A guard had been put on his laboratory and the next day half a dozen officials came down from the Air Ministry. They went through all his papers and took away some of his instruments, but before leaving, they told the Commissaire that the most interesting documents and instruments had been destroyed.

The Lyons police laboratory, one of the most famous in the world, reported that André's head had been wrapped up in a piece of velvet when it was crushed by the hammer, and one day Commissaire Charas showed me a tattered drapery which I immediately recognized as the brown velvet cloth I had seen on a table in my brother's laboratory, the one on which his meals were served when he could not leave his work.

After only a very few days in prison, Hélène had been transferred to a near-by asylum, one of the three in France where insane criminals are taken care of. My nephew Henri, a boy of six, the very image of his father, was entrusted to me, and eventually all legal arrangements were made for me to become his guardian and tutor.

Hélène, one of the quietest patients of the asylum, was allowed visitors and I went to see her on Sundays. Once or twice the Commissaire had accompanied me and, later, I learned that he had also visited Hélène alone. But we were never able to obtain any information from my sister-in-law who seemed to have become utterly indifferent. She rarely answered my questions and hardly ever those of the Commissaire. She spent a lot of her time sewing, but her favorite pastime seemed to be catching flies which she invariably released unharmed after having examined them carefully.

Hélène only had one fit of raving—more like a nervous breakdown than a fit said the doctor who had administered morphia to quieten her—the day she saw a nurse swatting flies.

The day after Hélène's one and only fit, Commissaire Charas came to see me.

"I have a strange feeling that there lies the key to the whole business, Monsieur Delambre," he said.

I did not ask him how it was that he already knew all about Hélène's fit.

"I do not follow you, Commissaire. Poor Madame Delambre could have shown an exceptional interest for anything else, really. Don't you think that flies just happen to be the border-subject of her tendency to raving?"

"Do you believe she is really mad?" he asked.

"My dear Commissaire, I don't see how there can be any doubt. Do you doubt it?"

"I don't know. In spite of all the doctors say, I have the impression that Madame Delambre has a very clear brain . . . even when catching flies."

"Supposing you were right, how would you explain her

attitude with regard to her little boy? She never seems to consider him as her own child."

"You know, Monsieur Delambre, I have thought about that also. She may be trying to protect him. Perhaps she fears the boy or, for all we know, hates him?"

"I'm afraid I don't understand, my dear Commissaire."

"Have you noticed, for instance, that she never catches flies when the boy is there?"

"No. But come to think of it, you are quite right. Yes, that is strange . . . Still, I fail to understand."

"So do I, Monsieur Delambre. And I'm very much afraid that we shall never understand, unless perhaps your sister-in-law should *get better.*"

"The doctors seem to think that there is no hope of any sort, you know."

"Yes. Do you know if your brother ever experimented with flies?"

"I really don't know, but I shouldn't think so. Have you asked the Air Ministry people? They knew all about the work."

"Yes, and they laughed at me."

"I can understand that."

"You are very fortunate to understand anything, Monsieur Delambre. I do not . . . but I hope to some day."

"Tell me, Uncle, do flies live a long time?"

We were just finishing our lunch and, following an established tradition between us, I was just pouring some wine into Henri's glass for him to dip a biscuit in.

Had Henri not been staring at his glass gradually being filled to the brim, something in my look might have frightened him.

This was the first time that he had ever mentioned flies, and I shuddered at the thought that Commissaire Charas might quite easily have been present. I could imagine the glint in his eye as he would have answered my nephew's question with another question. I could almost hear him saying:

"I don't know, Henri. Why do you ask?"

"Because I have again seen the fly that *Maman* was looking for."

And it was only after drinking off Henri's own glass of wine that I realized that he had answered my spoken thought.

"I did not know that your mother was looking for a fly."

"Yes, she was. It has grown quite a lot, but I recognized it all right."

"Where did you seé this fly, Henri, and . . . how did you recognize it?"

"This morning on your desk, Uncle Françoise. Its head is white instead of black, and it has a funny sort of leg."

Feeling more and more like Commissaire Charas, but trying to look unconcerned, I went on:

"And when did you see this fly for the first time?"

"The day that Papa went away. I had caught it, but *Maman* made me let it go. And then after, she wanted me to find it again. She'd changed her mind." And shrugging his shoulders just as my brother used to, he added, "You know what women are."

"I think that fly must have died long ago, and you must be mistaken, Henri," I said, getting up and walking to the door.

But as soon as I was out of the dining room, I ran up the stairs to my study. There was no fly anywhere to be seen.

I was bothered, far more than I cared to even think about. Henri had just proved that Charas was really closer to a clue than had seemed when he told me about his thoughts concerning Hélène's pastime.

For the first time I wondered if Charas did not really know much more than he let on. For the first time also, I wondered about Hélène. Was she really insane? A strange, horrid feeling was growing on me, and the more I thought about it, the more I felt that, somehow, Charas was right: Hélène was *getting away with it!*

What could possibly have been the reason for such a monstrous crime? What had led up to it? Just what had happened?

I thought of all the hundreds of questions that Charas

had put to Hélène, sometimes gently like a nurse trying to soothe, sometimes stern and cold, sometimes barking them furiously. Hélène had answered very few, always in a calm quiet voice and never seeming to pay any attention to the way in which the question had been put. Though dazed, she had seemed perfectly sane then.

Refined, well-bred and well-read, Charas was more than just an intelligent police official. He was a keen psychologist and had an amazing way of smelling out a fib or an erroneous statement even before it was uttered. I knew that he had accepted as true the few answers she had given him. But then there had been all those questions which she had never answered: the most direct and important ones. From the very beginning, Hélène had adopted a very simple system. "I cannot answer that question," she would say in her low quiet voice. And that was that! The repetition of the same question never seemed to annoy her. In all the hours of questioning that she underwent, Hélène did not once point out to the Commissaire that he had already asked her this or that. She would simply say, "I cannot answer that question," as though it were the very first time that that particular question had been asked and the very first time she had made that answer.

This cliché had become the formidable barrier beyond which Commissaire Charas could not even get a glimpse, an idea of what Hélène might be thinking. She had very willingly answered all questions about her life with my brother—which seemed a happy and uneventful one—up to the time of his end. About his death, however, all that she would say was that she had killed him with the steam-hammer, but she refused to say why, what had led up to the drama and how she got my brother to put his head under it. She never actually refused outright; she would just go blank and, with no apparent emotion, would switch over to, "I cannot answer that question."

Hélène, as I have said, had shown the Commissaire that she knew how to set and operate the steam-hammer.

Charas could only find one single fact which did not coincide with Hélène's declarations, the fact that the ham-

mer had been used twice. Charas was no longer willing to attribute this to insanity. That evident flaw in Hélène's stonewall defense seemed a crack which the Commissaire might possibly enlarge. But my sister-in-law finally cemented it by acknowledging:

"All right, I lied to you. I did use the hammer twice. But do not ask me why, because I cannot tell you."

"Is that your only . . . misstatement, Madame Delambre?" had asked the Commissaire, trying to follow up what looked at last like an advantage.

"It is . . . and you know it, Monsieur le Commissaire."

And, annoyed, Charas had seen that Hélène could read him like an open book.

I had thought of calling on the Commissaire, but the knowledge that he would inevitably start questioning Henri made me hesitate. Another reason also made me hesitate, a vague sort of fear that he would look for and find the fly Henri had talked of. And that annoyed me a good deal because I would find no satisfactory explanation for that particular fear.

André was definitely not the absent-minded sort of professor who walks about in pouring rain with a rolled umbrella under his arm. He was human, had a keen sense of humor, loved children and animals and could not bear to see anyone suffer. I had often seen him drop his work to watch a parade of the local fire brigade, or see the *Tour de France* cyclists go by, or even follow a circus parade all around the village. He liked games of logic and precision, such as billiards and tennis, bridge and chess.

How was it then possible to explain his death? What could have made him put his head under that hammer? It could hardly have been the result of some stupid bet or a test of his courage. He hated betting and had no patience with those who indulged in it. Whenever he heard a bet proposed, he would invariably remind all present that, after all, a bet was but a contract between a fool and a swindler, even if it turned out to be a toss-up as to which was which.

It seemed there were only two possible explanations to André's death. Either he had gone mad, or else he had a

reason for letting his wife kill him in such a strange and terrible way. And just what could have been his wife's role in all this? They surely could not have been both insane?

Having finally decided not to tell Charas about my nephew's innocent revelations, I thought I myself would try to question Hélène.

She seemed to have been expecting my visit for she came into the parlor almost as soon as I had made myself known to the matron and been allowed inside.

"I wanted to show you my garden," explained Hélène as I looked at the coat slung over her shoulders.

As one of the "reasonable" inmates, she was allowed to go into the garden during certain hours of the day. She had asked for and obtained the right to a little patch of ground where she could grow flowers, and I had sent her seeds and some rosebushes out of my garden.

She took me straight to a rustic wooden bench which had been made in the men's workshop and only just set up under a tree close to her little patch of ground.

Searching for the right way to broach the subject of André's death, I sat for a while tracing vague designs on the ground with the end of my umbrella.

"François, I want to ask you something," said Hélène after a while.

"Anything I can do for you, Hélène?"

"No, just something I want to know. Do flies live very long?"

Staring at her, I was about to say that her boy had asked the very same question a few hours earlier when I suddenly realized that here was the opening I had been searching for and perhaps even the possibility of striking a great blow, a blow perhaps powerful enough to shatter her stonewall defense, be it sane or insane.

Watching her carefully, I replied:

"I don't really know, Hélène; but the fly you were looking for was in my study this morning."

No doubt about it I had struck a shattering blow. She swung her head round with such force that I heard the bones crack in her neck. She opened her mouth, but said

not a word; only her eyes seemed to be screaming with fear.

Yes, it was evident that I had crashed through something, but what? Undoubtedly, the Commissaire would have known what to do with such an advantage; I did not. All I knew was that he would never have given her time to think, to recuperate, but all I could do, and even that was a strain, was to maintain my best poker-face, hoping against hope that Hélène's defenses would go on crumbling.

She must have been quite a while without breathing, because she suddenly gasped and put both her hands over her still open mouth.

"François . . . Did you kill it?" she whispered, her eyes no longer fixed, but searching every inch of my face.

"No."

"You have it then . . . You have it on you! Give it to me!" she almost shouted touching me with both her hands, and I knew that had she felt strong enough, she would have tried to search me.

"No, Hélène, I haven't got it."

"But you know now . . . You have guessed, haven't you?"

"No, Hélène. I only know one thing, and that is that you are not insane. But I mean to know all, Hélène, and, somehow, I am going to find out. You can choose: either you tell me everything and I'll see what is to be done, or . . ."

"Or what? Say it!"

"I was going to say it, Hélène . . . or I assure you that your friend the Commissaire will have that fly first thing tomorrow morning."

She remained quite still, looking down at the palms of her hands on her lap and, although it was getting chilly, her forehead and hands were moist.

Without even brushing aside a wisp of long brown hair blown across her mouth by the breeze, she murmured:

"If I tell you . . . will you promise to destroy that fly before doing anything else?"

"No, Hélène. I can make no such promise before knowing."

"But François, you must understand. I promised André

that fly would be destroyed. That promise must be kept and I can say nothing until it is."

I could sense the deadlock ahead. I was not yet losing ground, but I was losing the initiative. I tried a shot in the dark.

"Hélène, of course you understand that as soon as the police examine that fly, they will know that you are not insane, and then . . ."

"François, no! For Henri's sake! Don't you see? I was expecting that fly; I was hoping it would find me here but it couldn't know what had become of me. What else could it do but go to others it loves, to Henri, to you . . . you who might know and understand what was to be done!"

Was she really mad, or was she simulating again? But mad or not, she was cornered. Wondering how to follow up and how to land the knockout blow without running the risk of seeing her slip away out of reach, I said very quietly:

"Tell me all, Hélène. I can then protect your boy."

"Protect my boy from what? Don't you understand that if I am here, it is merely so that Henri won't be the son of a woman who was guillotined for having murdered his father? Don't you understand that I would by far prefer the guillotine to the living death of this lunatic asylum?"

"I understand, Hélène, and I'll do my best for the boy whether you tell me or not. If you refuse to tell me, I'll still do the best I can to protect Henri, but you must understand that the game will be out of my hands, because Commissaire Charas will have the fly."

"But why must you know?" said, rather than asked, my sister-in-law, struggling to control her temper.

"Because I must and will know how and why my brother died, Hélène."

"All right. Take me back to the . . . house. I'll give you what your Commissaire would call my 'Confession.' "

"Do you mean to say that you have written it!"

"Yes. It was not really meant for you, but more likely for *your friend,* the Commissaire. I had foreseen that, sooner or later, he would get too close to the truth."

"You then have no objection to his reading it?"

"You will act as you think fit, François. Wait for me a minute."

Leaving me at the door of the parlor, Hélène ran upstairs to her room. In less than a minute she was back with a large brown envelope.

"Listen, François; you are not nearly as bright as was your poor brother, but you are not unintelligent. All I ask is that you read this alone. After that, you may do as you wish."

"That I promise you, Hélène," I said taking the precious envelope. "I'll read it tonight and although tomorrow is not a visiting day, I'll come down to see you."

"Just as you like," said my sister-in-law without even saying good-by as she went back upstairs.

It was only on reaching home, as I walked from the garage to the house, that I read the inscription on the envelope:

TO WHOM IT MAY CONCERN

(Probably Commissaire Charas)

Having told the servants that I would have only a light supper to be served immediately in my study and that I was not to be disturbed after, I ran upstairs, threw Hélène's envelope on my desk and made another careful search of the room before closing the shutters and drawing the curtains. All I could find was a long since dead mosquito stuck to the wall near the ceiling.

Having motioned to the servant to put her tray down on a table by the fireplace, I poured myself a glass of wine and locked the door behind her. I then disconnected the telephone—I always did this now at night—and turned out all the lights but the lamp on my desk.

Slitting open Hélène's fat envelope, I extracted a thick wad of closely written pages. I read the following lines neatly centered in the middle of the top page:

This is not a confession because, although I killed my husband, I am not a murderess. I simply and very faithfully carried out his last wish by crushing his head and right arm under the steam-hammer of his brother's factory.

Without even touching the glass of wine by my elbow, I turned the page and started reading.

For very nearly a year before his death *(the manuscript began),* my husband had told me of some of his experiments. He knew full well that his colleagues of the Air Ministry would have forbidden some of them as too dangerous, but he was keen on obtaining positive results before reporting his discovery.

Whereas only sound and pictures had been, so far, transmitted through space by radio and television, André claimed to have discovered a way of transmitting matter. Matter, any solid object, placed in his "transmitter" was instantly disintegrated and reintegrated in a special receiving set.

André considered his discovery as perhaps the most important since that of the wheel sawn off the end of a tree trunk. He reckoned that the transmission of matter by instantaneous "disintegration-reintegration" would completely change life as we had known it so far. It would mean the end of all means of transport, not only of goods including food, but also of human beings. André, the practical scientist who never allowed theories or daydreams to get the better of him, already foresaw the time when there would no longer be any airplanes, ships, trains or cars and, therefore, no longer any roads or railway lines, ports, airports or stations. All that would be replaced by matter-transmitting and receiving stations throughout the world. Travelers and goods would be placed in special cabins and, at a given signal, would simply disappear and reappear almost immediately at the chosen receiving station.

André's receiving set was only a few feet away from his transmitter, in an adjoining room of his laboratory, and he at first ran into all sorts of snags. His first successful experi-

ment was carried out with an ash tray taken from his desk, a souvenir we had brought back from a trip to London.

That was the first time he told me about his experiments and I had no idea of what he was talking about the day he came dashing into the house and threw the ash tray in my lap.

"Hélène, look! For a fraction of a second, a bare ten-millionth of a second, that ash tray has been completely disintegrated. For one little moment it no longer existed! Gone! Nothing left, absolutely nothing! Only atoms traveling through space at the speed of light! And the moment after, the atoms were once more gathered together in the shape of an ash tray!"

"André, please . . . please! What on earth are you raving about?"

He started sketching all over a letter I had been writing. He laughed at my wry face, swept all my letters off the table and said:

"You don't understand? Right. Let's start all over again. Hélène, do you remember I once read you an article about the mysterious flying stones that seem to come from nowhere in particular, and which are said to occasionally fall in certain houses in India? They come flying in as though thrown from outside and that, in spite of closed doors and windows."

"Yes, I remember. I also remember that Professor Augier, your friend of the College de France, who had come down for a few days, remarked that if there was no trickery about it, the only possible explanation was that the stones had been disintegrated after having been thrown from outside, come through the walls, and then been reintegrated before hitting the floor or the opposite walls."

"That's right. And I added that there was, of course, one other possibility, namely the momentary and partial disintegration of the walls as the stone or stones came through."

"Yes, André. I remember all that, and I suppose you also remember that I failed to understand, and that you got quite annoyed. Well, I still do not understand why and

how, even disintegrated, stones should be able to come through a wall or a closed door."

"But it is possible, Hélène, because the atoms that go to make up matter are not close together like the bricks of a wall. They are separated by relative immensities of space."

"Do you mean to say that you have disintegrated that ash tray, and then put it together again after pushing it through something?"

"Precisely, Hélène. I projected it through the wall that separates my transmitter from my receiving set."

"And would it be foolish to ask how humanity is to benefit from ash trays that can go through walls?"

André seemed quite offended, but he soon saw that I was only teasing and again waxing enthusiastic, he told me of some of the possibilities of his discovery.

"Isn't it wonderful, Hélène?" he finally gasped, out of breath.

"Yes, André. But I hope you won't ever transmit me; I'd be too much afraid of coming out at the other end like your ash tray."

"What do you mean?"

"Do you remember what was written under that ash tray?"

"Yes, of course: Made in Japan. That was the great joke of our typically British souvenir."

"The words are still there, André; but . . . look!"

He took the ash tray out of my hands, frowned, and walked over to the window. Then he went quite pale, and I knew that he had seen what had proved to me that he had indeed carried out a strange experiment.

The three words were still there, but reversed and reading:

nɐdɐſ ni ǝbɐM

Without a word, having completely forgotten me, André rushed off to his laboratory. I only saw him the next morning, tired and unshaven after a whole night's work.

A few days later André had a new reverse which put him

out of sorts and made him fussy and grumpy for several weeks. I stood it patiently enough for a while, but being myself bad tempered one evening, we had a silly row over some futile thing, and I reproached him for his moroseness.

"I'm sorry, *chérie*. I've been working my way through a maze of problems and have given you all a very rough time. You see, my very first experiment with a live animal proved a complete fiasco."

"André! You tried that experiment with Dandelo, didn't you?"

"Yes. How did you know?" he answered sheepishly. "He disintegrated perfectly, but he never reappeared in the receiving set."

"Oh, André! What became of him then?"

"Nothing . . . there is just no more Dandelo; only the dispersed atoms of a cat wandering, God knows where, in the universe."

Dandelo was a small white cat the cook had found one morning in the garden and which we had promptly adopted. Now I knew how it had disappeared and was quite angry about the whole thing, but my husband was so miserable over it all that I said nothing.

I saw little of my husband during the next few weeks. He had most of his meals sent down to the laboratory. I would often wake up in the morning and find his bed unslept in. Sometimes, if he had come in very late, I would find that storm-swept appearance which only a man can give a bedroom by getting up very early and fumbling around in the dark.

One evening he came home to dinner all smiles, and I knew that his troubles were over. His face dropped, however, when he saw I was dressed for going out.

"Oh. Were you going out, Hélène?"

"Yes, the Drillons invited me for a game of bridge, but I can easily phone them and put it off."

"No, it's all right."

"It isn't all right. Out with it, dear!"

"Well, I've at last got everything perfect and I wanted you to be the first to see the miracle."

"Magnifique, André! Of course I'll be delighted."

Having telephoned our neighbors to say how sorry I was and so forth, I ran down to the kitchen and told the cook that she had exactly ten minutes in which to prepare a "celebration dinner."

"An excellent idea, Hélène," said my husband when the maid appeared with the champagne after our candlelight dinner. "We'll celebrate with reintegrated champagne!" and taking the tray from the maid's hands, he led the way down to the laboratory.

"Do you think it will be as good as before its disintegration?" I asked, holding the tray while he opened the door and switched on the lights.

"Have no fear. You'll see! Just bring it here, will you," he said, opening the door of a telephone call-box he had bought and which had been transformed into what he called a transmitter. "Put it down on that now," he added, putting a stool inside the box.

Having carefully closed the door, he took me to the other end of the room and handed me a pair of very dark sun glasses. He put on another pair and walked back to a switchboard by the transmitter.

"Ready, Hélène?" said my husband, turning out all the lights. "Don't remove your glasses till I give the word."

"I won't budge, André. Go on," I told him, my eyes fixed on the tray which I could just see in a greenish shimmering light through the glass paneled door of the telephone booth.

"Right," said André throwing a switch.

The whole room was brilliantly illuminated by an orange flash. Inside the booth I had seen a crackling ball of fire and felt its heat on my face, neck and hands. The whole thing lasted but the fraction of a second, and I found myself blinking at green-edged black holes like those one sees after having stared at the sun.

"Et voilà! You can take off your glasses, Hélène."

A little theatrically perhaps, my husband opened the door of the booth. Though André had told me what to

expect, I was astonished to find that the champagne, glasses, tray and stool were no longer there.

André ceremoniously led me by the hand into the next room in a corner of which stood a second telephone booth. Opening the door wide, he triumphantly lifted the champagne tray off the stool.

Feeling somewhat like the good-natured kind-member-of-the-audience who has been dragged onto the music hall stage by the magician, I refrained from saying, "All done with mirrors," which I knew would have annoyed my husband.

"Sure it's not dangerous to drink?" I asked as the cork popped.

"Absolutely sure, Hélène," he said handing me a glass. "But that was nothing. Drink this off and I'll show you something much more astounding."

We went back into the other room.

"Oh, André! Remember poor Dandelo!"

"This is only a guinea pig, Hélène. But I'm positive it will go through all right."

He set the furry little beast down on the green enameled floor of the booth and quickly closed the door. I again put on my dark glasses and saw and felt the vivid crackling flash.

Without waiting for André to open the door, I rushed into the next room where the lights were still on and looked into the receiving booth.

"Oh, André! *Chéri!* He's there all right!" I shouted excitedly, watching the little animal trotting round and round. "It's wonderful, André. It works! You've succeeded!"

"I hope so, but I must be patient. I'll know for sure in a few weeks' time."

"What do you mean? Look! He's as full of life as when you put him in the other booth."

"Yes, so he seems. But we'll have to see if all his organs are intact, and that will take some time. If that little beast is still full of life in a month's time, we then consider the experiment a success."

I begged André to let me take care of the guinea pig.

"All right, but don't kill it by overfeeding," he agreed with a grin for my enthusiasm.

Though not allowed to take Hop-la—the name I had given the guinea pig—out of its box in the laboratory, I tied a pink ribbon round its neck and was allowed to feed it twice a day.

Hop-la soon got used to its pink ribbon and became quite a tame little pet, but that month of waiting seemed a year.

And then one day, André put Miquette, our cocker spaniel, into his "transmitter." He had not told me beforehand, knowing full well that I would never have agreed to such an experiment with our dog. But when he did tell me, Miquette had been successfully transmitted half a dozen times and seemed to be enjoying the operation thoroughly; no sooner was she let out of the "reintegrator" than she dashed madly into the next room, scratching at the "transmitter" door to have "another go," as André called it.

I now expected that my husband would invite some of his colleagues and Air Ministry specialists to come down. He usually did this when he had finished a research job and, before handing them long detailed reports which he always typed himself, he would carry out an experiment or two before them. But this time, he just went on working. One morning I finally asked him when he intended throwing his usual "surprise party," as we called it.

"No, Hélène; not for a long while yet. This discovery is much too important. I have an awful lot of work to do on it still. Do you realize that there are some parts of the transmission proper which I do not yet myself fully understand? It works all right, but you see, I can't just say to all these eminent professors that I do this and that and, poof, it works! I must be able to explain how and why it works. And what is even more important, I must be ready and able to refute every destructive argument they will not fail to trot out, as they usually do when faced with anything really good."

I was occasionally invited down to the laboratory to wit-

ness some new experiment, but I never went unless André invited me, and only talked about his work if he broached the subject first. Of course it never occurred to me that he would, at that stage at least, have tried an experiment with a human being; though, had I thought about it—knowing André—it would have been obvious that he would never have allowed anyone into the "transmitter" before he had been through to test it first. It was only after the accident that I discovered he had duplicated all his switches inside the disintegration booth, so that he could try it out by himself.

The morning André tried this terrible experiment, he did not show up for lunch. I sent the maid down with a tray, but she brought it back with a note she had found pinned outside the laboratory door: *Do not disturb me, I am working.*

He did occasionally pin such notes on his door and, though I noticed it, I paid no particular attention to the unusually large handwriting of his note.

It was just after that, as I was drinking my coffee, that Henri came bouncing into the room to say that he had caught a funny fly, and would I like to see it. Refusing even to look at his closed fist, I ordered him to release it immediately.

"But, *Maman,* it has such a funny white head!"

Marching the boy over to the open window, I told him to release the fly immediately, which he did. I knew that Henri had caught the fly merely because he thought it looked curious or different from other flies, but I also knew that his father would never stand for any form of cruelty to animals, and that there would be a fuss should he discover that our son had put a fly in a box or a bottle.

At dinner time that evening, André had still not shown up and, a little worried, I ran down to the laboratory and knocked at the door.

He did not answer my knock, but I heard him moving around and a moment later he slipped a note under the door. It was typewritten:

HÉLENÈ, I AM HAVING TROUBLE. PUT THE BOY TO BED AND COME BACK IN AN HOUR'S TIME. A.

Frightened, I knocked and called, but André did not seem to pay any attention and, vaguely reassured by the familiar noise of his typewriter, I went back to the house.

Having put Henri to bed, I returned to the laboratory where I found another note slipped under the door. My hand shook as I picked it up because I knew by then that something must be radically wrong. I read:

HÉLÈNE, FIRST OF ALL I COUNT ON YOU NOT TO LOSE YOUR NERVE OR DO ANYTHING RASH BECAUSE YOU ALONE CAN HELP ME. I HAVE HAD A SERIOUS ACCIDENT. I AM NOT IN ANY PARTICULAR DANGER FOR THE TIME BEING THOUGH IT IS A MATTER OF LIFE AND DEATH. IT IS USELESS CALLING TO ME OR SAYING ANYTHING. I CANNOT ANSWER, I CANNOT SPEAK. I WANT YOU TO DO EXACTLY AND VERY CAREFULLY ALL THAT I ASK. AFTER HAVING KNOCKED THREE TIMES TO SHOW THAT YOU UNDERSTAND AND AGREE, FETCH ME A BOWL OF MILK LACED WITH RUM. I HAVE HAD NOTHING ALL DAY AND CAN DO WITH IT.

Shaking with fear, not knowing what to think and repressing a furious desire to call André and bang away until he opened, I knocked three times as requested and ran all the way home to fetch what he wanted.

In less than five minutes I was back. Another note had been slipped under the door:

HÉLÈNE, FOLLOW THESE INSTRUCTIONS CAREFULLY. WHEN YOU KNOCK I'LL OPEN THE DOOR. YOU ARE TO WALK OVER TO MY DESK AND PUT DOWN THE BOWL OF MILK. YOU WILL THEN GO INTO THE OTHER ROOM WHERE THE RECEIVER IS. LOOK CAREFULLY AND TRY TO FIND A FLY WHICH OUGHT TO BE THERE BUT WHICH I AM UNABLE TO FIND. UNFORTUNATELY I CANNOT SEE SMALL THINGS VERY EASILY.

BEFORE YOU COME IN YOU MUST PROMISE TO OBEY ME IMPLICITLY. DO NOT LOOK AT ME AND REMEMBER THAT

TALKING IS QUITE USELESS. I CANNOT ANSWER. KNOCK AGAIN THREE TIMES AND THAT WILL MEAN I HAVE YOUR PROMISE. MY LIFE DEPENDS ENTIRELY ON THE HELP YOU CAN GIVE ME.

I had to wait a while to pull myself together, and then I knocked slowly three times.

I heard André shuffling behind the door, then his hand fumbling with the lock, and the door opened.

Out of the corner of my eye, I saw that he was standing behind the door, but without looking round, I carried the bowl of milk to his desk. He was evidently watching me and I must at all costs appear calm and collected.

"*Chéri,* you can count on me," I said gently, and putting the bowl down under his desk lamp, the only one alight, I walked into the next room where all the lights were blazing.

My first impression was that some sort of hurricane must have blown out of the receiving booth. Papers were scattered in every direction, a whole row of test tubes lay smashed in a corner, chairs and stools were upset and one of the window curtains hung half torn from its bent rod. In a large enamel basin on the floor a heap of burned documents was still smoldering.

I knew that I would not find the fly André wanted me to look for. Women know things that men only suppose by reasoning and deduction; it is a form of knowledge very rarely accessible to them and which they disparagingly call intuition. I already knew that the fly André wanted was the one which Henri had caught and which I had made him release.

I heard André shuffling around in the next room, and then a strange gurgling and sucking as though he had trouble in drinking his milk.

"André, there is no fly here. Can you give me any sort of indication that might help? If you can't speak, rap or something . . . you know: once for yes, twice for no."

I had tried to control my voice and speak as though perfectly calm, but I had to choke down a sob of desperation when he rapped twice for "no."

"May I come to you, André? I don't know what can have happened, but whatever it is, I'll be courageous, dear."

After a moment of silent hesitation, he tapped once on his desk.

At the door I stopped aghast at the sight of André standing with his head and shoulders covered by the brown velvet cloth he had taken from a table by his desk, the table on which he usually ate when he did not want to leave his work. Suppressing a laugh that might easily have turned to sobbing, I said:

"André, we'll search thoroughly tomorrow, by daylight. Why don't you go to bed? I'll lead you to the guest room if you like, and won't let anyone else see you."

His left hand tapped the desk twice.

"Do you need a doctor, André?"

"No," he rapped.

"Would you like me to call up Professor Augier? He might be of more help . . ."

Twice he rapped "no" sharply. I did not know what to do or say. And then I told him:

"Henri caught a fly this morning which he wanted to show me, but I made him release it. Could it have been the one you are looking for? I didn't see it, but the boy said its head was white."

André emitted a strange metallic sigh, and I just had time to bite my fingers fiercely in order not to scream. He had let his right arm drop, and instead of his long-fingered muscular hand, a gray stick with little buds on it like the branch of a tree, hung out of his sleeve almost down to his knee.

"André, *mon chéri,* tell me what happened. I might be of more help to you if I knew. André . . . oh, it's terrible!" I sobbed, unable to control myself.

Having rapped once for yes, he pointed to the door with his left hand.

I stepped out and sank down crying as he locked the door behind me. He was typing again and I waited. At last he shuffled to the door and slid a sheet of paper under it.

HÉLÈNE, COME BACK IN THE MORNING. I MUST THINK AND WILL HAVE TYPED OUT AN EXPLANATION FOR YOU. TAKE ONE OF MY SLEEPING TABLETS AND GO STRAIGHT TO BED. I NEED YOU FRESH AND STRONG TOMORROW, MA PAUVRE CHÉRIE. A.

"Do you want anything for the night, André?" I shouted through the door.

He knocked twice for no, and a little later I heard the typewriter again.

The sun full on my face woke me up with a start. I had set the alarm-clock for five but had not heard it, probably because of the sleeping tablets. I had indeed slept like a log, without a dream. Now I was back in my living nightmare and crying like a child I sprang out of bed. It was just on seven!

Rushing into the kitchen, without a word for the startled servants, I rapidly prepared a trayload of coffee, bread and butter with which I ran down to the laboratory.

André opened the door as soon as I knocked and closed it again as I carried the tray to his desk. His head was still covered, but I saw from his crumpled suit and his open camp-bed that he must have at least tried to rest.

On his desk lay a typewritten sheet for me which I picked up. André opened the other door, and taking this to mean that he wanted to be left alone, I walked into the next room. He pushed the door to and I heard him pouring out the coffee as I read:

DO YOU REMEMBER THE ASH TRAY EXPERIMENT? I HAVE HAD A SIMILAR ACCIDENT. I "TRANSMITTED" MYSELF SUCCESSFULLY THE NIGHT BEFORE LAST. DURING A SECOND EXPERIMENT YESTERDAY A FLY WHICH I DID NOT SEE MUST HAVE GOT INTO THE "DISINTEGRATOR." MY ONLY HOPE IS TO FIND THAT FLY AND GO THROUGH AGAIN WITH IT. PLEASE SEARCH FOR IT CAREFULLY SINCE, IF IT IS NOT FOUND, I SHALL HAVE TO FIND A WAY OF PUTTING AN END TO ALL THIS.

If only André had been more explicit! I shuddered at the thought that he must be terribly disfigured and then cried softly as I imagined his face inside-out, or perhaps his eyes in place of his ears, or his mouth at the back of his neck, or worse!

André must be saved! For that, the fly must be found!

Pulling myself together, I said:

"André, may I come in?"

He opened the door.

"André, don't despair; I am going to find that fly. It is no longer in the laboratory, but it cannot be very far. I suppose you're disfigured, perhaps terribly so, but there can be no question of putting an end to all this, as you say in your note; that I will never stand for. If necessary, if you do not wish to be seen, I'll make you a mask or a cowl so that you can go on with your work until you get well again. If you cannot work, I'll call Professor Augier, and he and all your other friends will save you, André."

Again I heard that curious metallic sigh as he rapped violently on his desk.

"André, don't be annoyed; please be calm. I won't do anything without first consulting you, but you must rely on me, have faith in me and let me help you as best I can. Are you terribly disfigured, dear? Can't you let me see your face? I won't be afraid . . . I am your wife you know."

But my husband again rapped a decisive "no" and pointed to the door.

"All right. I am going to search for the fly now, but promise me you won't do anything foolish; promise you won't do anything rash or dangerous without first letting me know all about it!"

He extended his left hand, and I knew I had his promise.

I will never forget that ceaseless day-long hunt for a fly. Back home, I turned the house inside-out and made all the servants join in the search. I told them that a fly had escaped from the Professor's laboratory and that it must be captured alive, but it was evident they already thought me crazy. They said so to the police later, and that day's hunt

for a fly most probably saved me from the guillotine later.

I questioned Henri and as he failed to understand right away what I was talking about, I shook him and slapped him, and made him cry in front of the round-eyed maids. Realizing that I must not let myself go, I kissed and petted the poor boy and at last made him understand what I wanted of him. Yes, he remembered, he had found the fly just by the kitchen window; yes, he had released it immediately as told to.

Even in summer time we had very few flies because our house is on the top of a hill and the slightest breeze coming across the valley blows round it. In spite of that, I managed to catch dozens of flies that day. On all the window sills and all over the garden I had put saucers of milk, sugar, jam, meat—all the things likely to attract flies. Of all those we caught, and many others which we failed to catch but which I saw, none resembled the one Henri had caught the day before. One by one, with a magnifying glass, I examined every unusual fly, but none had anything like a white head.

At lunch time, I ran down to André with some milk and mashed potatoes. I also took some of the flies we had caught, but he gave me to understand that they could be of no possible use to him.

"If that fly has not been found tonight, André, we'll have to see what is to be done. And this is what I propose: I'll sit in the next room. When you can't answer by the yes-no method of rapping, you'll type out whatever you want to say and then slip it under the door. Agreed?"

"Yes," rapped André.

By nightfall we had still not found the fly. At dinner time, as I prepared André's tray, I broke down and sobbed in the kitchen in front of the silent servants. My maid thought that I had had a row with my husband, probably about the mislaid fly, but I learned later that the cook was already quite sure that I was out of my mind.

Without a word, I picked up the tray and then put it down again as I stopped by the telephone. That this was really a matter of life and death for André, I had no doubt.

Neither did I doubt that he fully intended committing suicide, unless I could make him change his mind, or at least put off such a drastic decision. Would I be strong enough? He would never forgive me for not keeping a promise, but under the circumstances, did that really matter? To the devil with promises and honor! At all costs André must be saved! And having thus made up my mind, I looked up and dialed Professor Augier's number.

"The Professor is away and will not be back before the end of the week," said a polite neutral voice at the other end of the line.

That was that! I would have to fight alone and fight I would. I would save André come what may.

All my nervousness had disappeared as André let me in and, after putting the tray of food down on his desk, I went into the other room, as agreed.

"The first thing I want to know," I said as he closed the door behind me, "is what happened exactly. Can you please tell me, André?"

I waited patiently while he typed an answer which he pushed under the door a little later.

HÉLÈNE, I WOULD RATHER NOT TELL YOU. SINCE GO I MUST, I WOULD RATHER YOU REMEMBER ME AS I WAS BEFORE. I MUST DESTROY MYSELF IN SUCH A WAY THAT NONE CAN POSSIBLY KNOW WHAT HAS HAPPENED TO ME. I HAVE OF COURSE THOUGHT OF SIMPLY DISINTEGRATING MYSELF IN MY TRANSMITTER, BUT I HAD BETTER NOT BECAUSE, SOONER OR LATER, I MIGHT FIND MYSELF REINTEGRATED. SOME DAY, SOMEWHERE, SOME SCIENTIST IS SURE TO MAKE THE SAME DISCOVERY. I HAVE THEREFORE THOUGHT OF A WAY WHICH IS NEITHER SIMPLE NOR EASY, BUT YOU CAN AND WILL HELP ME.

For several minutes I wondered if André had not simply gone stark raving mad.

"André," I said at last, "whatever you may have chosen or thought of, I cannot and will never accept such a cow-

ardly solution. No matter how awful the result of your experiment or accident, you are alive, you are a man, a brain . . . and you have a soul. You have no right to destroy yourself! You know that!"

The answer was soon typed and pushed under the door.

I AM ALIVE ALL RIGHT, BUT I AM ALREADY NO LONGER A MAN. AS TO MY BRAIN OR INTELLIGENCE, IT MAY DISAPPEAR AT ANY MOMENT. AS IT IS, IT IS NO LONGER INTACT, AND THERE CAN BE NO SOUL WITHOUT INTELLIGENCE . . . AND YOU KNOW THAT!

"Then you must tell the other scientists about your discovery. They will help you and save you, André!"

I staggered back frightened as he angrily thumped the door twice.

"André . . . why? Why do you refuse the aid you know they would give you with all their hearts?"

A dozen furious knocks shook the door and made me understand that my husband would never accept such a solution. I had to find other arguments.

For hours, it seemed, I talked to him about our boy, about me, about his family, about his duty to us and to the rest of humanity. He made no reply of any sort. At last I cried:

"André . . . do you hear me?"

"Yes," he knocked very gently.

"Well, listen then. I have another idea. You remember your first experiment with the ash tray? . . . Well, do you think that if you had put it through again a second time, it might possibly have come out with the letters turned back the right way?"

Before I had finished speaking, André was busily typing and a moment later I read his answer:

I HAVE ALREADY THOUGHT OF THAT. AND THAT WAS WHY I NEEDED THE FLY. IT HAS GOT TO GO THROUGH WITH ME. THERE IS NO HOPE OTHERWISE.

"Try all the same, André. You never know!"

I HAVE TRIED SEVEN TIMES ALREADY, was the typewritten reply I got to that.

"André! Try again, please!"

The answer this time gave me a flutter of hope, because no woman has ever understood, or will ever understand, how a man about to die can possibly consider anything funny.

I DEEPLY ADMIRE YOUR DELICIOUS FEMININE LOGIC. WE COULD GO ON DOING THIS EXPERIMENT UNTIL DOOMSDAY. HOWEVER, JUST TO GIVE YOU THAT PLEASURE, PROBABLY THE VERY LAST I SHALL EVER BE ABLE TO GIVE YOU, I WILL TRY ONCE MORE. IF YOU CANNOT FIND THE DARK GLASSES, TURN YOUR BACK TO THE MACHINE AND PRESS YOUR HANDS OVER YOUR EYES. LET ME KNOW WHEN YOU ARE READY.

"Ready, André!" I shouted, without even looking for the glasses and following his instructions.

I heard him move around and then open and close the door of his "disintegrator." After what seemed a very long wait, but probably was not more than a minute or so, I heard a violent crackling noise and perceived a bright flash through my eyelids and fingers.

I turned around as the booth door opened.

His head and shoulders still covered with the brown velvet cloth, André was gingerly stepping out of it.

"How do you feel, André? Any difference?" I asked, touching his arm.

He tried to step away from me and caught his foot in one of the stools which I had not troubled to pick up. He made a violent effort to regain his balance, and the velvet cloth slowly slid off his shoulders and head as he fell heavily backward.

The horror was too much for me, too unexpected. As a matter of fact, I am sure that, even had I known, the horror-impact could hardly have been less powerful. Trying to push both hands into my mouth to stifle my screams

and although my fingers were bleeding, I screamed again and again. I could not take my eyes off him, I could not even close them, and yet I knew that if I looked at the horror much longer, I would go on screaming for the rest of my life.

Slowly, the monster, the thing that had been my husband, covered its head, got up and groped its way to the door and passed it. Though still screaming, I was able to close my eyes.

I who had ever been a true Catholic, who believed in God and another, better life hereafter, have today but one hope: that when I die, I really die, and that there may be no after-life of any sort, because, if there is, then I shall never forget! Day and night, awake or asleep, I see it, and I know that I am condemned to see it forever, even perhaps into oblivion!

Until I am totally extinct, nothing can, nothing will ever make me forget that dreadful white hairy head with its low flat skull and its two pointed ears. Pink and moist, the nose was also that of a cat, a huge cat. But the eyes! Or rather, where the eyes should have been were two brown bumps the size of saucers. Instead of a mouth, animal or human, was a long hairy vertical slit from which hung a black quivering trunk that widened at the end, trumpet-like, and from which saliva kept dripping.

I must have fainted, because I found myself flat on my stomach on the cold cement floor of the laboratory, staring at the closed door behind which I could hear the noise of André's typewriter.

Numb, numb and empty, I must have looked as people do immediately after a terrible accident, before they fully understand what has happened. I could only think of a man I had once seen on the platform of a railway station, quite conscious, and looking stupidly at his leg still on the line where the train had just passed.

My throat was aching terribly, and that made me wonder if my vocal cords had not perhaps been torn, and whether I would ever be able to speak again.

The noise of the typewriter suddenly stopped and I felt I was going to scream again as something touched the door and a sheet of paper slid from under it.

Shivering with fear and disgust, I crawled over to where I could read it without touching it:

NOW YOU UNDERSTAND. THAT LAST EXPERIMENT WAS A NEW DISASTER, MY POOR HÉLÈNE. I SUPPOSE YOU RECOGNIZED PART OF DANDELO'S HEAD. WHEN I WENT INTO THE DISINTEGRATOR JUST NOW, MY HEAD WAS ONLY THAT OF A FLY. I NOW ONLY HAVE EYES AND MOUTH LEFT. THE REST HAS BEEN REPLACED BY PARTS OF THE CAT'S HEAD. POOR DANDELO WHOSE ATOMS HAD NEVER COME TOGETHER. YOU SEE NOW THAT THERE CAN ONLY BE ONE POSSIBLE SOLUTION, DON'T YOU? I MUST DISAPPEAR. KNOCK ON THE DOOR WHEN YOU ARE READY AND I SHALL EXPLAIN WHAT YOU HAVE TO DO.

Of course he was right, and it had been wrong and cruel of me to insist on a new experiment. And I knew that there was now no possible hope, that any further experiments could only bring about worse results.

Getting up dazed, I went to the door and tried to speak, but no sound came out of my throat . . . so I knocked once!

You can of course guess the rest. He explained his plan in short typewritten notes, and I agreed, I agreed to everything!

My head on fire, but shivering with cold, like an automaton, I followed him into the silent factory. In my hand was a full page of explanations: what I had to know about the steam-hammer.

Without stopping or looking back, he pointed to the switchboard that controlled the steam-hammer as he passed it. I went no farther and watched him come to a halt before the terrible instrument.

He knelt down, carefully wrapped the cloth round his head, and then stretched out flat on the ground.

It was not difficult. I was not killing my husband. André,

poor André, had gone long ago, years ago it seemed. I was merely carrying out his last wish . . . and mine.

Without hesitating, my èyes on the long still body, I firmly pushed the "stroke" button right in. The great metallic mass seemed to drop slowly. It was not so much the resounding clang of the hammer that made me jump as the sharp cracking which I had distinctly heard at the same time. My hus . . . the thing's body shook a second and then lay still.

It was then I noticed that he had forgotten to put his right arm, his fly-leg, under the hammer. The police would never understand but the scientists would, and they must not! That had been André's last wish, also!

I had to do it and quickly, too; the night watchman must have heard the hammer and would be round any moment. I pushed the other button and the hammer slowly rose. Seeing but trying not to look, I ran up, leaned down, lifted and moved forward the right arm which seemed terribly light. Back at the switchboard, again I pushed the red button, and down came the hammer a second time. Then I ran all the way home.

You know the rest and can now do whatever you think right.

So ended Hélène's manuscript.

The following day I telephoned Commissaire Charas to invite him to dinner.

"With pleasure, Monsieur Delambre. Allow me, however, to ask: is it the Commissaire you are inviting, or just Monsieur Charas?"

"Have you any preference?"

"No, not at the present moment."

"Well then, make it whichever you like. Will eight o'clock suit you?"

Although it was raining, the Commissaire arrived on foot that evening.

"Since you did not come tearing up to the door in your black Citroën, I take it you have opted for Monsieur Charas, off duty?"

"I left the car up a side-street," mumbled the Commissaire with a grin as the maid staggered under the weight of his raincoat.

"*Merci,*" he said a minute later as I handed him a glass of Pernod into which he tipped a few drops of water, watching it turn the golden amber liquid to pale blue milk.

"You heard about my poor sister-in-law?"

"Yes, shortly after you telephoned me this morning. I am sorry, but perhaps it was all for the best. Being already in charge of your brother's case, the inquiry automatically comes to me."

"I suppose it was suicide."

"Without a doubt. Cyanide the doctors say quite rightly; I found a second tablet in the unstitched hem of her dress."

"*Monsieur est servi,*" announced the maid.

"I would like to show you a very curious document afterward, Charas."

"Ah, yes. I heard that Madame Delambre had been writing a lot, but we could find nothing beyond the short note informing us that she was committing suicide."

During our tête-à-tête dinner, we talked politics, books and films, and the local football club of which the Commissaire was a keen supporter.

After dinner, I took him up to my study where a bright fire—a habit I had picked up in England during the war—was burning.

Without even asking him, I handed him his brandy and mixed myself what he called "crushed-bug juice in soda water"—his appreciation of whisky.

"I would like you to read this, Charas; first because it was partly intended for you and, secondly, because it will interest you. If you think Commissaire Charas has no objection, I would like to burn it after."

Without a word, he took the wad of sheets Hélène had given me the day before and settled down to read them.

"What do you think of it all?" I asked some twenty minutes later as he carefully folded Hélène's manuscript, slipped it into the brown envelope, and put it into the fire.

Charas watched the flames licking the envelope from

which wisps of gray smoke were escaping, and it was only when it burst into flames that he said slowly raising his eyes to mine:

"I think it proves very definitely that Madame Delambre was quite insane."

For a long time we watched the fire eating up Hélène's "confession."

"A funny thing happened to me this morning, Charas. I went to the cemetery where my brother is buried. It was quite empty and I was alone."

"Not quite, Monsieur Delambre. I was there, but I did not want to disturb you."

"Then you saw me . . ."

"Yes. I saw you bury a matchbox."

"Do you know what was in it?"

"A fly, I suppose."

"Yes. I had found it early this morning, caught in a spider's web in the garden."

"Was it dead?"

"No, not quite. I . . . crushed it . . . between two stones. Its head was . . . white . . . all white."

LET'S GET TOGETHER

by Isaac Asimov

What makes a man: ten toes, one nose, and a brain weight of about 1,300 grams? Intelligence? Curiosity? Humor? Conscious ego? What is the distinction between your "stern Victorian," "wise Chinese," and "warlike Gaul"? Between a Hopi, a headhunter, or a Latin School headmaster? Is there a predictable evolutionary difference between *Homo Sap* as he existed in the Pharoahs' Egypt and as he will be in a colony on Mars?

One of the first writers to pursue this theme was Isaac Asimov, whose fictional researches into "robopsychology" (in a series of stories beginning in 1940, and later published in book form as *I, Robot*) anticipated the effort of the newest science, cybernetics, to study the mind of man through the building of analogue "thinking machines." Dr. Asimov, a prolific writer of fiction and nonfiction (with five new books out during 1957) is also Associate Professor of Biochemistry at Boston University's School of Medicine.

A kind of peace had endured for a century and people had forgotten what anything else was like. They would scarcely have known how to react had they discovered that a kind of war had finally come.

Certainly, Elias Lynn, Chief of the Bureau of Robotics, wasn't sure how he ought to react when *he* finally found out. The Bureau of Robotics was headquartered in Cheyenne, in line with the century-old trend toward decentralization, and Lynn stared dubiously at the young Security officer from Washington who had brought the news.

Elias Lynn was a large man, almost charmingly homely, with pale blue eyes that bulged a bit. Men weren't usually comfortable under the stare of those eyes, but the Security officer remained calm.

Lynn decided that his first reaction ought to be incredulity. Hell, it *was* incredulity! He just didn't believe it!

He eased himself back in his chair and said, "How certain is the information?"

The Security officer, who had introduced himself as Ralph G. Breckenridge and had presented credentials to match, had the softness of youth about him; full lips, plump cheeks that flushed easily, and guileless eyes. His clothing was out of line with Cheyenne but it suited a universally air-conditioned Washington, where Security, despite everything, was still centered.

Breckenridge flushed and said, "There's no doubt about it."

"You people know all about Them, I suppose," said Lynn and was unable to keep a trace of sarcasm out of his tone. He was not particularly aware of his use of a slightly stressed pronoun in his reference to the enemy, the equivalent of capitalization in print. It was a cultural habit of this generation and the one preceding. No one said the "East," or the "Reds" or the "Soviets" or the "Russians" any more. That would have been too confusing, since some of Them weren't of the East, weren't Reds, Soviets, and especially not Russians. It was much simpler to say We and They, and much more precise.

Travelers had frequently reported that They did the same in reverse. Over there, They were "We" (in the appropriate language) and We were "They."

Scarcely anyone gave thought to such things any more. It was all quite comfortable and casual. There was no hatred, even. At the beginning, it had been called a Cold War. Now it was only a game, almost a good-natured game, with unspoken rules and a kind of decency about it.

Lynn said abruptly, "Why should They want to disturb the situation?"

He rose and stood staring at a wall-map of the world, split into two regions with faint edgings of color. An irregular portion on the left of the map was edged in a mild green. A smaller, but just as irregular, portion on the right

of the map was bordered in a washed-out pink. We and They.

The map hadn't changed much in a century. The loss of Formosa and the gain of East Germany some eighty years before had been the last territorial switch of importance.

There had been another change, though, that was significant enough and that was in the colors. Two generations before, Their territory had been a brooding, bloody red, Ours a pure and undefiled white. Now there was a neutrality about the colors. Lynn had seen Their maps and it was the same on Their side.

"They wouldn't do it," he said.

"They are doing it," said Breckenridge, "and you had better accustom yourself to the fact. Of course, sir, I realize that it isn't pleasant to think that They may be that far ahead of us in robotics."

His eyes remained as guileless as ever, but the hidden knife-edges of the words plunged deep, and Lynn quivered at the impact.

Of course, that would account for why the Chief of Robotics learned of this so late and through a Security officer at that. He had lost caste in the eyes of the Government; if Robotics had really failed in the struggle, Lynn could expect no political mercy.

Lynn said wearily, "Even if what you say is true, They're not far ahead of us. We could build humanoid robots."

"Have we, sir?"

"Yes. As a matter of fact, we have built a few models for experimental purposes."

"They were doing so ten years ago. They've made ten years' progress since."

Lynn was disturbed. He wondered if his incredulity concerning the whole business was really the result of wounded pride and fear for his job and reputation. He was embarrassed by the possibility that this might be so, and yet he was forced into defense.

He said, "Look, young man, the stalemate between Them and Us was never perfect in every detail, you know. They have always been ahead in one facet or another and

We in some other facet or another. If They're ahead of us right now in robotics, it's because They've placed a greater proportion of Their effort into robotics than We have. And that means that some other branch of endeavor has received a greater share of Our efforts than it has of Theirs. It would mean We're ahead in force-field research or in hyper-atomics, perhaps."

Lynn felt distressed at his own statement that the stalemate wasn't perfect. It was true enough, but that was the one great danger threatening the world. The world depended on the stalemate being as perfect as possible. If the small unevennesses that always existed overbalanced too far in one direction or the other—

Almost at the beginning of what had been the Cold War, both sides had developed thermonuclear weapons, and war became unthinkable. Competition switched from the military to the economic and psychological and had stayed there ever since.

But always there was the driving effort on each side to break the stalemate, to develop a parry for every possible thrust, to develop a thrust that could not be parried in time —something that would make war possible again. And that was not because either side wanted war so desperately, but because both were afraid that the other side would make the crucial discovery first.

For a hundred years each side had kept the struggle even. And in the process, peace had been maintained for a hundred years while, as byproducts of the continuously intensive research, force-fields had been produced and solar energy and insect control and robots. Each side was making a beginning in the understanding of mentalics, which was the name given to the biochemistry and biophysics of thought. Each side had its outposts on the Moon and on Mars. Mankind was advancing in giant strides under forced draft.

It was even necessary for both sides to be as decent and humane as possible among themselves, lest through cruelty and tyranny, friends be made for the other side.

It couldn't be that the stalemate would now be broken and that there would be war.

Lynn said, "I want to consult one of my men. I want his opinion."

"Is he trustworthy?"

Lynn looked disgusted. "Good Lord, what man in Robotics has not been investigated and cleared to death by your people? Yes, I vouch for him. If you can't trust a man like Humphrey Carl Laszlo, then we're in no position to face the kind of attack you say They are launching, no matter what else we do."

"I've heard of Laszlo," said Breckenridge.

"Good. Does he pass?"

"Yes."

"Then, I'll have him in and we'll find out what he thinks about the possibility that robots could invade the U. S. A."

"Not exactly," said Breckenridge, softly. "You still don't accept the full truth. Find out what he thinks about the fact that robots have *already* invaded the U. S. A."

Laszlo was the grandson of a Hungarian who had broken through what had then been called the Iron Curtain, and he had a comfortable above-suspicion feeling about himself because of it. He was thick-set and balding with a pugnacious look graven forever on his snub face, but his accent was clear Harvard and he was almost excessively soft-spoken.

To Lynn, who was conscious that after years of administration he was no longer expert in the various phases of modern robotics, Laszlo was a comforting receptacle for complete knowledge. Lynn felt better because of the man's mere presence.

Lynn said, "What do you think?"

A scowl twisted Laszlo's face ferociously. "That They're that far ahead of us. Completely incredible. It would mean They've produced humanoids that could not be told from humans at close quarters. It would mean a considerable advance in robo-mentalics."

"You're personally involved," said Breckenridge, coldly.

"Leaving professional pride out of account, exactly why is it impossible that They be ahead of Us?"

Laszlo shrugged. "I assure you that I'm well acquainted with Their literature on robotics. I know approximately where They are."

"You know approximately where They want you to *think* They are, is what you really mean," corrected Breckenridge. "Have you ever visited the other side?"

"I haven't," said Laszlo, shortly.

"Nor you, Dr. Lynn?"

Lynn said, "No, I haven't, either."

Breckenridge said, "Has any robotics man visited the other side in twenty-five years?" He asked the question with a kind of confidence that indicated he knew the answer.

For a matter of seconds, the atmosphere was heavy with thought. Discomfort crossed Laszlo's broad face. He said, "As a matter of fact, They haven't held any conferences on robotics in a long time."

"In twenty-five years," said Breckenridge. "Isn't that significant?"

"Maybe," said Laszlo, reluctantly. "Something else bothers me, though. None of Them have ever come to Our conferences on robotics. None that I can remember."

"Were They invited?" asked Breckenridge.

Lynn, staring and worried, interposed quickly, "Of course."

Breckenridge said, "Do They refuse attendance to any other types of scientific conferences We hold?"

"I don't know," said Laszlo. He was pacing the floor now. "I haven't heard of any cases. Have you, Chief?"

"No," said Lynn.

Breckenridge said, "Wouldn't you say it was as though They didn't want to be put in the position of having to return any such invitation? Or as though They were afraid one of Their men might talk too much?"

That was exactly how it seemed, and Lynn felt a helpless conviction that Security's story was true after all steal over him.

Why else had there been no contact between sides on robotics? There had been a cross-fertilizing trickle of researchers moving in both directions on a strictly one-for-one basis for years, dating back to the days of Eisenhower and Khrushchev. There were a great many good motives for that: an honest appreciation of the supra-national character of science; impulses of friendliness that are hard to wipe out completely in the individual human being; the desire to be exposed to a fresh and interesting outlook and to have your own slightly stale notions greeted by others as fresh and interesting.

The governments themselves were anxious that this continue. There was always the obvious thought that by learning all you could and telling as little as you could, your own side would gain by the exchange.

But not in the case of robotics. Not there.

Such a little thing to carry conviction. And a thing, moreover, they had known all along. Lynn thought darkly: *We've taken the complacent way out.*

Because the other side had done nothing publicly on robotics, it had been tempting to sit back smugly and be comfortable in the assurance of superiority. Why hadn't it seemed possible, even likely, that They were hiding superior cards, a trump hand, for the proper time?

Laszlo said shakenly, "What do we do?" It was obvious that the same line of thought had carried the same conviction to him.

"Do?" parroted Lynn. It was hard to think right now of anything but of the complete horror that came with conviction. There were ten humanoid robots somewhere in the United States, each one carrying a fragment of a TC bomb.

TC! The race for sheer horror in bomb-ery had ended there. TC! Total Conversion! The sun was no longer a synonym one could use. Total conversion made the sun a penny candle.

Ten humanoids, each completely harmless in separation, could, by the simple act of coming together, exceed critical mass and—

Lynn rose to his feet heavily, the dark pouches under his eyes, which ordinarily lent his ugly face a look of savage foreboding, more prominent than ever. "It's going to be up to us to figure out ways and means of telling a humanoid from a human and then finding the humanoids."

"How quickly?" muttered Laszlo.

"Not later than five minutes before they get together," barked Lynn, "and I don't know when that will be."

Breckenridge nodded. "I'm glad you're with us now, sir. I'm to bring you back to Washington for conference, you know."

Lynn raised his eyebrows. "All right."

He wondered if, had he delayed longer in being convinced, he might not have been replaced forthwith—if some other Chief of the Bureau of Robotics might not be conferring in Washington. He suddenly wished earnestly that exactly that had come to pass.

The First Presidential Assistant was there, the Secretary of Science, the Secretary of Security, Lynn himself, and Breckenridge. Five of them sitting about a table in the dungeons of an underground fortress near Washington.

Presidential Assistant Jeffreys was an impressive man, handsome in a white-haired and just-a-trifle-jowly fashion, solid, thoughtful and as unobtrusive, politically, as a Presidential Assistant ought to be.

He spoke incisively. "There are three questions that face us as I see it. First, when are the humanoids going to get together? Second, where are they going to get together? Third, how do we stop them before they get together?"

Secretary of Science Amberley nodded convulsively at that. He had been Dean of Northwestern Engineering before his appointment. He was thin, sharp-featured and noticeably edgy. His forefinger traced slow circles on the table.

"As far as *when* they'll get together," he said. "I suppose it's definite that it won't be for some time."

"Why do you say that?" asked Lynn sharply.

"They've been in the U. S. at least a month already. So Security says."

Lynn turned automatically to look at Breckenridge, and Secretary of Security Macalaster intercepted the glance. Macalaster said, "The information is reliable. Don't let Breckenridge's apparent youth fool you, Dr. Lynn. That's part of his value to us. Actually, he's thirty-four and has been with the department for ten years. He has been in Moscow for nearly a year and without him, none of this terrible danger would be known to us. As it is, we have most of the details."

"Not the crucial ones," said Lynn.

Macalaster of Security smiled frostily. His heavy chin and close-set eyes were well-known to the public but almost nothing else about him was. He said, "We are all finitely human, Dr. Lynn. Agent Breckenridge has done a great deal."

Presidential Assistant Jeffreys cut in. "Let us say we have a certain amount of time. If action at the instant were necessary, it would have happened before this. It seems likely that they are waiting for a specific time. If we knew the place, perhaps the time would become self-evident.

"If they are going to TC a target, they will want to cripple us as much as possible, so it would seem that a major city would have to be it. In any case, a major metropolis is the only target worth a TC bomb. I think there are four possibilities: Washington, as the administrative center; New York, as the financial center; and Detroit and Pittsburgh as the two chief industrial centers."

Macalaster of Security said, "I vote for New York. Administration and industry have both been decentralized to the point where the destruction of any one particular city won't prevent instant retaliation."

"Then why New York?" asked Amberly of Science, perhaps more sharply than he intended, "Finance has been decentralized as well."

"A question of morale. It may be they intend to destroy our will to resist, to induce surrender by the sheer horror of the first blow. The greatest destruction of human life would be in the New York Metropolitan area—"

"Pretty cold-blooded," muttered Lynn.

"I know," said Macalaster of Security, "but they're capable of it, if they thought it would mean final victory at a stroke. Wouldn't we—"

Presidential Assistant Jeffreys brushed back his white hair. "Let's assume the worst. Let's assume that New York will be destroyed some time during the winter, preferably immediately after a serious blizzard when communications are at their worst and the disruption of utilities and food supplies in fringe areas will be most serious in their effect. Now, how do we stop them?"

Amberley of Science could only say, "Finding ten men in two hundred and twenty million is an awfully small needle in an awfully large haystack."

Jeffreys shook his head. "You have it wrong. Ten humanoids among two hundred twenty million humans."

"No difference," said Amberley of Science. "We don't know that a humanoid can be differentiated from a human at sight. Probably not." He looked at Lynn. They all did.

Lynn said heavily, "We in Cheyenne couldn't make one that would pass as human in the daylight."

"But They can," said Macalaster of Security, "and not only physically. We're sure of that. They've advanced mentalic procedures to the point where They can reel off the micro-electronic pattern of the brain and focus it on the positronic pathways of the robot."

Lynn stared. "Are you implying that They can create the replica of a human being complete with personality and memory?"

"I am."

"Of specific human beings?"

"That's right."

"Is this also based on Agent Breckenridge's findings?"

"Yes. The evidence can't be disputed."

Lynn bent his head in thought for a moment. Then he said, "Then ten men in the United States are not men but humanoids. But the originals would have had to be available to them. They couldn't be Orientals, who would be too easy to spot, so they would have to be East Europeans. How would they be introduced into this country, then?

With the radar network over the entire world border as tight as a drum, how could They introduce any individual, human or humanoid, without our knowing it?"

Macalaster of Security said, "It can be done. There are certain legitimate seepages across the border. Businessmen, pilots, even tourists. They're watched, of course, on both sides. Still ten of them might have been kidnaped and used as models for humanoids. The humanoids would then be sent back in their place. Since we wouldn't expect such a substitution, it would pass us by. If they were Americans to begin with, there would be no difficulty in their getting into this country. It's as simple as that."

"And even their friends and family could not tell the difference?"

"We must assume so. Believe me, we've been waiting for any report that might imply sudden attacks of amnesia or troublesome changes in personality. We've checked on thousands."

Amberley of Science stared at his finger-tips. "I think ordinary measures won't work. The attack must come from the Bureau of Robotics and I depend on the chief of that bureau."

Again eyes turned sharply, expectantly, on Lynn.

Lynn felt bitterness rise. It seemed to him that this was what the conference came to and was intended for. Nothing that had been said had not been said before. He was sure of that. There was no solution to the problem, no pregnant suggestion. It was a device for the record, a device on the part of men who gravely feared defeat and who wished the responsibility for it placed clearly and unequivocally on someone else.

And yet there was justice in it. It was in robotics that We had fallen short. And Lynn was not Lynn merely. He was Lynn of Robotics and the responsibility had to be his.

He said, "I will do what I can."

He spent a wakeful night and there was a haggardness about both body and soul when he sought and attained another interview with Presidential Assistant Jeffreys the next

morning. Breckenridge was there, and though Lynn would have preferred a private conference, he could see the justice in the situation. It was obvious that Breckenridge had attained enormous influence with the government as a result of his successful Intelligence work. Well, why not?

Lynn said, "Sir, I am considering the possibility that we are hopping uselessly to enemy piping."

"In what way?"

"I'm sure that however impatient the public may grow at times, and however legislators sometimes find it expedient to talk, the government at least recognizes the world stalemate to be beneficial. They must recognize it also. Ten humanoids with one TC bomb is a trivial way of breaking the stalemate."

"The destruction of fifteen million human beings is scarcely trivial."

"It is from the world power standpoint. It would not so demoralize us as to make us surrender or so cripple us as to convince us we could not win. There would just be the same old planetary death-war that both sides have avoided so long and so successfully. And all They would have accomplished is to force us to fight minus one city. It's not enough."

"What do you suggest?" said Jeffreys coldly. "That They do not have ten humanoids in our country? That there is not a TC bomb waiting to get together?"

"I'll agree that those things are here, but perhaps for some reason greater than just mid-winter bomb-madness."

"Such as?"

"It may be that the physical destruction resulting from the humanoids getting together is not the worst thing that can happen to us. What about the moral and intellectual destruction that comes of their being here at all? With all due respect to Agent Breckenridge, what if They *intended* for us to find out about the humanoids; what if the humanoids are never supposed to get together, but merely to remain separate in order to give us something to worry about."

"Why?"

"Tell me this. What measures have already been taken against the humanoids? I suppose that Security is going through the files of all citizens who have ever been across the border or close enough to it to make kidnaping possible. I know, since Macalaster mentioned it yesterday, that they are following up suspicious psychiatric cases. What else?"

Jeffreys said, "Small X-ray devices are being installed in key places in the large cities. In the mass arenas, for instance—"

"Where ten humanoids might slip in among a hundred thousand spectators of a football game or an air-polo match?"

"Exactly."

"And concert halls and churches?"

"We must start somewhere. We can't do it all at once."

"Particularly when panic must be avoided," said Lynn. "Isn't that so? It wouldn't do to have the public realize that at any unpredictable moment, some unpredictable city and its human contents would suddenly cease to exist."

"I suppose that's obvious. What are you driving at?"

Lynn said strenuously, "That a growing fraction of our national effort will be diverted entirely into the nasty problem of what Amberley called finding a very small needle in a very large haystack. We'll be chasing our tails madly, while They increase their research lead to the point where we find we can no longer catch up; when we must surrender without the chance even of snapping our fingers in retaliation.

"Consider further that this news will leak out as more and more people become involved in our counter-measures and more and more people begin to guess what we're doing. Then what? The panic might do us more harm than any one TC bomb."

The Presidential Assistant said irritably, "In Heaven's name, man, what do you suggest we do, then?"

"Nothing," said Lynn. "Call their bluff. Live as we have lived and gamble that They won't dare break the stalemate for the sake of a one-bomb head start."

"Impossible!" said Jeffreys. "Completely impossible. The welfare of all of Us is very largely in my hands, and doing nothing is the one thing I cannot do. I agree with you, perhaps, that X-ray machines at sports arenas are a kind of skin-deep measure that won't be effective, but it has to be done so that people, in the aftermath, do not come to the bitter conclusion that we tossed our country away for the sake of a subtle line of reasoning that encouraged do-nothingism. In fact, our counter-gambit will be active indeed."

"In what way?"

Presidential Assistant Jeffreys looked at Breckenridge. The young Security officer, hitherto calmly silent, said, "It's no use talking about a possible future break in the stalemate when the stalemate is broken now. It doesn't matter whether these humanoids explode or do not. Maybe they *are* only a bait to divert us, as you say. But the fact re-remains that we are a quarter of a century behind in robotics, and that may be fatal. What other advances in robotics will there be to surprise us if war does start? The only answer is to divert our entire force immediately, *now*, into a crash program of robotics research, and the first problem is to find the humanoids. Call it an exercise in robotics, if you will, or call it the prevention of the death of fifteen million men, women and children."

Lynn shook his head helplessly. "You *can't*. You'd be playing into their hands. They want us lured into the one blind alley while they're free to advance in all other directions."

Jeffreys said impatiently, "That's your guess. Breckenridge has made his suggestion through channels and the government has approved, and we will begin with an all-Science conference."

"All-Science?"

Breckenridge said, "We have listed every important scientist of every branch of natural science. They'll all be at Cheyenne. There will be only one point on the agenda: How to advance robotics. The major specific subheading under that will be: How to develop a receiving device for

the electromagnetic fields of the cerebral cortex that will be sufficiently delicate to distinguish between a protoplasmic human brain and a positronic humanoid brain."

Jeffreys said, "We had hoped you would be willing to be in charge of the conference."

"I was not consulted in this."

"Obviously time was short, sir. Do you agree to be in charge?"

Lynn smiled briefly. It was a matter of responsibility again. The responsibility must be clearly that of Lynn of Robotics. He had the feeling it would be Breckenridge who would really be in charge. But what could he do?

He said, "I agree."

Breckenridge and Lynn returned together to Cheyenne, where that evening Laszlo listened with a sullen mistrust to Lynn's description of coming events.

Laszlo said, "While you were gone, Chief, I've started putting five experimental models of humanoid structure through the testing procedures. Our men are on a twelve-hour day, with three shifts overlapping. If we've got to arrange a conference, we're going to be crowded and red-taped out of everything. Work will come to a halt."

Breckenridge said, "That will be only temporary. You will gain more than you lose."

Laszlo scowled. "A bunch of astrophysicists and geochemists around won't help a damn toward robotics."

"Views from specialists of other fields may be helpful."

"Are you sure? How do we know that there *is* any way of detecting brain waves or that, even if we can, there is a way of differentiating human and humanoid by wave pattern? Who set up the project, anyway?"

"I did," said Breckenridge.

"*You* did? Are you a robotics man?"

The young Security agent said calmly, "I have studied robotics."

"That's not the same thing."

"I've had access to text-material dealing with Russian

robotics—in Russian. Top-secret material well in advance of anything you have here."

Lynn said ruefully, "He has us there, Laszlo."

"It was on the basis of that material," Breckenridge went on, "that I suggested this particular line of investigation. It is reasonably certain that in copying off the electromagnetic pattern of a specific human mind into a specific positronic brain, a perfectly exact duplicate cannot be made. For one thing, the most complicated positronic brain small enough to fit into a human-sized skull is hundreds of times less complex than the human brain. It can't pick up all the overtones, therefore, and there must be some way to take advantage of that fact."

Laszlo looked impressed despite himself and Lynn smiled grimly. It was easy to resent Breckenridge and the coming intrusion of several hundred scientists of non-robotics specialties, but the problem itself was an intriguing one. There was that consolation, at least.

It came to him quietly.

Lynn found he had nothing to do but sit in his office alone, with an executive position that had grown merely titular. Perhaps that helped. It gave him time to think, to picture the creative scientists of half the world converging on Cheyenne.

It was Breckenridge who, with cool efficiency, was handling the details of preparation. There had been a kind of confidence in the way he said, "Let's get together and we'll lick Them."

Let's get together.

It came to Lynn so quietly that anyone watching Lynn at that moment might have seen his eyes blink slowly twice—but surely nothing more.

He did what he had to do with a whirling detachment that kept him calm when he felt that, by all rights, he ought to be going mad.

He sought out Breckenridge in the other's improvised quarters. Breckenridge was alone and frowning. "Is anything wrong, sir?"

Lynn said wearily, "Everything's right, I think. I've invoked martial law."

"What!"

"As chief of a division I can do so if I am of the opinion the situation warrants it. Over my division I can then be dictator. Chalk up one for the beauties of decentralization."

"You will rescind that order immediately." Breckenridge took a step forward. "When Washington hears this, you will be ruined."

"I'm ruined anyway. Do you think I don't realize that I've been set up for the role of the greatest villain in American history: the man who let Them break the stalemate? I have nothing to lose—and perhaps a great deal to gain."

He laughed a little wildly. "What a target the Division of Robotics will be, eh, Breckenridge? Only a few thousand men to be killed by a TC bomb capable of wiping out three hundred square miles in one micro-second. But five hundred of those men would be our greatest scientists. We would be in the peculiar position of having to fight a war with our brains shot out, or surrendering. I think we'd surrender."

"But this is impossible. Lynn, do you hear me? Do you understand? How could the humanoids pass our security provisions? How could they get together?"

"But they *are* getting together! We're helping them to do so. We're ordering them to do so. Our scientists visit the other side, Breckenridge. They visit Them regularly. You made a point of how strange it was that no one in robotics did. Well, ten of those scientists are still there and in their place, ten humanoids are converging on Cheyenne."

"That's a ridiculous guess."

"I think it's a good one, Breckenridge. But it wouldn't work unless we knew humanoids were in America so that we would call the conference in the first place. Quite a coincidence that you brought the news of the humanoids *and* suggested the conference *and* suggested the agenda *and* are running the show *and* know exactly which scientists

were invited. Did you make sure the right ten were included?"

"Dr. Lynn!" cried Breckenridge in outrage. He poised to rush forward.

Lynn said, "Don't move. I've got a blaster here. We'll just wait for the scientists to get here one by one. One by one we'll X-ray them. One by one, we'll monitor them for radioactivity. No two will get together without being checked, and if all five hundred are clear, I'll give you my blaster and surrender to you. Only I think we'll find the ten humanoids. Sit down, Breckenridge."

They both sat.

Lynn said, "We wait. When I'm tired, Laszlo will spell me. We wait."

Professor Manuelo Jiminez of the Institute of Higher Studies of Buenos Aires exploded while the stratospheric jet on which he traveled was three miles above the Amazon Valley. It was a simple chemical explosion but it was enough to destroy the plane.

Dr. Herman Liebowitz of M. I. T. exploded in a monorail, killing twenty people and injuring a hundred others.

In similar manner, Dr. Auguste Marin of L'Institut Nucléonique of Montreal and seven others died at various stages of their journey to Cheyenne.

Laszlo hurtled in, pale-faced and stammering, with the first news of it. It had only been two hours that Lynn had sat there, facing Breckenridge, blaster in hand.

Laszlo said, "I thought you were nuts, Chief, but you were right. They *were* humanoids. They *had* to be." He turned to stare with hate-filled eyes at Breckenridge. "Only they were warned. *He* warned them, and now there won't be one left intact. Not one to study."

"God!" cried Lynn and in a frenzy of haste thrust his blaster out toward Breckenridge and fired. The Security man's neck vanished; the torso fell; the head dropped, thudded against the floor and rolled crookedly

Lynn moaned, "I didn't understand, I thought he was a traitor. Nothing more."

And Laszlo stood immobile, mouth open, for the moment incapable of speech.

Lynn said wildly, "Sure, he warned them. But how could he do so while sitting in that chair unless he were equipped with built-in radio transmission? Don't you see it? Breckenridge had been in Moscow. The real Breckenridge is still there. Oh my God, there were *eleven* of them."

Laszlo managed a hoarse squeak. "Why didn't *he* explode?"

"He was hanging on, I suppose, to make sure the others had received his message and were safely destroyed. Lord, Lord, when you brought the news and I realized the truth, I couldn't shoot fast enough. God knows by how few seconds I may have beaten him to it."

Laszlo said shakily, "At least, we'll have one to study." He bent and put his fingers on the sticky fluid trickling out of the mangled remains at the neck end of the headless body.

Not blood, but high-grade machine oil.

THE WONDER HORSE

by George Byram

When I first read this story, I passed it on to my daughter (the horse expert in our family) to find out whether the Wonder Horse was a sufficiently *unlikely* animal to make it possible to call the yarn a fantasy—the whole thing had such a background feeling of credibility.

Later, I realized that the intense plausibility of the story stemmed from the fact that the horse itself is just about the only departure from everyday factuality. The story was written, says the author, "one evening when I was studying genetics in regard to my own horse-breeding program (crossing Arabians on Quarter Horses). I came to that part of the text which discussed mutations and, like any horse-breeder, began dreaming what kind of mutation I would like to have happen. Then, like any author, realizing the chances were literally millions to one that it would ever happen, I did the next best thing: I imagined that it did . . ."

Webster says a mutation is a sudden variation, the offspring differing from the parents in some well-marked character or characters—and that certainly fits Red Eagle. He was foaled of registered parents, both his sire and dam descending from two of the best bloodlines in the breed. But the only thing normal about this colt was his color, a beautiful chestnut.

I attended Red Eagle's arrival into the world. He was kicking at the sac that enclosed him as I freed his nostrils from the membrane. He was on his feet in one minute. He was straight and steady on his pasterns by the time his dam had him licked dry. He had his first feeding before he was five minutes old, and he was beginning to buck and rear and prance by the time I got my wits about me and called Ben.

Ben came in the other end of the ramshackle barn from the feed lot. He was small as men go, but big for a jockey. Not really old at forty-two, his hair was gray and he was old in experience of horses.

Ben came into the box stall and as he saw the colt he stopped and whistled. He pushed back his hat and studied the red colt for a full five minutes. Even only minutes old a horseman could see he was markedly different. The bones from stifle to hock and elbow to knee were abnormally long. There was unusual length and slope of shoulder. He stood high in the croup and looked like he was running downhill. He had a very long underline and short back. All this spelled uniquely efficient bone levers, and these levers were connected and powered by the deepest hard-twisted muscles a colt ever brought into this world. Unbelievable depth at the girth and immense spring to the ribs meant an engine of heart and lungs capable of driving those muscled levers to their maximum. Red Eagle's nostrils were a third larger than any we had ever seen and he had a large, loose windpipe between his broad jaws. He would be able to fuel the engine with all the oxygen it could use. Most important of all, the clean, sharp modeling of his head and the bigness and luster of his eyes indicated courage, will to win. But because of his strange proportions he looked weird.

"Holy Mary," said Ben softly, and I nodded agreement.

Ben and I had followed horses all our lives. I as a veterinarian and trainer for big breeders, Ben as a jockey. Each of us had outserved his usefulness. Ben had got too heavy to ride; I had got too cantankerous for the owners to put up with. I had studied bloodlines and knew the breeders were no longer improving the breed, but I could never make anyone believe in my theories. One owner after another had decided he could do without my services. Ben and I had pooled our savings and bought a small ranch in Colorado. We had taken the mare that had just foaled in lieu of salary from our last employer. Barton Croupwell had laughed when we had asked for the mare rather than our money.

"Costello," he said to me, "you and Ben have twenty-five hundred coming. That mare is nineteen years old. She could drop dead tomorrow."

"She could have one more foal too," I said.

"She could, but it's five to two she won't."

"That's good enough odds for the kind of blood she's carrying."

Croupwell was a gambler who raised horses for only one reason: to make money. He shook his head. "I've seen old codgers set in their thinking, but you're the worst. I suppose you've got a stallion picked out—in case this mare'll breed."

"He doesn't belong to you," I said.

That needled him. "I've got stallions that bring five thousand for a stud fee. Don't tell me they aren't good enough."

"Their bloodlines are wrong," I answered. "Mr. Carvelliers has a stallion called Wing Away."

"Carvelliers' stallions cost money. Are you and Ben that flush?" He already knew what I had in mind.

"You and Carvelliers trade services," I said. "It wouldn't cost you anything to have the mare bred."

He threw back his head and laughed. He was a tall, thin man, always beautifully tailored, with black hair and a line of mustache. "I'm not a philanthropist," he said. "Do you really want this mare?"

"I said I did."

"You really think she'll get with foal?"

"I'll turn your odds around. I say it's five to two she will."

"I'll gamble with you," he said. "I'll send the mare over to Carvelliers'. If she settles I'll take care of the stud fee. If she doesn't, I keep the mare."

"And my and Ben's twenty-five hundred?"

"Of course."

"You're no gambler," I said, looking him in the eye, "but I'll take the bet."

Now, Ben and I were looking at a running machine that was something new on the face of the earth.

Our ranch was perfect for training the colt. It was out of the way and we took particular care that no one ever saw Red Eagle. By the time he was a yearling, our wildest estimate of what he would be had fallen short. Ben began to ride him when he was a coming two-year-old. By that time he had reached seventeen hands, weighed twelve hundred pounds, and could carry Ben's hundred and twenty-six as if Ben were nothing. Every time Ben stepped off him he was gibbering like an idiot. I was little better. This horse didn't run; he flowed. Morning after morning as Ben began to open him up I would watch him coming down the track we had dozed out of the prairie and he looked like a great wheel with flashing spokes rolling irresistibly forward. Carrying as much weight as mature horses are asked to carry, our stop watch told us Red Eagle had broken every world record for all distances and this on an imperfect track. Ben and I were scared.

One night when the racing season was close upon us, Ben said nervously, "I've made a few calls to some jockeys I know. Croupwell's and Carvelliers' and some others. The best two-year-olds they got are just normal, good colts. Red Eagle will beat them twenty lengths."

"You've got to keep him under restraint, Ben. You can't let anybody know what he can do."

"I can do anything with him out here by himself. But who knows what he'll do with other horses?"

"You've got to hold him."

"Listen, Cos, I've ridden some of the best and some of the toughest. I know what I can hold and what I can't. If Eagle ever takes it in his head to run, there'll not be a hell of a lot I can do about it."

"We've trained him careful."

"Yes, but if I've got him figured, he'll go crazy if a horse starts to crowd him. Another thing, any horseman will see at a glance what we've got. They'll know we're not letting him extend himself."

We were standing out by the pine pole paddock and I turned and looked at Red Eagle. Have you ever seen a cheetah? It's a cat. It runs faster than any other living

creature. It's long-legged and long-bodied and it moves soft and graceful until it starts to run; then it becomes a streak with a blur of legs beneath. Red Eagle looked more like a twelve-hundred-pound cheetah than a horse and he ran the same way.

"Well, he's a race horse," I said. "If we don't race him, what'll we do with him?"

"We'll race him," said Ben, "but things ain't ever goin' to be the same again."

That turned out to be pure prophecy.

We decided to start him on a western track. We had to mortgage the ranch to get the money for his entry fee, but we had him entered in plenty of time. Two days before the race we hauled him, blanketed, in a closed trailer and put him into his stall without anyone getting a good look at him. We worked him out at dawn each morning before any other riders were exercising their horses.

This track was one where a lot of breeders tried their two-year-olds. The day of the race the first person I saw was Croupwell. His mild interest told me he already knew we had an entry. He looked at my worn Levis and string-bean frame. "What's happened these three years, Costello? You don't appear to have eaten regular."

"After today it'll be different," I told him.

"That colt you have entered, eh? He's not the bet you won from me, is he?"

"The same."

"I see by the papers Ben's riding. Ben must have lost weight too."

"Not so's you'd notice."

"You're not asking a two-year-old to carry a hundred and twenty-eight pounds on its first start!"

"He's used to Ben," I said casually.

"Costello, I happen to know you mortgaged your place to get the entry fee." He was looking at me speculatively. His gambler's instinct told him something was amiss. "Let's have a look at the colt."

"You'll see him when we bring him out to be saddled," I said and walked away.

You can't lead a horse like that among a group of horsemen without things happening. Men who spend their lives with horses know what gives a horse reach and speed and staying power. It didn't take an expert to see what Red Eagle had. When we took the blanket off him in the saddle paddock every jockey and owner began to move close. In no time there was a milling group of horsemen in front of where Ben and I were saddling Eagle.

Carvelliers, a handsome, white-haired Southern gentleman, called me to him. "Costello, is that Wing Away's colt?"

"Your signature's on his papers," I said.

"I'll give you fifty thousand dollars for his dam."

"She's dead," I said. "She died two weeks after we'd weaned this colt."

"Put a price on the colt," he said without hesitation.

"He's not for sale," I answered.

"We'll talk later," he said and turned and headed for the betting windows. Every man in the crowd followed him. I saw several stable hands pleading with acquaintances to borrow money to bet on Eagle despite the extra weight he would be spotting the other horses. By the time the parimutuel windows closed, our horse was the odds-on favorite and nobody had yet seen him run.

"I'm glad we didn't have any money to bet," said Ben, as I legged him up. "A dollar'll only make you a dime after what they've done to the odds."

The falling odds on Red Eagle had alerted the crowd to watch for him. As the horses paraded before the stands there was a rippling murmur of applause. He looked entirely unlike the other eight horses on the track. He padded along, his head bobbing easily, his long hind legs making him look like he was going downhill. He took one step to the other mincing thoroughbreds' three.

I had gone down to the rail and as Ben brought him by, heading for the backstretch where the six-furlong race would start, I could see the Eagle watching the other horses, his ears flicking curiously. I looked at Ben. He was pale. "How is he?" I called.

Ben glanced at me out of the corners of his eyes. "He's different."

"Different!" I called back edgily. "How?"

"Your guess is good as mine," Ben called over his shoulder.

Eagle went into the gate at his assigned place on the outside as docilely as we'd trained him to. But when the gate flew open, the rush of horses startled him. Breaking on top, he opened up five lengths on the field in the first sixteenth of a mile. The crowd went whoosh with a concerted sigh of amazement.

"Father in heaven, hold him," I heard myself saying.

Through my binoculars, I could see the riders on the other horses studying the red horse ahead of them. Many two-year-olds break wild, but no horse opens five lengths in less than two hundred yards. I saw Ben steadying him gently, and as they went around the first turn, Ben had slowed him until the pack moved up to within a length.

That was as close as any horse ever got. Around the turn a couple of riders went after Eagle and the pack spread briefly into groups of three and two and two singles. I could see the two horses behind Eagle make their move. Eagle opened another three lengths before they hit the turn into the stretch and I could see Ben fighting him. The two that had tried to take the lead were used up and the pack came by them as all the riders turned their horses on for the stretch drive. Eagle seemed to sense the concerted effort behind him and his rate of flow changed. It was as if a racing car had its accelerator floorboarded. He came into the stretch gaining a half length every time his feet hit the turf.

When he hit the wire he was a hundred yards ahead of the nearest horse and still going away. Ben had to take him completely around the track before Eagle realized there were no horses behind him. By the time Ben walked him into the winner's circle, Eagle's sides were rising and falling evenly. He was only damp, not having got himself hot enough to sweat.

The first thing I remember seeing was Ben's guilty expres-

sion. "I tried to hold him," he said. "When he realized something was trying to outrun him he got so damn mad he didn't even know I was there."

The loudspeaker had gone into a stuttering frenzy. Yes, the world's record for six furlongs had been broken. Not only broken, ladies and gentlemen; five seconds had been cut from it. No, the win was not official. Track veterinarians had to examine the horse. Please keep your seats, ladies and gentlemen.

Keep their seats, hell! Every man, woman, and child was going to see at close range the horse that could run like that. There had been tears in my eyes as Eagle rolled down the stretch. You couldn't stay calm when you saw what these people had seen.

The rest of that day sorts itself into blurred episodes. First, the vets checked Eagle's teeth, his registration papers, his date of foaling, and finally rechecked the number tattooed in his lip to make sure he was a two-year-old. Then they found that he had not been stimulated. They also found measurements so unbelievable they seriously questioned whether this animal was a horse. They went into a huddle with the track officials.

There was loose talk of trying to rule the Eagle off the tracks. Carvelliers pointed out that Eagle's papers were in perfect order, his own stallion had sired him, he was a thoroughbred of accepted bloodlines, and there was no way he could legally be ruled ineligible.

"If that horse is allowed to run," said one track official, "who will race against him?"

Croupwell was seated at the conference table, as were most of the other owners. "Gentlemen," he said suavely, "aren't you forgetting the handicapper?"

The job of a handicapper is to figure how much weight each horse is to carry. It is a known fact that a good handicapper can make any field of horses come in almost nose and nose by imposing greater weights on the faster horses. But Croupwell was forgetting something. Usually, only older horses run in handicaps.

I jumped to my feet. "You know two-year-olds are not

generally handicapped," I said. "They race under allowance conditions."

"True," said Croupwell. "Two-year-olds usually do run under arbitrary weights. But it is a flexible rule, devised to fit the existing situation. Now that the situation has changed, arbitrarily the weights must be changed."

Carvelliers frowned angrily. "Red Eagle was carrying a hundred and twenty-eight against a hundred and four for the other colts. You would have to impose such weights to bring him down to an ordinary horse that you'd break him down."

Croupwell shrugged. "If that should be true, it is unfortunate. But we have to think of the good of racing. You know that its lifeblood is betting. There will be no betting against this horse in any race it's entered."

Carvelliers rose. "Gentlemen," and the way he said it was an insult, "I have been breeding and racing horses all my life. It has always been my belief that racing was to improve the breed, not kill the best horses." He turned to Ben and me. "At your convenience I would like to speak with you."

Ben and I paid off the loan we'd used for the entry fee, bought ourselves some presentable clothes, and went up to Carvelliers' hotel.

"Hello, Ben; good to see you," he said. "Costello, I owe you an apology. I've disagreed with you on bloodlines for years. You've proven me wrong."

"You've been wrong," I agreed, "but Red Eagle is not the proof. He would have been a good colt if he was normal—maybe the best, but what he actually is has nothing to do with bloodlines."

"Do you think he's a mutation—something new?"

"Completely."

"How much weight do you think he can carry and still win?"

I turned to Ben and Ben said, "He'll win carrying any weight. He'll kill himself to win."

"It's too bad you couldn't have held him," said Carvel-

liers. "My God, five seconds cut from the record. Don't fool yourself, they'll weight him until even tendons and joints such as his can't stand it. Will you run him regardless?"

"What else will there be to do?"

"Hmmmm. Yes. Well, maybe you're right. But if they break him down, I have a proposition to make you."

We thanked him and left.

Ben and I planned our campaign carefully. "We've got to train him with other horses," Ben told me. "If I can get him used to letting a horse stay a few lengths behind, I can hold him down."

We bought two fairly good platers with the rest of our first winnings and hired neighboring ranch kids to ride them. We began to see men with binoculars on the hills around our track. We let the Eagle loaf and the boys with the binoculars never saw any great times.

The racing world had gone crazy over what Red Eagle had done to the records. But as time passed and the binocular boys reported he wasn't burning up his home track, the writers began to hint that it had been a freak performance—certainly remarkable, but could he do it again? This was the attitude we wanted. Then we put Red Eagle in his second race, this one a mile and a sixteenth.

It was a big stakes race for two-year-olds. We didn't enter him until the last minute. Even so, the news got around and the track had never had such a large attendance and such little betting. The people didn't dare bet against the Eagle, but he had only run at six furlongs and they weren't ready to believe in him and bet on him to run a distance. Because of the low pari-mutuel take, we were very unpopular with the officials of that track.

"If there's any way you can do it," I told Ben, "hold him at the gate."

"I'll hold him if I can."

By this time Red Eagle had become used to other horses and would come out of the gate running easily. When they sprung the gate on those crack two-year-olds that day, Ben

had a tight rein and the pack opened a length on the Eagle before he understood he'd been double-crossed. When he saw horses *ahead* of him he went crazy.

He swung far outside and caught the pack before they were in front of the stands. He'd opened five lengths at the first turn. He continued to accelerate in the back stretch, and the crowd had gone crazy too. When he turned into the stretch the nearest thing to him was the starting gate the attendants hadn't quite had time to pull out of the way. Eagle swerved wide to miss the gate and then, as if the gate had made him madder, really turned it on. When he crossed the finish line the first horse behind him hadn't entered the stretch. I sat down weakly and cried. He had cut *ten* seconds off the world's record for a mile and a sixteenth.

The pandemonium did not subside when the race was over. Front-page headlines all over the world said, "New Wonder Horse Turns Racing World Topsy-turvy." That was an understatement.

"The next time we run him," I told Ben, "they'll put two sacks of feed and a bale of hay on him."

Ben was gazing off into the distance. "You can't imagine what it's like to sit on all that power and watch a field of horses go by you backward, blip, like that. You know something, Cos? He still wasn't flat out."

"Fine," I said sarcastically. "We'll run him against Mercedes and Jaguars."

Well, they weighted him. The handicapper called for one hundred thirty-seven pounds. It was an unheard-of weight for a two-year-old to carry, but it wasn't as bad as I had expected.

At home we put the one thirty-seven on him and eased him along for a few weeks. He didn't seem to notice the weight. The first time Ben let him out he broke his own record. I kept tabs on his legs and he never heated in the joints or swelled.

We entered him in the next race to come up. It rained for two days before the race and the track was a sea of mud. Some thought the "flying machine," as Red Eagle was be-

ginning to be called, could not set his blazing pace in mud.

"What do you think?" I asked Ben. "He's never run in mud."

"Hell, Cos, that horse don't notice what he's running on. He just feels the pressure of something behind him trying to outrun him and it pushes him like a jet."

Ben was right. When the pack came out of the gate that day, Red Eagle squirted ahead like a watermelon seed squeezed from between your fingers. He sprayed the pack briefly with mud, then blithely left them, and when he came down the stretch he was completely alone.

During the next several races, three things became apparent. First, the handicapper had no measuring stick to figure what weight Eagle should carry. They called for one hundred forty, forty-two, then forty-five, and Eagle came down the stretch alone. The second thing became apparent after Eagle had won carrying one forty-five. His next race he started alone. No one would enter against him. Third, Eagle was drawing the greatest crowds in the history of racing.

There were two big races left that season. They were one day and a thousand miles apart. The officials at both tracks were in a dilemma. Whichever race Eagle entered would have a huge crowd, but it would be a walkaway and that crowd would bet its last dollar on Eagle, because the track was required by law to pay ten cents on the dollar. The officials resolved their dilemma by using the old adage: *You can stop a freight train if you put enough weight on it.* Red Eagle was required to carry the unheard-of weight of one hundred and seventy pounds. Thus they hoped to encourage other owners to race against us and at the same time they'd have Eagle's drawing power.

Ben grew obstinate. "I don't want to hurt him and that weight'll break him down."

"Great," I replied. "Two worn-out old duffers with the world's greatest horse end up with two platers, a sandhills ranch, and the winnings from a few races."

"I know how you feel," said Ben. "The only thing you

could have got out of this was money, but I get to ride him."

"Well," I said, trying to be philosophical about it, "I get to watch him and that's almost as good as riding him." I stopped and grabbed Ben's arm. "What did I say?"

Ben jerked his arm away. "You gone nuts?"

"Get to watch him! Ben, what's happened every time the Eagle's run?"

"He's broke a record," said Ben matter-of-factly.

"He's sent several thousand people into hysterics," I amended.

Ben looked at me. "Are you thinking people would pay to see just one horse run?"

"Has there ever been more than one when the Eagle's run? Come on. We're going to enter him."

We entered Eagle in the next to the last race of the season. What I'd expected happened. All the other owners pulled out. They weren't having any of the Eagle even carrying a hundred and seventy pounds. They all entered in the last race. No horse, not even the Eagle—they thought—had the kind of stamina to make two efforts on successive days with a plane trip sandwiched between, so they felt safe.

The officials at the second track were jubilant. They had the largest field they had ever run. The officials at the first track had apoplexy. They wanted to talk to us. They offered plane fare and I flew down.

"Would you consider an arrangement," they asked, "whereby you would withdraw your horse?"

"I would not," I replied.

"The public won't attend a walkaway," they groaned, "even with the drawing power of your horse." What they were thinking of was that ten cents on the dollar.

"That's where you're wrong," I told them. "Advertise that the wonder horse is running unweighted against his own record and you'll have a sellout."

Legally, they could not call off the race, so they had to agree.

On the way home I stopped off at Carvelliers'. We had a long talk and drew up an agreement. "It'll work," I said. "I know it will."

"Yes," agreed Carvelliers, "it will work, but you must persuade Ben to run him just once carrying the hundred and seventy. We've got to scare the whole racing world to death."

"I'll persuade him," I promised.

When I got home I took Ben aside. "Ben," I said, "every cow horse has to carry more than a hundred and seventy pounds."

"Yeah, but a cow horse don't run a mile in just over a minute."

"Nevertheless," I said, "he'll run as fast as he can carrying that weight and it doesn't hurt him."

"But a cow horse has pasterns and joints like a work horse. They just ain't built like a thoroughbred."

"Neither is Red Eagle," I answered.

"What's this all about? You already arranged for him not to carry any weight."

"That's for the first race."

"*First race!* You ain't thinkin' of runnin' in both of them?"

"Yes, and that second one will be his last race. I'll never ask you to ride him carrying that kind of weight again."

"You ought to be ashamed to ask me to ride him carrying it at all." Then what I had said sunk in. "*Last* race! How do you know it'll be his last race?"

"I forgot to tell you I had a talk with Carvelliers."

"So you had a talk with Carvelliers. So what?"

"Ben," I pleaded, "trust me. See what the Eagle can do with a hundred and seventy."

"All right," said Ben grudgingly, "but I ain't goin' to turn him on."

"Turn him on!" I snorted. "You ain't ever been able to turn him off."

Ben was surprised but I wasn't when Red Eagle galloped easily under the weight. Ben rode him for a week before he got up the nerve to let him run. Eagle was still way

ahead of every record except his own. He stayed sound.

When we entered him in the second race all but five owners withdrew their horses. These five knew their animals were the best of that season, barring our colt. And they believed that the Eagle after a plane ride, a run the day before, and carrying a hundred and seventy pounds was fair competition.

At the first track Eagle ran unweighted before a packed stand. The people jumped and shouted with excitement as the red streak flowed around the track, racing the second hand of the huge clock that had been erected in front of the odds board. Ben was worried about the coming race and only let him cut a second off his previous record. But that was enough. The crowd went mad. And I had the last ammunition I needed.

The next day dawned clear and sunny. The track was fast. Every seat in the stand was sold and the infield was packed. The press boxes overflowed with writers, anxiously waiting to report to the world what the wonder horse would do. The crowd that day didn't have to be told. They bet their last dollar on him to win.

Well, it's all history now. Red Eagle, carrying one hundred and seventy pounds, beat the next fastest horse five lengths. All the fences in front of the stands were torn down by the crowd trying to get a close look at the Eagle. The track lost a fortune and three officials had heart attacks.

A meeting was called and they pleaded with us to remove our horse from competition.

"Gentlemen," I said, "we'll make you a proposition. You noticed yesterday that the gate for Eagle's exhibition was the largest that track ever had. Do you understand? People will pay to watch Eagle run against time. If you'll guarantee us two exhibitions a season at each major track and give us sixty per cent of the gate, we'll agree never to run the Eagle in competition."

It was such a logical move that they wondered they hadn't thought of it themselves. It worked out beautifully. Owners of ordinary horses could run them with the convic-

tion that they would at least be somewhere in the stretch when the race finished. The officials were happy, because not only was racing secure again, but they made money out of their forty per cent of the gates of Eagle's exhibitions. And we were happy, because we made even more money. Everything has been serene for three seasons. But I'm a little concerned about next year.

I forgot to tell you the arrangement Carvelliers and I had made. First, we had discussed a little-known aspect of mutations: namely, that they pass on to their offspring their new characteristics. Carvelliers has fifty brood mares on his breeding farm, and Red Eagle proved so sure at stud that next season fifty carbon copies of him will be hitting the tracks. You'd never believe it, but they run just like their sire, and Ben and I own fifty per cent of each of them. Ben feels somewhat badly about it, but, as I pointed out, we only promised not to run the Eagle.

YOU KNOW WILLIE

by Theodore R. Cogswell

As I said, horror is not my dish of tea—least of all weird, eerie, or Gothic mystery. It's a rare ghost story that can chill my blood; vampires, witches, and werewolves I can take with pleasure only if they're funny, or if they're rationalized clear out of the category of the supernatural; voodoo is mostly too rococo for my taste.

What it comes down to, I expect, is that nothing is going to frighten you very much unless you believe in it at least a *little* bit; and for me the archetype horrors are not so much empty moors and moonless nights as mundane malice, bigotry, and stupidity such as you may find more readily in the newspaper than in fantasy.

"You Know Willie" is a dark-of-the-moon type story, full of ha'nts and spells and atmospheric terror; but the trappings are used here to clothe (or symbolize?) another kind of fear.

In the old days there wouldn't have been any fuss about Willie McCracken shooting a Negro, but these weren't the old days. The judge sat sweating, listening to the voice from the state capital that roared through the telephone receiver.

"But you can't hang no white man for shooting no nigger!"

"Who said anything about hanging?" said the voice impatiently. "I want it to look good, that's all. So don't make it any half hour job—take two weeks if you have to."

The judge obediently took two weeks. There was a long parade of witnesses for the defense and an equally long one for the prosecution, and through it all the jury, having been duly instructed beforehand, sat gravely, happy for a respite from the hot sun and fields—and the cash money

that was accruing to each of them at the rate of three dollars a day. A bright young man was down from the capital to oversee all major matters, and as a result, the trial of Willie McCracken was a model of juridical propriety.

The prosecution made as strong a case against Willie as it could without bringing in such prejudicial evidence as that the little garage the dead man had opened after he came back from Korea had been taking business away from the one Willie ran at an alarming rate, or that it was common knowledge that Willie was the Thrice High Warlock of the local chapter of The Knights of the Flaming Sword and in his official capacity had given the deceased one week to get out of town or else.

There were two important witnesses. One was very old and very black, the other wasn't quite as young as she used to be but she was white. The first could technically be classed as a witch—though there was another and more sonorous name for what she was in the forgotten tribal language she used on ritual occasions—but contrary to the ancient injunction, she had not only been permitted to live, but to flourish in a modest fashion. There were few in the courtroom who had not at one time or another made secret use of Aunt Hattie's services. And although most of the calls had been for relatively harmless love potions or protective amulets, there were enough who had called with darker things in mind to cause her to be treated with unusual respect.

Aunt Hattie was the town's oldest inhabitant—legend had it that she was already a grown woman when Lincoln larcenously freed the slaves—and the deceased had been her only living blood relative.

Having been duly sworn, she testified that the defendant, Willie McCracken, had come to her cabin just as she was getting supper, asked for the deceased, and then shot him between the eyes when he came to the door.

She was followed by Willie's wife, a plumpish little blonde in an over-tight dress who was obviously enjoying all the attention she was getting. She in turn swore that Willie had been home in bed with her where he belonged at the time

in question. From the expressions on the jurymen's faces, it was obvious that they were thinking that if he hadn't been, he was a darned fool.

There were eight Knights of the Flaming Sword sitting around the table in Willie's kitchen. Willie pulled a jug from the floor beside him, took a long swallow, and wiped his mouth nervously with the hairy back of his hand. He looked up at the battered alarm clock on the shelf over the sink and then lifted the jug again. When he set it down Pete Martin reached over and grabbed it.

"Buck up, Willie boy," he said as he shook the container to see how much was left in it. "Ain't nobody going to get at you with us here."

Willie shivered. "You ain't seen her squatting out under that cottonwood every night like I have." He reached out for the jug but Martin laughed and pulled it out of reach.

"You lay off that corn and you won't be seeing Aunt Hattie every time you turn around. The way you've been hitting the stuff since the trial it's a wonder you ain't picking snakes up off the table by now."

"I seen her, I tell you," said Willie sullenly. "Six nights running now I seen her plain as day just sitting out under that tree waiting for the moon to get full." He reached for the jug again but Martin pushed his hand away.

"You've had enough. Now you just sit there quiet like while I talk some sense. Aunt Hattie's dead and Jackson's dead and they're both safe six foot under. I don't blame you for getting your wind up after what she yelled in the courtroom afore she keeled over, but just remember that there ain't no nigger the Knights can't take care of, dead or alive. Now you go upstairs and get yourself a little shut-eye. You're plumb beat. I don't think you've had six hours good sleep since the finish of the trial. You don't notice Winnie Mae losing any rest, do you?"

Willie kneaded his bald scalp with thick fingers. "Couldn't sleep," he said hoarsely. "Not with her out there. She said he'd come back first full moon rise and every night it's been getting rounder and rounder."

"He comes back, we'll fix him for you, Willie," said Martin in a soothing voice. "Now you do like I said. Moon won't be up for a good two hours yet. You go get a little sleep and we'll call you in plenty of time."

Willie hesitated and then got to his feet and lumbered up the stairs. He was so tired he staggered as he walked. When he got into the dark bedroom he pulled off his clothes and threw himself down on the brass bed beside Winnie Mae. He tried to keep awake but he couldn't. In a moment his heavy snores were blending with her light delicate ones.

The moonlight was strong and bright in the room when Willie woke. They hadn't called him! From the kitchen below he heard a rumble of voices and then drunken laughter. Slowly, as if hypnotized, he swung his fat legs over the side of the bed and stumbled to the window. He tried to keep from looking but he couldn't. She would be there, squatting beneath the old cottonwood, a shriveled little black mummy that waited . . . waited . . . waited . . .

Willie dug his knuckles suddenly into his eyes, rubbed hard, and then looked again. There was nothing! Nothing where the thick old trunk met the ground but a dusty clump of crab grass. He stood trembling, staring down at the refuse-littered yard as if it was the most beautiful thing he had ever seen. There was something healing in the calm flood of moonlight. The hard knot he had been carrying inside his head dissolved and he felt strong and young again. He wanted to shout, to caper around the room.

Winnie Mae mumbled in her sleep and he turned to look at her. Her thin cotton nightgown was bunched up under her arms and she lay, legs astraddle, her plump body gleaming whitely in the moonlight. She whimpered as she pulled herself up out of her slumber and then closed her arms around the heavy body that was pressing down on her.

"Remember me," he whispered, "I'm Willie. You know Willie."

She giggled and pulled him tighter against her. Her breath began to come faster and her fingers made little cat clawings on his back. As she squirmed under him her hands crept higher, over his shoulders, up his neck . . .

There was a sudden explosion under him and a caterwauling scream of sheer horror. Willie jerked back as her nails raked across his face, and then he felt a sudden stabbing agony as she jabbed up with her knee. He staggered away from the bed, his hand cupped over his bleeding face.

His hands! Time slid to a nightmarish stop as his finger tips sent a message pulsing down through nerve endings that his bald scalp had somehow sprouted a thick mop of kinky hair. He jerked his hands down and held them cupped before him. The fresh blood was black in the moonlight, and not only the blood. He spun toward the cracked mirror and saw himself for the first time. The flabby body with its sagging belly was gone. In its place was that of a dark-skinned stranger . . . but not a stranger.

His fingers crept across his forehead looking for the small red bullet hole that was no longer there.

And then time started to rush forward again. Winnie Mae's screaming went on and on and there was a rushing of heavy feet up the stairs from the kitchen.

He tried to explain but there was a new softness to his speech that put the lie to his stumbling words. When the door burst open he stood for a moment, hands stretched out in supplication.

"No," he whimpered. "I'm Willie. You know Willie."

As they came slowly out of the shadows he broke. He took one slow step backward, and then two, and then when he felt the low sill press against his calves, turned and dove out the window onto the sloping roof. When he got to the ground he tried again to explain but somebody remembered his gun.

Willie as he had been would have been run to ground within the mile, but his new lithe body carried him effortlessly through the night. If it hadn't been for the dogs he might have got away.

Somebody had a deck of cards and they all drew. Pete Martin was low man so he had to go back after the gasoline.

NEAR MISS

by Henry Kuttner

Science-fiction as a special category of publishing dates from April, 1926, when the first exclusively s-f magazine appeared. The field is now one generation old, and I suppose it is not surprising that some of the earlier authors and editors have died in recent years. But Henry Kuttner's sudden death in February, at the age of forty-three, was a shocking and unexpected loss.

Although his first science-fiction stories were not published until 1938, Kuttner had been writing for some ten years for the old *Weird Tales*. When he came to New York from his native Los Angeles, he met, and married, another *Weird Tales* writer, Catherine L. Moore.

For the next ten years the prolific Kuttner-Moore collaboration appeared in almost every issue of all the better s-f magazines (under a variety of pseudonyms totaling, at last count, seventeen, best-known of which were Lewis Padgett and Lawrence O'Donnell). In 1953 the Kuttners abandoned all pennames, and their stories have since appeared under the separate or joint bylines of Moore and Kuttner.

It is astonishing how many really good stories have come from this unusual combination. My own favorite is "Padgett," who wrote the Baldy stories and the Gallegher series—including "The Twonky"; "Mimsy Were the Borogroves"; "When the Bough Breaks" . . . but then there was O'Donnell's "Fury," and Kuttner's "Nothing But Gingerbread Left" and "Exit the Professor"; and Kuttner-Moore's "Home There's No Returning"—in the first volume of *S–F*—and many more than can be mentioned here, even without considering the mystery and suspense stories.

"Near Miss" is Henry Kuttner's last unpublished story. It is included here in recognition of a name that meant "The Year's Greatest" in 1957 just as it did in 1939, and throughout the intervening years.

Something is happening here in Guaymas. So far, only those who see it believe it. That is why no newspaper has carried the story yet. Photographs are regarded with skepticism. Obviously they must be faked. No one outside Guaymas—or Pueblo Pequeño—will accept the evidence.

But one of these days a man from *Life* will convince the New York office that he isn't drunk. One of these days an admiral or a physicist or a congressman will be on the spot at the right time. Then you'll hear about what's happening in Guaymas—and, of course, in Pueblo Pequeño. But the press releases may never explain exactly how it all started. The unscrupulous Tom Dillon isn't likely to talk about that, and Tío Ignacio, though loquacious, is not always entirely truthful.

It all started one bright morning in Lower California. . . .

"Those prawns are going to fly to market from now on," Dillon said firmly to the *brujo.*

The *brujo,* or wizard, looked eastward to where the Gulf of California sparkled blue in the sunlight. No airborne prawns were visible. A few villagers strolled across the beach with their long-handled nets, halfheartedly seeking the prawns for which the small village of Pueblo Pequeño was remotely famous. Possibly a flying fish whirled briefly out of its element and returned—it was too far to be certain.

"That, now, I look forward with much pleasure to seeing," Tío Ignacio observed. "Old in witchcraft as I am, my ardor is that of a boy when I have the infrequent chance to admire new magic."

Dillon repressed an impulse to kick the old wizard over the cliff into the Gulf. He said courteously, "I have not made myself clear."

"It is my feeble intellect that is at fault," said Tío Ignacio. "I thought, no doubt mistakenly, that you planned to supply *los camarones grandes* with the power of flight."

"True," Dillon said. "That is why my plane—my machine of flight—is waiting back there on the mesa now. Tomorrow, if all goes well, the week's catch of prawns will

be loaded into my plane and, by that means, fly to Guaymas."

"It is an age of marvels," said Tío Ignacio. "May I offer you a sip of wine?"

"Thank you. . . . There is one small difficulty. The people of Pueblo Pequeño refuse to let me carry the prawns. They say that Felipe Ortega always drives them up the peninsula to Santa Rosalia on market day. Tomorrow is market day. Felipe must not reach Santa Rosalia."

And both men looked thoughtfully to where the road, in which pigs have sunk from sight forever in wet weather, runs from Pueblo Pequeño north to Santa Rosalia.

Tío Ignacio waited.

Dillon said, "You have, I understand, certain magical powers. Now if I could persuade you to put a *brujería* upon Felipe Ortega . . ."

"You wish me to put a spell upon my own nephew?"

"I had hoped that you would do me the favor of accepting a small present."

Tío Ignacio sighed.

"What sorrow," he mumured. "Ask of me anything else, *señor,* and I obey with alacrity. But this one thing I may not do. My nephew is, unfortunately, immune to spells."

"When I spoke of a small present, I did not mean—"

"Oh, it is not that," the wizard said. "I am not bargaining. Not yet, at any rate. Here is the problem. When Felipe was a villainous little child, he offended me—I forget why —and I put a spell on him. His wails annoyed me perhaps. He was a puny brat. Not as he is now—a large, strong young man. For this, I blame myself."

Dillon looked politely puzzled.

"My spell was too weak," Tío Ignacio explained. "This happens sometimes. It was a quite small spell, not virulent enough. Felipe was a little sick, and then he suddenly became as he is now. Well, not so large, of course. He had only six years. But instead of the sickly, squealing child he had been, he abruptly became a large, roaring one. After that he was forever immune to my spells. It was like what happens when the doctor comes and scratches the children.

They get a little sick. But afterward they do not get smallpox."

"It is very clear," Dillon said. "We, too, speak of acquired immunity."

There was a pause. The two men sat, considering wickedness. Dillon felt admiration for the wizard's maneuverings, obviously aimed at raising the price. Still, he had his own pride. He had never yet been outsmarted in a business deal, although it was true that he had never before met a situation exactly like this. There had been times of late when Tom Dillon almost wished he had never heard of the Camarone Grande, that rare and delicious prawn which thrives in only one place in all the world, and which is the sole product of the impoverished village named Pueblo Pequeño.

It was the Camarone Grande that had brought Tom Dillon to the Pueblo, with a plan to have cargoes of prawns flown daily to Guaymas where they could be refrigerated and reshipped to avid diners. But a difficulty had arisen immediately.

The economy of Pueblo Pequeño was geared to tradition. Once a week Felipe Ortega drove El Jeep with a cargo of prawns fifty miles north to Santa Rosalia, where the small, friendless creatures were carted aboard a local launch and shipped to Guaymas. El Jeep was a battered and elderly car, very *enfermo,* and the frightful roads of Lower California made the drive an all-day undertaking, especially as Felipe was emotionally involved with the vehicle and wept at each blowout. He drove carefully. Moreover, he would make the trip no more than once a week. It would be cruelty to El Jeep to do more.

Having arranged for a daily flight in a private plane between Pueblo Pequeño and Guaymas, Dillon was disconcerted to find that the villagers refused to do business with him. It would, they said, be discourteous to Felipe. Dillon explained how much money they could make if they caught enough prawns to justify the daily flight. They said that if they fished daily, the prawns would spoil before Felipe made his weekly trip to Santa Rosalia. Dillon asked why the trip

could not be made more often. They looked at him as if he had gone mad.

What it boiled down to was this: the people of Pueblo Pequeño were tradition-minded. They had been shipping prawns weekly in El Jeep for many years. They were not going to change their methods. Even if Dillon brought in trucks himself, it would make no difference. And as for the airplane, it was against God. Certainly one had seen airplanes before. Nevertheless, one did not understand how they worked. A swallow or a butterfly one could understand. Even a flying fish. But a machine of flight was dangerously mysterious in its principles.

"It works just like El Jeep," Dillon said. "Do you understand the mechanical principles of El Jeep?"

"That," they told him, "is quite a different matter. It is Felipe who works El Jeep, and we all know Felipe. So there is no mystery there, of course."

"I can bring a boat in," Dillon suggested.

"Oh, no boats ever come to Pueblo Pequeño except our own," they said, laughing a little. "Besides, it would not be polite to Felipe."

"But I can make you all rich—comparatively speaking—if you'll only co-operate."

"We will be happy to co-operate. But, of course, *los camarones* must be transported by Felipe Ortega."

This deadlock brought Dillon to Felipe Ortega, who was a large, sentimental and volatile young man with a wife, four children, and El Jeep. Dillon made eight different proposals. They were all turned down, on the grounds that it would not be polite to El Jeep. Finally, since Dillon liked the young man and found the tumultuous atmosphere of his crowded home pleasant, he offered to hire Felipe to drive El Jeep to Santa Rosalia daily, with a cargo of prawns. Since this would shake the old car apart within a few months, Felipe gasped, retired, and was presently found stroking the hood of El Jeep and making impossible promises to the battered vehicle. Dillon felt like a murderer.

Under the circumstances, it may seem paradoxical that his next plan involved the sabotage of El Jeep. It is true

that he felt somewhat guilty about it, and avoided meeting the innocent stare of El Jeep's headlights. But, after all, this was business, and the people of Pueblo Pequeño were behaving in a markedly unbusinesslike way. There was also the question of pride. As has been mentioned, Tom Dillon had never yet been outsmarted in a business deal.

Besides, once the problem was solved, he would bring in a mechanic and have El Jeep repaired. He must not offer to pay for the work himself; that would hurt Felipe's dignity. But something could be worked out. . . .

Unfortunately sabotage is difficult to commit undetected in a very small Mexican village. Even if Dillon had contrived to separate himself from the string of children and dogs and an occasional pig that trailed after him, Felipe's watchfulness would have defeated him. Felipe guarded El Jeep like Argus.

So—since those of Pueblo Pequeño believed in magic—Dillon decided to consult the local witch-doctor. Wizards, he had learned long ago, could be useful. One could do business with them. And Tío Ignacio, Dillon realized at first sight, was an extremely clever, though bad, old man. He could do business with Tío Ignacio, even though he might have to pretend to believe in the wizard's magical power. It was a small price to pay.

So, when the *brujo* explained that Felipe had an acquired immunity to spells, Dillon, after a brief pondering, said, "Would it be possible, *señor,* to put a *brujería* on Felipe's car?"

"Put a spell on El Jeep?" Tío Ignacio scratched his grizzled head. "But is this possible? I can enchant a man's family, his animals, his crops—but these have life."

"Yet you can bespell a man's house, I have heard."

"A home is made from the things of the earth, our mother. Also, men live in a house, and life passes from them to it. But a machine?"

"I've seen it down in El Paso," Dillon said. "I saw a Navajo wizard make a *muñeco* of a car—an image—"

"A *muñeco,* of course. A *muñeco* of clay, mingled with some scrapings of paint from El Jeep, and perhaps a little

screw from the mysteries within. Wait. This I have never thought of. Can a machine live? It is true that Felipe says El Jeep has feelings, but Felipe's head is as soft as his heart. Let me consider. Men and crops and homes, these are old things. But El Jeep—Felipe drove him from Tia Juana, all the way down the peninsula, and—and—in short, *señor,* El Jeep is the only car in Pueblo Pequeño. Were I to do this, it would establish a precedent. This would be a new thing." Shocked by the concept of change, Tío Ignacio closed his wrinkled eyelids.

"On the other hand," he added, opening his eyes, "my nephew is a bad one who does not respect me or give me enough gifts, as a dutiful nephew should. If he had not developed immunity to my spells, he would give me many gifts." The ancient wizard's voice acquired sudden energy. *"Hijo de perro!* We shall see who is the *brujo* in Pueblo Pequeño. This will give me great joy. Of course, I will be put to enormous expense, so we talk of the impossible, since I am a poor old man, outcast and starving."

"But I must insist on your permitting me to contribute a small sum to—"

"Small?" Tío Ignacio murmured, and his piggish little eyes watched Dillon reach for his wallet.

The bargain was struck at eighty *pesos.* Dillon handed over ten and cautiously stipulated that the balance be paid on delivery.

"On delivery, *señor?"*

"Of course. If the prawns reach Santa Rosalia—or if El Jeep does—then your magic has not worked, and I owe you nothing," Dillon said firmly, for he had met wicked old men like Tío Ignacio before.

The *brujo* sighed.

"It will be as God wills," he said.

Dillon was tempted to suggest that a little sand in the transmission of El Jeep might help too, but he kept his own counsel. He felt certain that the wizard would have both the knowledge and the means to sabotage Felipe's beloved car. Nor would Tío Ignacio require any more magic than a screwdriver and a dark night, probably.

So Dillon took leave of the wizard, promising himself that as soon as he won the game, he would arrange to have El Jeep not only repaired but completely overhauled. After all, a man had to be practical.

It was a great relief to do business with a practical man like Tío Ignacio.

Early the next morning Tom Dillon leaned against an adobe wall and watched El Jeep standing in the middle of the plaza. Felipe was preparing to leave for Santa Rosalia. The prawn-baskets were being loaded, with many pauses for interesting conversations, and for the last twenty minutes Felipe had been bidding good-by to everyone in Pueblo Pequeño. He was clasping his wife in a fond embrace, and they were going on volubly in a way that could be justified only by Felipe's incipient departure to South Africa for at least twenty years. This scene, however, took place regularly each week.

There was no sign of Tío Ignacio. Unless he had rushed here on his spindly legs before Dillon's arrival, hastily sabotaged El Jeep and fled, the car could still run.

Perhaps the wizard had an accomplice. Men were drifting about El Jeep, occasionally addressing a friendly remark to the unresponsive vehicle, but . . . Dillon squatted so he could see under El Jeep. There was no sign of a prostrate saboteur.

Felipe tore himself away from his loved one and entered El Jeep. What with the prawns, there was just room enough for him. He turned the key, indulged in a five-minute interchange with the Mayor, and at last pressed the starter.

Nothing happened.

El Jeep did not respond. He was, as Tío Ignacio would put it, *muerte*.

Dillon sighed softly with relief.

For another five minutes Felipe experimented with the starter. Finally, discussing the whole matter with the crowd, he got out, opened the hood, and tried a screwdriver. He got a few sparks now and then, but that was all.

It became clear that El Jeep was dead. There was much

conversation. Time passed. At a suitable moment, Dillon joined the group.

"Perhaps I can be of some help," he suggested.

Felipe gave him an anxious look.

"You are a mechanic, *señor?*"

"No. But it is clear that El Jeep will not move. The sun is hot, time passes, and the prawns will spoil. Would it not be wise to think of transporting them in some other way?"

"It is not—" Felipe said doubtfully, but Dillon went hastily on.

"My machine of flight is ready. I can, before the prawns spoil, take them to Santa Rosalia—or, even better, directly across the Gulf to Guaymas."

"Through the air?" a withered ancient asked, horrified.

"Or the prawns will spoil. It is the only way, *señores.*"

There was an outburst of argument.

Dillon, avoiding Felipe's eyes, said firmly, "El Jeep will never move again. So Pueblo Pequeño will die too, unless the prawns fly to market. *Los camarones* are your only product. You have but to say the word, and I will have the honor of saving Pueblo Pequeño from total ruin."

"Hush, *señor,*" said somebody. "This is not polite to Felipe."

"For myself, I care nothing," Felipe said. "But El Jeep, the poor little one, who by now is heart of my heart—We could at least move out of earshot. But no. It is too late now." He went and stroked one of El Jeep's battered fenders. "My poor," he observed, "was it a sickness in the tires last night? But now they are fat with air again. So what is your sorrow?"

There was a baffled pause.

"The prawns will spoil," Dillon murmured.

"I have it," said the withered ancient who had spoken before. "Let us all go to the church and pray."

So they did.

Dillon repressed his curiosity as to what El Jeep's sorrow was. He suspected a short-circuit, but, since a few loungers remained in the plaza relaxing drowsily in the shade, he

stayed where he was and smoked cigarettes. Once he moved to another wall where El Jeep's headlights would not be looking directly at him. They seemed reproachful and a little sad.

After a long time the villagers returned from church, very happy.

"God has answered our prayers," Felipe confided. "Like a flash from heaven the idea entered my head while I prayed. I will hitch two burros to El Jeep and so the prawns will go to Santa Rosalia. Pueblo Pequeño is saved."

Dillon coughed the cigarette from his lips. Somebody offered him a goatskin of wine.

"Is this not a happy day?" he was asked.

"It is a day of felicity," he agreed, and, evading the goatskin, he hurried back to the shack of Tío Ignacio, while Felipe and the others dispersed, hunting for burros and harness.

"The bargain was that neither the prawns nor El Jeep would reach Santa Rosalia," Dillon said firmly.

The *brujo* reached behind him and brought forth a six-inch model of El Jeep made of hard clay.

"I have done my best, *señor,*" he said. "I made the *muñeco,* as you see. What happens to the *muñeco* happens to El Jeep. Last night I made the tires go poo, but Felipe merely blew them up again. This morning I did—other things. El Jeep is dead, is he not?"

"But he can still move. Burros can drag him to Santa Rosalia."

Tío Ignacio shrugged.

Dillon said, "It is a pity. As it is, of course, I owe you nothing—"

"Señor," said the shocked wizard, "you owe me seventy *pesos."*

"On the contrary, you owe me the ten I gave you to bind our bargain, which you have not kept. I am sorry that your magic is not strong enough to help me. However!" And Dillon, in turn, shrugged.

Tío Ignacio examined the clay *muñeco* in his gnarled hands.

"I have never enchanted a car before," he said. "With a man, I can gauge the strength of my magic as a rule. With a car, *quién sabe?*"

"At any rate, it is too late now," Dillon said. "A pity. I would have paid two hundred *pesos* to prevent El Jeep from reaching Santa Rosalia today."

"Ah? In that case . . . very well, *señor,* I will try once more. I will make El Jeep slip."

Dillon looked a question.

"As a man in mud. One slips. If I put, say, oil on the wheels of the *muñeco,* El Jeep will slip as in mud, once I cast my spell. Now—the oil."

"Oh. Of course. Have you any?"

"If God wills." And the wizard retired into his shack. He came out with a small can of oil that Dillon recognized. He had lost it not long ago.

"Thus," said the wizard, anointing the *muñeco's* clay wheels. He paused to laugh heartily. "You remember I spoke of how I put a too-small spell on Felipe when he was a brat? And that as a result he grew strong and became immune to magic? Well, he is not immune now, in a manner of speaking. For he has a great love for El Jeep which makes them almost as one. What harms El Jeep harms Felipe. So, in a way, this spell harms Felipe after all. One might say that this is my revenge. Where would a man be if he did not believe in justice?" He cackled nastily and used the oil with vigor.

But Dillon was already trotting back to town.

It was a shakedown, of course. Tío Ignacio had planned the whole thing, possibly with the connivance of Felipe himself. The idea had been to get Dillon worried and then raise the price, which was exactly what had happened. Now, Dillon suspected, Tío Ignacio's magic would work more effectively for two hundred *pesos.* Very likely all the burros in Pueblo Pequeño would have mysteriously disappeared, so El Jeep could not be dragged to Santa Rosalia. The method the wizard used didn't matter, as long as he

got results. And, Dillon felt, Tío Ignacio was a man who did get results.

Still, it was business. And since Dillon had been prepared to pay much more than two hundred *pesos* if necessary, he was satisfied.

By the time he reached the plaza, it had become increasingly evident that something was wrong with El Jeep. The car seemed remarkably unstable. Although standing on hard-packed earth, El Jeep might as well have been on ice. More than a dozen men were trying to hold the car steady while the burros were hitched on with patched leather and rope harness. Felipe, at the wheel, was handed the reins and a whip.

"*Vámanos!*" he cried, and the men holding El Jeep sprang back. The car slewed wildly sidewise, dragging the reluctant burros after it, while Felipe jammed his foot on the brake and demanded of El Jeep what was wrong.

Dillon stared, trying to discover how the trick was being worked.

The burros reared in terror. The harness snapped. Completely unanchored, El Jeep, with the devoted Felipe clinging to the steering wheel, slid, slowly circling, toward the scattering crowd. Felipe's wife shrieked and ran to aid her husband, but was captured by the Mayor. The priest was exorcising the wildly gyrating car. Dillon gasped and sprinted to safety as El Jeep rushed, tail first, toward him, crashed into a wall, and bounced back in the best Newtonian tradition.

Obviously this was not of God.

El Jeep spun like a top. He darted around the plaza, battering his fenders in noisy caroms against anything that got in the way. The shouting rose to a crescendo. Dozens of dodging figures alternately tried to help and risked their necks.

"Jump, Felipe!" voices cried. "For your life!"

But Felipe shook his head violently. He shouted that he would not desert the poor little one. Just then the poor little one bounced off a wall at an angle, dislodging the

last remaining basket of prawns, and slid nearly the full length of the plaza.

"Jump!" voices shrieked. For El Jeep was rushing toward an adobe wall which was all that was left of a house. And the wall was obviously ready to fall at a reasonably heavy impact. When it did, there would probably be little useful left of either El Jeep or Felipe.

"Oh, no," Dillon heard himself saying. "I didn't mean— *Felipe! Jump!"* He sprinted after the receding jeep, in a futile attempt to reach it and, somehow, divert it from its fatal course.

But El Jeep slid backward inexorably toward the crumbling wall, and somehow its mechanical face seemed more animated than Felipe's frozen one. The latter sat petrified, while the headlights of El Jeep wore a look of intolerable anguish, and as Dillon ran forward in a frantic attempt to do *something* . . .

Something happened.

There was a startlingly loud twanging sound that rang through the plaza. There was a brief, blinding flash of white light. El Jeep glittered like a diamond for one instant, vibrated violently from bumper to bumper, and then shot up into the air as though jet-propelled, clearing the ruinous wall by millimeters.

The air-borne jeep rushed madly skyward, gradually slowed, and then, fifty feet up, swept in a wide arc, circling back toward the plaza as Felipe's hands automatically turned the steering wheel. Every head was tilted back; every eye bulged. In perfect silence the jeep slanted impossibly down the air and came to a halt in the center of the plaza. The tires spun slowly nearly a foot above the sun-baked ground. El Jeep rocked a little and was still.

Dillon was caught in the throng that pressed forward. There was a wild outburst of congratulations. Dillon fought his way toward El Jeep. Still weak with reaction, he squatted and passed his hand unbelievingly through the air between a revolving wheel and the ground.

"Levitation?" Dillon said in a faint voice, and stood up

to meet Felipe's innocent gaze. "Felipe. What happened?"

The young man shrugged.

"Quién sabe? One suspects magic. Ah, well. At any rate" —and Felipe patted El Jeep's rusty dashboard affectionately—"at any rate, the poor little one is saved, and—why, now that I think of it, so is Pueblo Pequeño."

"Olé!" cried all the villagers approvingly.

Time had passed. Tío Ignacio turned the *muñeco* of El Jeep hopelessly in his gnarled hands.

"I am sorry, *señor,"* he told Dillon. "It is the same thing that happened when I put a spell on Felipe when he was a bad little boy. The spell was too weak, and Felipe became *vigoroso* instead of getting a fever or measles. After that, he was immune to magic."

"But El Jeep didn't become *vigoroso,"* Dillon said in a desperate voice. "El Jeep flew."

Tío Ignacio nodded.

"A thing can do only that which is possible to it," he explained. "Felipe could not fly. No man is capable of flight. But there are men who are strong. So any man may become strong."

"Go on," Dillon said feebly.

"Pués, a machine cañnot become *vigoroso.* But there are machines of flight like your own. So any machine may become one. As El Jeep has done now, because my first spells were too weak, so that he developed immunity."

"But it's physically impossible! A machine of flight, yes. But El Jeep's built to move along the ground, not through the air."

"And fish are built to swim. Yet the flying fish flies, truly."

"It doesn't. It glides. It jumps out of the water when bigger fish chase it."

"El Jeep jumped off the ground when my magic chased him," said the wizard, with an air of complacent triumph.

There was a deadlocked pause.

"See!" cried Tío Ignacio, pointing.

In the distance, up over the rooftops of Pueblo Pequeño, rose El Jeep, laden with baskets of prawns, Felipe at the wheel. There was a far outburst of cheering.

The jeep turned, about a hundred feet up, and headed eastward. Felipe looked down and waved at the two men. Then the car was beyond the cliff and steadily moving over the Gulf toward Guaymas.

Tío Ignacio hopefully flung the *muñeco* into the water. There was a small splash. El Jeep remained air-borne. The wizard shrugged.

"Ah, well," he said. "All things happen for the best. Now, instead of taking the prawns to Santa Rosalia, Felipe will fly them directly to Guaymas across the Gulf. As you have desired, *señor.* At the beginning of our negotiations, you observed that you wished the prawns to fly to Guaymas. This occurs. So if you will now pay me two hundred *pesos,* the conclusion of these events will be completely harmonious."

Dillon stared after the dwindling shape of El Jeep.

"And I call myself a business man," he murmured, as though to himself. "Me, Tom Dillon, the guy who's never been outsmarted in a business deal. Well, there goes my record. This is the first time I ever came out of a deal showing a loss instead of a profit, and I still don't know how the con was worked. If I only knew . . ."

He stiffened. He turned his head and met the wizard's wicked old eyes. Then, very quickly, Dillon looked away.

"So that's it," he said. "I'll be damned." And, suddenly, Dillon looked vastly relieved.

"Tío Ignacio," he said, carefully watching the horizon.

"Señor?"

"When did you first hypnotize me?"

"Hypnotize you? But I did not—"

"Of course you did," Dillon said, his voice firmer now. "There's no other possible answer. Except magic, and—with all due respect—I don't believe in magic. I thought I saw El Jeep fly. Well, jeeps don't fiy. But people can be hypnotized. You're a smart business man, Tío Ignacio."

"I know nothing of business, *señor.* I am only a poor old wizard—"

"You," said Dillon, "are a crook. But now my eyes are open. Do you still have the nerve to say I owe you two hundred *pesos?"*

"A bargain is a bargain. The prawns did not go to Santa Rosalia. Moreover, to you the sum is a small one."

"Well, you just try and get it," Dillon said triumphantly, and turned away.

"One moment, *señor,"* the wizard called. "One moment. Let us, at least, part friends. I will agree that you owe me nothing. Let us forget that. And, to make an end, perhaps you will accept a small souvenir to prove that I hold no ill will."

Dillon hesitated and glanced back. From the folds of his grimy serape Tío Ignacio had extracted a little clay image. Something about the doll made Dillon's heart jump.

"What have you got there?" he asked quickly.

"This toy?" the wizard said. "Merely a souvenir—"

"That's a *muñeco* of me!"

"Of you, *señor?* Well, there is a certain resemblance, I must admit," Tío Ignacio agreed, examining the doll. "However, you do not believe in magic, so what of that? Now, if you will accept this small gift—"

Dillon, somewhat pale, reached.

"One moment. It is customary among men of good will to *exchange* gifts," said Tío Ignacio reprovingly, withholding the image. "So if you wish to give me, merely as a souvenir, a few *pesos,* perhaps—let us say, the amount we agreed upon as payment for that last spell . . . ah. *Muchas gracias, señor. Muchas gracias!"*

GAME PRESERVE

by Rog Phillips

Critics of science-fiction are always fond of the psychiatric one-two. There was a time when the subject could hardly be discussed without the use of the phrase "phallic symbolism" (*in re* rocket-ship illustrations, for example). More recently, the word "escape" has become a favorite bludgeon of the critics.

Now "escape" is not inherently a bad (or a good) thing. We give medals to people who escape, or help others to escape, from death, danger, or dishonor; it is only the effort to escape from problems of real-life survival that is called "neurotic."

"Fantasy" is another of these multi-meaning words. It may be the dream-world of insanity; or it may be, properly utilized, a technique for gaining new perspective on a problem which was insoluble only in its familiar context. "Game Preserve" is a striking illustration of the use of "escape fiction" in the hands of a skilled and imaginative craftsman.

"Hi-hi-hi!" Big One shouted, and heaved erect with the front end of It.

"Hi-hi-hi," Fat One and the dozen others echoed more mildly, lifting wherever they could get a hold on It.

It was lifted and borne forward in a half crouching trot.

"Hi-hi hi-hi-hihihi," Elf chanted, running and skipping alongside the panting men and their massive burden.

It was carried forward through the lush grass for perhaps fifty feet.

"Ah-ah-ah," Big One sighed loudly, slowly letting the front end of It down until it dug into the soft black soil.

"Ahhh," Fat One and the others sighed, letting go and standing up, stretching aching back muscles, rubbing cramped hands.

"Ah-ah-ah-ah-ah-ah," Elf sang, running around and in between the resting men. He came too close to Big One and was sent sprawling by a quick, good humored push.

Everyone laughed, Big One laughing the loudest. Then Big One lifted Elf to his feet and patted him on the back affectionately, a broad grin forming a toothy gap at the top of his bushy black beard.

Elf answered the grin with one of his own, and at that moment his ever present yearning to grow up to be the biggest and the strongest like Big One flowed through him with new strength.

Abruptly Big One leaped to the front end of It, shouting "Hi-hi-HI!"

"Hi-hi-hi," the others echoed, scrambling to their places. Once again It was borne forward for fifty feet—and again and again, across the broad meadowland.

A vast matting of blackberry brambles came into view off to one side. Big One veered his course toward it. The going was uphill now, so the forward surges shortened to forty feet, then thirty. By the time they reached the blackberries they were wet and glossy with sweat.

It was a healthy patch, loaded with large ripe berries. The men ate hungrily at first, then more leisurely, pointing to one another's stained beards and laughing. As they denuded one area they leaped to It, carried it another ten feet, and started stripping another section, never getting more than a few feet from It.

Elf picked his blackberries with first one then another of the men. When his hunger was satisfied he became mischievous, picking a handful of berries and squashing them against the back or the chest of the nearest man and running away, laughing. It was dangerous sport, he knew, because if one of them caught him he would be tossed into the brambles.

Eventually they all had their fill, and thanks to Elf looked as though they were oozing blackberry juice from every pore. The sun was in its mid-afternoon position. In the distance a line of white-barked trees could be seen—evidence of a stream.

"Hi-hi-hi!" Big One shouted.

The journey toward the trees began. It was mostly downhill, so the forward spurts were often as much as a hundred feet.

Before they could hear the water they could smell it. They grunted their delight at the smell, a rich fish odor betokening plenty of food. Intermingled with this odor was the spicy scent of eucalyptus.

They pushed forward with renewed zeal so that the sweat ran down their skins, dissolving the berry juices and making rivulets that looked like purple blood.

When less than a hundred yards from the stream, which was still hidden beyond the tall grasses and the trees lining its bank, they heard the sound of voices, high pitched—women's voices. They became uneasy and nervous. Their surges forward shortened to ten feet, their rest periods became longer, they searched worriedly for signs of motion through the trees.

They changed their course to arrive a hundred yards downstream from the source of the women's voices. Soon they reached the edge of the tree belt. It was more difficult to carry It through the scatterings of bushes. Too, they would get part way through the trees and run into trees too close together to get It past them, and have to back out and try another place. It took almost two hours to work through the trees to the bank of the stream.

Only Elf recognized the place they finally broke through as the place they had left more than two days before. In that respect he knew he was different, not only from Big One and other grownups, but also all other Elfs except one, a girl Elf. He had known it as long as he could remember. He had learned it from many little things. For example, he had recognized the place when they reached it. Big One and the others never remembered anything for long. In getting It through the trees they blundered as they always had, and got through by trial and error with no memory of past blunderings.

Elf was different in another way, too. He could make more sounds than the others. Sometimes he would keep a

little It with him until it gave him a feeling of security almost as strong as the big It, then wander off alone with It and play with making sounds, "Bz-bz. Walla-walla-walla-rue-rue-la-lo-hi. Da!" and all kinds of sounds. It excited him to be able to make different sounds and put them together so that they pleased his hearing, but such sounds made the others avoid him and look at him from a safe distance, with worried expressions, so he had learned not to make *different* sounds within earshot of the others.

The women and Elfs were upstream a hundred yards, where they always remained. From the way they were milling around and acting alarmed it was evident to Elf they could no more remember the men having been here a few days before than the men could remember it themselves. It would be two or three days before they slowly lost their fear of one another. It would be the women and their Elfs who would cautiously approach, holding their portable Its clutched for security, until, finally losing all fear, they would join into one big group for a while.

Big One and the others carried It right to the water's edge so they could get into the water without ever being far from It. They shivered and shouted excitedly as they bathed. Fat One screamed with delight as he held a squirming fish up for the others to see. He bit into it with strong white teeth, water dripping from his heavy brown beard. Renewed hunger possessed him. He gobbled the fish and began searching for another. He always caught two fish for any other man's one, which was why he was fat.

Elf himself caught a fish. After eating it he lay on the grassy bank looking up at the white billowing clouds in the blue sky. The sun was now near the horizon, half hidden behind a cloud, sending divergent ramps of light downward. The clouds on the western horizon were slowly taking on color until red, orange, and green separated into definite areas. The soft murmur of the stream formed a lazy background to the excited voices of the men. From upstream, faintly, drifted the woman and Elf sounds.

Here, close to the ground, the rich earthy smell was

stronger than that of the stream. After a time a slight breeze sprang up, bringing with it other odors, that of distant pines, the pungent eucalyptus, a musky animal scent.

Big One and the others were out of the water finally. Half asleep, Elf watched them move It up to dry ground. As though that were what the sun had been waiting for, it sank rapidly below the horizon.

The clouds where the sun had been seemed now to blaze for a time with a smoldering redness that cooled to black. The stars came out, one by one.

A multitude of snorings erupted into the night. Elf crept among the sleeping forms until he found Big One, and settled down for the night, his head against Big One's chest, his right hand resting against the cool smooth metal of It.

Elf awoke with the bright morning sun directly in his eyes. Big One was gone, already wading in the stream after fish. Some of the others were with him. A few were still sleeping.

Elf leaped to his feet, paused to stretch elaborately, then splashed into the stream. As soon as he caught a fish he climbed out onto the bank and ate it. Then he turned to his search for a little It. There were many lying around, all exactly alike. He studied several, not touching some, touching and even nudging others. Since they all looked alike it was more a matter of *feel* than any real difference that he looked for. One and only one seemed to be the It. Elf returned his attention to it several times.

Finally he picked it up and carried it over to the big It, and hid it underneath. Big One, with shouts of sheer exuberance, climbed up onto the bank dripping water. He grinned at Elf.

Elf looked in the direction of the women and other Elfs. Some of them were wandering in his direction, each carrying an It of some sort, many of them similar to the one he had chosen.

In sudden alarm at the thought that someone might steal his new It, Elf rescued it from its hiding place. He tried to hide it behind him when any of the men looked his way.

They scorned an individual It and, as men, perferred an It too heavy for one person.

As the day advanced, women and Elfs approached nearer, pretending to be unaware at times that the men were here, at other times openly fleeing back, overcome by panic.

The men never went farther than twenty feet from the big It. But as the women came closer the men grew surly toward one another. By noon two of them were trying to pick a fight with anyone who would stand up to them.

Elf clutched his little It closely and moved cautiously downstream until he was twenty feet from the big It. Tentatively he went another few feet—farther than any of the men dared go from the big It. At first he felt secure, then panic overcame him and he ran back, dropping the little It. He touched the big It until the panic was gone. After a while he went to the little It and picked it up. He walked around, carrying it, until he felt secure with it again. Finally he went downstream again, twenty feet, twenty-five feet, thirty . . . He felt panic finally, but not overwhelmingly. When it became almost unendurable he calmly turned around and walked back.

Confidence came to him. An hour later he went downstream until he was out of sight of the big It and the men. Security seemed to flow warmly from the little It.

Excitement possessed Elf. He ran here and there, clutching It closely so as not to drop it and lose it. He felt *free.*

"Bdlboo," he said aloud, experimentally. He liked the sounds. "Bdlboo-bdlboo-bdlboo." He saw a berry bush ahead and ran to it to munch on the delicious fruit. "Riddle piddle biddle," he said. It sounded nice.

He ran on, and after a time he found a soft grassy spot and stretched out on his back, holding It carelessly in one hand. He looked up and up, at a layer of clouds going in one direction and another layer above it going in another direction.

Suddenly he heard voices.

At first he thought the wind must have changed so that it was carrying the voices of the men to him. He lay there

listening. Slowly he realized these voices were different. They were putting sounds together like those he made himself.

A sense of wonder possessed him. How could there be anyone besides himself who could do that?

Unafraid, yet filled with caution, he clutched It closely to his chest and stole in the direction of the sounds.

After going a hundred yards he saw signs of movement through the trees. He dropped to the ground and lay still for a moment, then gained courage to rise cautiously, ready to run. Stooping low, he stole forward until he could see several moving figures. Darting from tree to tree he moved closer to them, listening with greater excitement than he had ever known to the smoothly flowing variety of beautiful sounds they were making.

This was something new, a sort of game they must be playing. One voice would make a string of sounds then stop, another would make a string of different sounds and stop, a third would take it up. They were good at it, too.

But the closer he got to them the more puzzled he became. They were shaped somewhat like people, they carried Its, they had hands and faces like people. That's as far as the similarity went. Their feet were solid, their arms, legs, and body were not skin at all but strangely colored and unliving in appearance. Their faces were smooth like women's, their hair short like babies', their voices deep like men's.

And the Its they carried were unlike any Elf had ever seen. Not only that, each of them carried more than one.

That was an *idea!* Elf became so excited he almost forgot to keep hidden. If you had more than one It, then if something happened to one you would still feel secure!

He resisted the urge to return to the stream and search for another little It to give him extra security. If he did that he might never again find these creatures that were so like men and yet so different. So instead, he filed the idea away to use at the earliest opportunity and followed the strange creatures, keeping well hidden from them.

Soon Elf could hear the shouts of the men in the distance. From the behavior of the creatures ahead, they had heard those shouts too. They changed their direction so as to reach the stream a hundred yards or more downstream at about the spot where Elf had left. They made no voice sounds now that Elf could hear. They clutched their strangely shaped long Its before them tensely as though feeling greater security that way, their heads turning this way and that as they searched for any movement ahead.

They moved purposefully. An overwhelming sense of kinship brought tears to Elf's eyes. These creatures were *his kind.* Their differences from him were physical and therefore superficial, and even if those differences were greater it wouldn't have mattered.

He wanted, suddenly, to run to them. But the thought of it sent fear through him. Also they might run in panic from him if he suddenly revealed himself.

It would have to be a mutual approach, he felt. He was used to seeing them now. In due time he would reveal himself for a brief moment to them. Later he would stay in the open and watch them, making no move to approach until they got used to his being around. It might take days, but eventually, he felt sure, he could join them without causing them to panic.

After all, there had been the time when he absented himself from the men for three whole days and when he returned they had forgotten him, and his sudden appearance in their midst had sent even Big One into spasms of fear. Unable to flee from the security of the big It, and unable to bear his presence among them without being used to him, they had all fallen on the ground in a fit. He had had to retreat and wait until they recovered. Then, slowly, he had let them get used to his being in sight before approaching again. It had taken two full days to get to the point where they would accept him once more.

That experience, Elf felt, would be valuable to remember now. He wouldn't want to plunge these creatures into fits or see them scatter and run away.

Also, he was too afraid right now to reveal himself even though every atom of his being called for their companionship.

Suddenly he made another important discovery. Some of the Its these creatures carried had something like pliable vines attached to them so they could be hung about the neck! The thought was so staggering that Elf stopped and examined his It to see if that could be done to it. It was twice as long as his hand and round one way, tapering to a small end that opened to the hollow inside. It was too smooth to hold with a pliable vine unless— He visualized pliable vines woven together to hold It. He wasn't sure how it could be done, but maybe it could.

He set the idea aside for the future and caught up with the creatures again, looking at them with a new emotion, awe. The ideas he got just from watching them were so staggering he was getting dizzy!

Another new thought hit him. He rejected it at once as being too fantastic. It returned. Leaves are thin and pliable and can be wrapped around small objects like pebbles. Could it be that these creatures were really men of some sort, with bodies like men, covered with something thin like leaves are thin? It was a new and dizzy height in portable securities, and hardly likely. No. He rejected the idea with finality and turned his mind to other things.

He knew now where they could reach the stream. He decided to circle them and get ahead of them. For the next few minutes this occupied his full attention, leaving no room for crazy thoughts.

He reached the stream and hid behind some bushes where he would have a quick line of retreat if necessary. He clutched It tightly and waited. In a few moments he saw the first of the creatures emerge a hundred feet away. The others soon joined the first. Elf stole forward from concealment to concealment until he was only fifteen feet from them. His heart was pounding with a mixture of fear and excitement. His knuckles were white from clutching It.

The creatures were still carrying on their game of making sounds, but now in an amazing new way that made them

barely audible. Elf listened to the incredibly varied sounds, enraptured.

"This colony seems to have remained pure."

"You never can tell."

"No, you never can tell. Get out the binoculars and look, Joe."

"Not just yet, Harold. I'm looking to see if I can spot one whose behavior shows intelligence."

Elf ached to imitate some of the beautiful combinations of sounds. He wanted to experiment and see if he could make the softly muted voices. He had an idea how it might be done, not make a noise in your throat but breathe out and form the sounds with your mouth just like you were uttering them aloud.

One of the creatures fumbled at an It hanging around his neck. The top of it hinged back. He reached in and brought out a gleaming It and held it so that it covered his eyes. He was facing toward the men upstream and stood up slowly.

"See something, Joe?"

Suddenly Elf was afraid. Was this some kind of magic? He had often puzzled over the problem of whether things were there when he didn't look at them. He had experimented, closing his eyes then opening them suddenly to see if things were still there, and they always were; but maybe this was magic to make the men not be there. Elf waited, watching upstream, but Big One and the others did not vanish.

The one called Joe chuckled. "The toy the adult males have would be a museum piece if it were intact. A 1960 Ford, I think. Only one wheel on it, right front."

Elf's attention jerked back. One of the creatures was reaching over his shoulder, lifting on the large It fastened there. The top of the It pulled back. He reached inside, bringing out something that made Elf almost exclaim aloud. It was shaped exactly like the little It Elf was carrying, but it glistened in the sunlight and its interior was filled with a richly brown fluid.

"Anyone else want a Coke?"

"This used to be a picnic area," the one called Joe said,

not taking his eyes from the binoculars. "I can see a lot of pop bottles lying around in the general area of that wreck of a Ford."

While Elf watched, breathless, the creature reached inside the skin of his hip and brought out a very small It and did something to the small end of the hollow It. Putting the very small It back under the skin of his hip, he put the hollow It to his lips and tilted it. Elf watched the brown liquid drain out. Here was magic. Such an It—the very one he carried—could be filled with water from the stream and carried around to drink any time!

When the It held no more liquid the creature dropped it to the ground. Elf could not take his eyes from it. He wanted it more than he had ever wanted anything. They might forget it. Sometimes the women dropped their Its and forgot them, picking up another one instead, and these creatures had beardless faces like women. Besides, each of them carried so many Its that they would feel just as secure without this one.

So many Its! One of the creatures held a flat white It in one hand and a very slim It shaped like a straight section of a bush stem, pointed at one end, with which he scratched on the white It at times, leaving black designs.

"There're fourteen males," the one called Joe whispered. The other wrote it down.

The way these creatures did things, Elf decided, was very similar to the way Big One and the other men went at moving the big It. They were very much like men in their actions, these creatures.

"Eighty-five or six females."

"See any signs of intelligent action yet?"

"No. A couple of the males are fighting. Probably going to be a mating free-for-all tomorrow or next day. There's one! Just a minute, I want to make sure. It's a little girl, maybe eight or nine years old. Good forehead. Her eyes definitely lack that large marble-like quality of the submoron parent species. She's intelligent all right. She's drawing something in the sand with a stick. Give me your rifle,

Bill, it's got a better telescope sight on it than mine, and I don't want her to suffer."

That little It, abandoned on the ground. Elf wanted it. One of the creatures would be sure to pick it up. Elf worried. He would never get it then. If only the creatures would go, or not notice him. If only—

The creature with the thing over his eyes put it back where he had gotten it out of the thing hanging from his shoulder. He had taken one of the long slim things from another of the creatures and placed the thick end against his shoulder, the small end pointed upstream. The others were standing, their backs to Elf, all of them looking upstream. If they would remain that way, maybe he could dart out and get the little It. In another moment they might lose interest in whatever they were watching.

Elf darted out from his concealment and grabbed the It off the ground, and in the same instant an ear-shattering sound erupted from the long slim thing against the creature's shoulder.

"Got her!" the creature said.

Paralyzed with fright, Elf stood motionless. One of the creatures started to turn his way. At the last instant Elf darted back to his place of concealment. His heart was pounding so loudly he felt sure they would hear it.

"You sure, Joe?"

"Right through the head. She never knew what happened."

Elf held the new It close to him, ready to run if he were discovered. He didn't dare look at it yet. It wouldn't notice if he just held it and felt it without looking at it. It was cold at first, colder than the water in the stream. Slowly it warmed. He dared to steal a quick glance at it. It gleamed at him as though possessed of inner life. A new feeling of security grew within him, greater than he had ever known. The other It, the one half filled with dried mud, and deeply scratched from the violent rush of water over it when the stream went over its banks, lay forgotten at his feet.

"Well, that finishes the survey trip for this time."

Elf paid little attention to the voice whispers now, too wrapped up in his new feelings.

"Yes, and quite a haul. Twenty-two colonies—three more than ten years ago. Fourteen of them uncontaminated, seven with only one or two intelligent offspring to kill, only one colony so contaminated we had to wipe it out altogether. And one renegade."

"The renegades are growing scarcer every time. Another ten or twenty years and they'll be extinct."

"Then there won't be any more intelligent offspring in these colonies."

"Let's get going. It'll be dark in another hour or so."

The creatures were hiding some of their Its under their skin, in their carrying cases. There was a feeling about them of departure. Elf waited until they were on the move, back the way they had come, then he followed at a safe distance.

He debated whether to show himself now or wait. The sun was going down in the sky now. It wouldn't be long until it went down for the night. Should he wait until in the morning to let them get their first glimpse of him?

He smiled to himself. He had plenty of time. Tomorrow and tomorrow. He would never return to Big One and the other men. Men or creatures, he would join with these new and wonderful creatures. They were *his kind.*

He thought of the girl Elf. They were her kind, too. If he could only get her to come with him.

On sudden impulse he decided to try. These creatures were going back the same way they had come. If he ran, and if she came right with him, they could catch up with the creatures before they went so far they would lose them.

He turned back, going carefully until he could no longer see the creatures, then he ran. He headed directly toward the place where the women and Elfs stayed. They would not be so easily alarmed as the men because there were so many of them they couldn't remember one another, and one more or less of the Elfs went unnoticed.

When he reached the clearing he slowed to a walk, looking for her. Ordinarily he didn't have to look much. She would see him and come to him, smiling in recognition of the fact that he was the only one like her.

He became a little angry. Was she hiding? Then he saw her. He went to her. She was on her stomach, motionless as though asleep, but something was different. There was a hole in one side of her head, and on the opposite side it was torn open, red and grayish white, with— He knelt down and touched her. She had the same inert feel to her that others had had who never again moved.

He studied her head curiously. He had never seen anything like this. He shook her. She remained limp. He sighed. He knew what would happen now. It was already happening. The odor was very faint yet, but she would not move again, and day after day the odor would get stronger. No one liked it.

He would have to hurry or he would lose the creatures. He turned and ran, never looking back. Once he started to cry, then stopped in surprise. Why had he been crying, he wondered. He hadn't hurt himself.

He caught up with the creatures. They were hurrying now, their long slender Its balanced on one shoulder, the big end resting in the palm of the hand. They no longer moved cautiously. Shortly it was new country. Elf had never been this far from the stream. Big One more or less led the men, and always more or less followed the same route in cross-country trips.

The creatures didn't spend hours stumbling along impossible paths. They looked ahead of them and selected a way, and took it. Also they didn't have a heavy It to transport, fifty feet at a time. Elf began to sense they had a destination in mind. Probably the place they lived.

Just ahead was a steep bank, higher than a man, running in a long line. The creatures climbed the bank and vanished on the other side. Cautiously Elf followed them, heading toward a large stone with It qualities at the top of the

bank from whose concealment he could see where they had gone without being seen. He reached it and cautiously peeked around it. Just below him were the creatures, but what amazed Elf was the sight of the big It.

It was very much like the big It the men had, except that there were differences in shape, and instead of one round thing at one corner, it had one at each corner and rested on them so that it was held off the ground. It glistened instead of being dull. It had a strange odor that was quite strong.

The creatures were putting some of their Its into it, two of them had actually climbed into it—something neither Elf nor the men had ever dared to do with their own big It.

Elf took his eyes off of it for a moment to marvel at the ground. It seemed made of stone, but such stone as he had never before seen. It was an even width with edges going in straight lines that paralleled the long narrow hill on which he stood, and on the other side was a similar hill, extending as far as the eye could see.

He returned his attention to the creatures and their big It. The creatures had all climbed into it now. Possibly they were settling down for the night, though it was still early for that . . .

No matter. There was plenty of time. Tomorrow and tomorrow. Elf would show himself in the morning, then run away. He would come back again after a while and show himself a little longer, giving them time to get used to him so they wouldn't panic.

They were playing their game of making voice sounds to one another again. It seemed their major preoccupation. Elf thought how much fun it would be to be one of them, making voice sounds to his heart's content.

"I don't see why the government doesn't wipe out the whole lot," one of them was saying. "It's hopeless to keep them alive. Feeble-mindedness is dominant in them. They can't be absorbed into the race again, and any intelligent off-spring they get from mating with a renegade would start a long line of descendants, at least one fourth of whom would be mindless idiots."

"Well," another of them said, "it's one of those things where there is no answer. Wipe them out, and next year it would be all the blond-haired people to be wiped out to keep the race of dark-haired people pure, or something. Probably in another hundred years nature will take care of the problem by wiping them out for us. Meanwhile we game wardens must make the rounds every two years and weed out any of them we can find that have intelligence." He looked up the embankment but did not notice Elf's head, concealed partially by the grass around the concrete marker. "It's an easy job. Any of them we missed seeing this time, we'll probably get next time. In the six or eight visits we make before the intelligent ones can become adults and mate we always find them."

"What I hate is when they see us, those intelligent ones," a third voice said. "When they walk right up to us and want to be friends with us it's too much like plain murder, except that they can't talk, and only make moronic sounds like 'Bdl-bdl-bdl.' Even so, it gets me when we kill them." The others laughed.

Suddenly Elf heard a new sound from the big It. It was not a voice sound, or if it was it was one that Elf felt he could not possibly match exactly. It was a growling, "RRrr-RRrrRRrr." Suddenly it was replaced by still a different sound, a "p-p-p-p-p" going very rapidly. Perhaps it was the way these creatures snored. It was not unpleasant. Elf cocked his head to one side, listening to the sound, smiling. How exciting it would be when he could join with these creatures! He wanted to so much.

The big It began to move. In the first brief second Elf could not believe his senses. How could it move without being carried? But it was moving, and the creatures didn't seem to be aware of it! Or perhaps they were too overcome by fear to leap out!

Already the big It was moving faster than a walk, and was moving faster with every heartbeat. How could they remain unaware of it and not leap to safety?

Belatedly Elf abandoned caution and leaped down the embankment to the flat ribbon of rock, shouting. But

already the big It was over a hundred yards away, and moving faster now than birds in flight!

He shouted, but the creatures didn't hear him—or perhaps they were so overcome with fright that they were frozen. Yes, that must be it.

Elf ran after the big It. If he could only catch up with it he would gladly join the creatures in their fate. Better to die with them than to lose them!

He ran and ran, refusing to believe he could never overtake the big It, even when it disappeared from view, going faster than the wind. He ran and ran until his legs could lift no more.

Blinded by tears, he tripped and sprawled full length on the wide ribbon of stone. His nose bled from hitting the hard surface. His knees were scraped and bleeding. He was unaware of this.

He was aware only that the creatures were gone, to what unimaginable fate he could not guess, but lost to him, perhaps forever.

Sobs welled up within him, spilled out, shaking his small naked body. He cried as he hadn't cried since he was a baby.

And the empty Coca Cola bottle, clutched forgotten in his hand, glistened with the rays of the setting sun . . .

NOW LET US SLEEP

by Avram Davidson

Two years ago, the first annual volume of *S-F* included a very short story by a young writer new to this field and to fiction generally. "The Golem" was Avram Davidson's second published story, although he had previously contributed extensively to *Commentary* and other opinion magazines.

Since that time, Mr. Davidson has gone on to take first prize (with his first mystery) in the annual *Ellery Queen's Mystery Magazine* contest. "The Golem," meantime, has been translated into a number of foreign languages (most recently for dramatization in Hebrew over an Israeli station), and the author has become a regular contributor to the better s-f magazines.

A pink-skinned young cadet ran past Harper, laughing and shouting and firing his stungun. The wind veered about, throwing the thick scent of the Yahoos into the faces of the men, who whooped loudly to show their revulsion.

"I got three!" the chicken cadet yelped at Harper. "Did you see me pop those two together? Boy, what a stink they have!"

Harper looked at the sweating kid, muttered, "You don't smell so sweet yourself," but the cadet didn't wait to hear. All the men were running now, running in a ragged semicircle with the intention of driving the Yahoos before them, to hold them at bay at the foot of the gaunt cliff a quarter-mile off.

The Yahoos loped awkwardly over the rough terrain, moaning and grunting grotesquely, their naked bodies bent low. A few hundred feet ahead one of them stumbled and fell, his arms and legs flying out as he hit the ground, twitched, and lay still.

A bald-headed passenger laughed triumphantly, paused to kick the Yahoo, and trotted on. Harper kneeled beside the fallen Primitive, felt for a pulse in the hairy wrist. It seemed slow and feeble, but then, no one actually knew what the normal pulse-beat should be. And—except for Harper—no one seemed to give a damn.

Maybe it was because he was the grandson of Barret Harper, the great naturalist—back on Earth, of course. It seemed as if man could be fond of nature only on the planet of man's origin, whose ways he knew so well. Elsewhere, it was too strange and alien—you subdued it, or you adjusted to it, or you were perhaps even content with it. But you almost never *cared* about the flora or fauna of the new planets. No one had the feeling for living things that an earth-born had.

The men were shouting more loudly now, but Harper didn't lift his head to see why. He put his hand to the shaggy gray chest. The heart was still beating, but very slowly and irregularly. Someone stood beside him.

"He'll come out of it in an hour or so," the voice of the purser said. "Come on—you'll miss all the fun—you should see how they act when they're cornered! They kick out and throw sand and"—he laughed at the thought—"they weep great big tears, and go, *'Oof! Oof!'* "

Harper said, "An ordinary man *would* come out of it in an hour or so. But I think their metabolism is different. . . . Look at all the bones lying around."

The purser spat. "Well, don't that prove they're not human, when they won't even bury their dead? . . . *Oh,* oh!—look at that!" He swore.

Harper got to his feet. Cries of dismay and disappointment went up from the men.

"What's wrong?" Harper asked.

The purser pointed. The men had stopped running, were gathering together and gesturing. "Who's the damn fool who planned this drive?" the purser asked, angrily. "He picked the wrong cliff! The damned Yahoos *nest* in that one! Look at them climb, will you—" He took aim, fired the stungun. A figure scrabbling up the side of the rock

threw up its arms and fell, bounding from rock to rock until it hit the ground. "*That* one will never come out of it!" the purser said, with satisfaction.

But this was the last casualty. The other Yahoos made their way to safety in the caves and crevices. No one followed them. In those narrow, stinking confines a Yahoo was as good as a man, there was no room to aim a stungun, and the Yahoos had rocks and clubs and their own sharp teeth. The men began straggling back.

"This one a she?" The purser pushed at the body with his foot, let it fall back with an annoyed grunt as soon as he determined its sex. "There'll be Hell to pay in the hold if there's more than two convicts to a she." He shook his head and swore.

Two lighters came skimming down from the big ship to load up.

"Coming back to the launch?" the purser asked. He had a red shiny face. Harper had always thought him a rather decent fellow—before. The purser had no way of knowing what was in Harper's mind; he smiled at him and said, "We might as well get on back, the fun's over now."

Harper came to a sudden decision. "What're the chances of my taking a souvenir back with me? This big fellow, here, for example?"

The purser seemed doubtful. "Well, I dunno, Mr. Harper. We're only supposed to take females aboard, and unload *them* as soon as the convicts are finished with their fun." He leered. Harper, suppressing a strong urge to hit him right in the middle of his apple-red face, put his hand in his pocket. The purser understood, looked away as Harper slipped a bill into the breast pocket of his uniform.

"I guess it can be arranged. See, the Commissioner-General on Selopé III wants one for his private zoo. Tell you what: We'll take one for him and one for you—I'll tell the supercargo it's a spare. But if one croaks, the C-G has to get the other. Okay?"

At Harper's nod the purser took a tag out of his pocket, tied it around the Yahoo's wrist, waved his cap to the lighter as it came near. "Although why anybody'd *want*

one of these beats me," he said, cheerfully. "They're dirtier than animals. I mean, a pig or a horse'll use the same corner of the enclosure, but these things'll dirty anywhere. Still, if you *want* one—" He shrugged.

As soon as the lighter had picked up the limp form (the pulse was still fluttering feebly) Harper and the purser went back to the passenger launch. As they made a swift ascent to the big ship the purser gestured to the two lighters. "That's going to be a mighty slow trip *those* two craft will make back up," he remarked.

Harper innocently asked why. The purser chuckled. The coxswain laughed.

"The freight-crewmen want to make their points before the convicts. *That's* why."

The chicken cadet, his face flushed a deeper pink than usual, tried to sound knowing. "How about that, purser? Is it pretty good stuff?"

The other passengers wiped their perspiring faces, leaned forward eagerly. The purser said, "Well, rank has its privileges, but that's one I figure I can do without."

His listeners guffawed, but more than one looked down toward the lighters and then avoided other eyes when he looked back again.

Barnum's Planet (named, as was the custom then, after the skipper who'd first sighted it) was a total waste, economically speaking. It was almost all water and the water supported only a few repulsive-looking species of no discernible value. The only sizable piece of land—known, inevitably, as Barnumland, since no one else coveted the honor—was gaunt and bleak, devoid alike of useful minerals or arable soil. Its ecology seemed dependent on a sort of fly: A creature rather like a lizard ate the flies and the Yahoos ate the lizards. If something died at sea and washed ashore, the Yahoos ate that, too. What the flies ate no one knew, but their larvae ate the Yahoos, dead.

They were small, hairy, stunted creatures whose speech —if speech it was—seemed confined to moans and clicks and grunts. They wore no clothing, made no artifacts, did

not know the use of fire. Taken away captive, they soon languished and died. Of all the Primitives discovered by man, they were the most primitive. They might have been left alone on their useless planet to kill lizards with tree branches forever—except for one thing.

Barnum's Planet lay equidistant between Coulter's System and the Selopés, and it was a long, long voyage either way. Passengers grew restless, crews grew mutinous, convicts rebellious. Gradually the practice developed of stopping on Barnum's Planet "to let off steam"—archaic expression, but although the nature of the machinery man used had changed since it was coined, man's nature hadn't.

And, of course, no one *owned* Barnum's Planet, so no one cared what happened there.

Which was just too bad for the Yahoos.

It took some time for Harper to settle the paperwork concerning his "souvenir," but finally he was given a baggage check for "One Yahoo, male, live," and hurried down to the freight deck. He hoped it would be still alive.

Pandemonium met his ears as he stepped out of the elevator. A rhythmical chanting shout came from the convict hold. "Hear that?" one of the duty officers asked him, taking the cargo chit. Harper asked what the men were yelling. "I wouldn't care to use the words," the officer said. He was a paunchy, gray-haired man, one who probably loved to tell his grandchildren about his "adventures." This was one he wouldn't tell them.

"I don't like this part of the detail," the officer went on. "Never did, never will. Those creatures *seem human to me*—stupid as they are. And if they're *not* human," he asked, "then how can we sink low enough to bring their females up for the convicts?"

The lighters grated on the landing. The noise must have penetrated to the convict hold, because all semblance of words vanished from the shouting. It became a mad cry, louder and louder.

"Here's your pet," the gray-haired officer said. "Still out, I see . . . I'll let you have a baggage-carrier. Just give it to a steward when you're done with it." He had to raise

his voice to be heard over the frenzied howling from the hold.

The ship's surgeon was out having tea at the captain's table. The duty medical officer was annoyed. "What, another one? We're not veterinarians, you know . . . Well, wheel him in. My intern is working on the other one . . . *whew!*" He held his nose and hastily left.

The intern, a pale young man with close-cropped dark hair, looked up from the pressure-spray he had just used to give an injection to the specimen Yahoo selected for the Commissioner-General of Selopé III. He smiled faintly.

"Junior will have company, I see. . . . Any others?"

Harper shook his head. The intern went on, "This should be interesting. The young one seems to be in shock. I gave him two cc's of anthidar sulfate, and I see I'd better do the same for yours. Then . . . Well, I guess there's still nothing like serum albumen, is there? But you'd better help me strap them down. If they come to, there's a cell back aft we can put them in, until I can get some cages rigged up." He shot the stimulant into the flaccid arm of Harper's Yahoo.

"Whoever named these beasties knew his Swift," the young medico said. "You ever read that old book, *Gulliver's Travels?*"

Harper nodded.

"Old Swift went mad, didn't he? He hated humanity, they all seemed like Yahoos to him. . . . In a way I don't blame him. I think that's why everybody despises these Primitives: They seem like caricatures of ourselves. Personally, I look forward to finding out a lot about them, their metabolism and so on. . . . What's *your* interest?"

He asked the question casually, but shot a keen look as he did so. Harper shrugged. "I hardly know, exactly. It's not a scientific one, because I'm a businessman." He hesitated. "You ever hear or read about the Tasmanians?"

The intern shook his head. He thrust a needle into a vein in the younger Yahoo's arm, prepared to let the serum flow in. "If they lived on Earth, I wouldn't know. Never

was there. I'm a third generation Coulterboy, myself."

Harper said, "Tasmania is an island south of Australia. The natives were the most primitive people known to Earth. They were almost all wiped out by the settlers, but one of them succeeded in moving the survivors to a smaller island. And then a curious thing happened."

Looking up from the older Primitive, the intern asked what that was.

"The Tasmanians—the few that were left—decided that they'd had it. They refused to breed. And in a few more years they were all dead. . . . I read about them when I was just a kid. Somehow, it moved me very much. Things like that *did*—the dodo, the great auk, the quagga, the Tasmanians. I've never been able to get it out of my mind. When I began hearing about the Yahoos, it seemed to me that they were like the old Tasmanians. Only there are no settlers on Barnumland."

The intern nodded. "But that won't help our hairy friends here a hell of a lot. Of course no one knows how many of them there are—or ever were. But I've been comparing the figures in the log as to how many females are caught and taken aboard." He looked directly at Harper. "And on every trip there are less by far."

Harper bowed his head. He nodded. The intern's voice went on: "The thing is, Barnum's Planet is no one's responsibility. If the Yahoos could be used for labor, they'd be exploited according to a careful system. But as it is, no one cares. If half of them die from being stungunned, no one cares. If the lighter crews don't bother to actually land the females—if any of the wretched creatures are still *alive* when the convicts are done—but just dump them out from twenty feet up, why, again: no one cares. Mr. Harper?"

Their eyes met. Harper said, "Yes?"

"Don't misunderstand me. . . . I've got a career here. I'm not jeopardizing it to save the poor Yahoos—but if *you* are interested—if you think you've got any influence—and if you want to try to do anything—" He paused. "Why, now is the time to start. Because after another few stop-

overs there aren't going to *be* any Yahoos. No more than there are any Tasmanians."

Selopé III was called "The Autumn Planet" by the poets. At least, the P.R. picture-tapes always referred to it as "Selopé III, The Autumn Planet of the poets," but no one knew who the poets were. It was true that the Commission Territory, at least, did have the climate of an almost-perpetual early New England November. Barnumland had been dry and warm. The Commissioner-General put the two Yahoos in a heated cage as large as the room Harper occupied at his company's bachelor executive quarters.

"Here, boy," the C-G said, holding out a piece of fruit. He made a chirping noise. The two Yahoos huddled together in a far corner.

"They don't seem very bright," he said, sadly. "All my *other* animals eat out of my hand." He was very proud of his private zoo, the only one in the Territory. On Sundays he allowed the public to visit it.

Sighing, Harper repeated that the Yahoos were Primitives, not animals. But, seeing the C-G was still doubtful, he changed his tactics. He told the C-G about the great zoos on Earth, where the animals went loose in large enclosures rather than being caged up. The C-G nodded thoughtfully. Harper told him of the English dukes who—generation after ducal generation—preserved the last herd of wild White Cattle in a park on their estate.

The C-G stroked his chin. "Yes, yes," he said. "I see your point," he said. He sighed gustily. "Can't be done," he said.

"But why not, sir?" Harper cried.

It was simple. "No money. Who's to pay? The Exchequer-Commissioner is weeping blood trying to get the budget through Council. If he adds a penny more— No, young fellow. I'll do what *I* can: I'll feed these two, here. But that's all I can do."

Trying to pull all the strings he could reach, Harper approached the Executive-Fiscal and the Procurator-

General, the President-in-Council, the Territorial Advocate, the Chairman of the Board of Travel. But no one could do anything. Barnum's Planet, it was carefully explained to him, remained No Man's Land only because no man presumed to give any orders concerning it. If any government did, this would be a Presumption of Authority. And then every other government would feel obliged to deny that presumption and issue a claim of its own.

There was a peace on now—a rather tense, uneasy one. And it wasn't going to be disturbed for Harper's Yahoos. Human, were they? Perhaps. But who cared? As for morality, Harper didn't even bother to mention the word. It would have meant as little as chivalry.

Meanwhile, he was learning something of the Yahoos' language. Slowly and arduously, he gained their confidence. They would shyly take food from him. He persuaded the C-G to knock down a wall and enlarge their quarters. The official was a kindly old man, and he seemed to grow fond of the stooped, shaggy, splay-footed Primitives. And after a while he decided that they were smarter than animals.

"Put some clothes on 'em, Harper," he directed. "If they're people, let 'em start acting like people. They're too big to go around naked."

So, eventually, washed and dressed, Junior and Senior were introduced to Civilization via 3-D, and the program was taped and shown everywhere.

Would you like a cigarette, Junior? Here, let me light it for you. Give Junior a glass of water, Senior. Let's see you take off your slippers, fellows, and put them on again. And now do what I say in your own language . . .

But if Harper thought that might change public opinion, he thought wrong. Seals perform, too, don't they? And so do monkeys. They talk? Parrots talk better. And anyway, who cared to be bothered about animals *or* Primitives? They were okay for fun, but that was all.

And the reports from Barnumland showed fewer and fewer Yahoos each time.

Then one night two drunken crewmen climbed over the fence and went carousing in the C-G's zoo. Before they

left, they broke the vapor-light tubes, and in the morning Junior and Senior were found dead from the poisonous fumes.

That was Sunday morning. By Sunday afternoon Harper was drunk, and getting drunker. The men who knocked on his door got no answer. They went in anyway. He was slouched, red-eyed, over the table.

"People," he muttered. "Tell you they were *human!*" he shouted.

"Yes, Mr. Harper, we know that," said a young man, pale, with close-cropped dark hair.

Harper peered at him, boozily. "Know you," he said. "Thir' gen'ration Coulterboy. Go 'way. Spoi' your c'reer. Whaffor? Smelly ol' Yahoo?" The young medico nodded to his companion, who took a small flask from his pocket, opened it. They held it under Harper's nose by main force. He gasped and struggled, but they held on, and in a few minutes he was sober.

"That's rough stuff," he said, coughing and shaking his head. "But—thanks, Dr. Hill. Your ship in? Or are you stopping over?"

The former intern shrugged. "I've left the ships," he said. "I don't have to worry about spoiling my new career. This is my superior, Dr. Anscomb."

Anscomb was also young, and, like most men from Coulter's System, pale. He said, "I understand you can speak the Yahoos' language."

Harper winced. "What good's that now? They're dead, poor little bastards."

Anscomb nodded. "I'm sorry about that, believe me. Those fumes are so quick. . . . But there are still a few alive on Barnum's Planet who can be saved. The Joint Board for Research is interested. Are you?"

It had taken Harper fifteen years to work up to a room of this size and quality in bachelor executives' quarters. He looked around it. He picked up the letter which had come yesterday. ". . . neglected your work and become a joke . . . unless you accept a transfer and reduction in grade . . ." He nodded slowly, putting down the letter.

"I guess I've already made my choice. What are your plans?"

Harper, Hill, and Anscomb sat on a hummock on the north coast of Barnumland, just out of rock-throwing range of the gaunt escarpment of the cliff which rose before them. Behind them a tall fence had been erected. The only Yahoos still alive were "nesting" in the caves of the cliff. Harper spoke into the amplifier again. His voice was hoarse as he forced it into the clicks and moans of the Primitives' tongue.

Hill stirred restlessly. "Are you sure that means, *'Here is food. Here is water'*—and not, *'Come down and let us eat you'?* I think I can almost say it myself by now."

Shifting and stretching, Anscomb said, "It's been two days. Unless they've determined to commit race suicide a bit more abruptly than your ancient Tasmanians—" He stopped as Harper's fingers closed tightly on his arm.

There was a movement on the cliff. A shadow. A pebble clattered. Then a wrinkled face peered fearfully over a ledge. Slowly, and with many stops and hesitations, a figure came down the face of the cliff. It was an old she. Her withered and pendulous dugs flapped against her sagging belly as she made the final jump to the ground, and—her back to the wall of rock—faced them.

"Here is food," Harper repeated softly. "Here is water." The old woman sighed. She plodded wearily across the ground, paused, shaking with fear, and then flung herself down at the food and the water.

"The Joint Board for Research has just won the first round," Hill said. Anscomb nodded. He jerked his thumb upward. Hill looked.

Another head appeared at the cliff. Then another. And another. They watched. The crone got up, water dripping from her dewlaps. She turned to the cliff. "Come down," she cried. "Here is food and water. Do not die. Come down and eat and drink." Slowly, her tribes-people did so. There were thirty of them.

Harper asked, "Where are the others?"

The crone held out her dried and leathery breasts to him. "Where are those who have sucked? Where are those your brothers took away?" She uttered a single shrill wail; then was silent.

But she wept—and Harper wept with her.

"I'll guess we'll swing it all right," Hill said. Anscomb nodded. "Pity there's so few of them. I was afraid we'd have to use gas to get at them. Might have lost several that way."

Neither of them wept.

For the first time since ships had come to their world, Yahoos *walked* aboard one. They came hesitantly and fearfully, but Harper had told them that they were going to a new home and they believed him. He told them that they were going to a place of much food and water, where no one would hunt them down. He continued to talk until the ship was on its way, and the last Primitive had fallen asleep under the dimmed-out vapor-tube lights. Then he staggered to his cabin and fell asleep himself. He slept for thirty hours.

He had something to eat when he awoke, then strolled down to the hold where the Primitives were. He grimaced, remembering his trip to the hold of the other ship to collect Senior, and the frenzied howling of the convicts awaiting the females. At the entrance to the hold he met Dr. Hill, greeted him.

"I'm afraid some of the Yahoos are sick," Hill said. "But Dr. Anscomb is treating them. The others have been moved to this compartment here."

Harper stared. "Sick? How can they be sick? What from? And how many?"

Dr. Hill said, "It appears to be Virulent Plague. . . . Fifteen of them are down with it. You've *had* all six shots, haven't you? Good. Nothing to worry—"

Harper felt the cold steal over him. He stared at the pale young physician. "No one can enter or leave any system or planet without having had all six shots for Virulent Plague," he said slowly. "So if we are all immune, how

could the Primitives have gotten it? And how is it that only fifteen have it? Exactly half of them. What about the other fifteen, Dr. Hill? *Are they the control group for your experiment?"*

Dr. Hill looked at him calmly. "As a matter of fact, yes. I hope you'll be reasonable. Those were the only terms the Joint Board for Research would agree to. After all, not even convicts will volunteer for experiments in Virulent Plague."

Harper nodded. He felt frozen. After a moment he asked, "Can Anscomb do anything to pull them through?"

Dr. Hill raised his eyebrows. "Perhaps. We've got something we wanted to try. And at any rate, the reports should provide additional data on the subject. We must take the long-range view."

Harper nodded. "I suppose you're right," he said.

By noon all fifteen were dead.

"Well, that means an uneven control group," Dr. Anscomb complained. "Seven against eight. Still, that's not *too* bad. And it can't be helped. We'll start tomorrow."

"Virulent Plague again?" Harper asked.

Anscomb and Hill shook their heads. "Dehydration," the latter said. "And after that, there's a new treatment for burns we're anxious to try. . . . It's a shame, when you think of the Yahoos being killed off by the thousands, year after year, *uselessly*. Like the dodo. We came along just in time—thanks to you, Harper."

He gazed at them. *"Quis custodiet ipsos custodes?"* he asked. They looked at him, politely blank. "I'd forgotten. Doctors don't study Latin any more, do they? An old proverb. It means: 'Who shall guard the guards themselves?' . . . Will you excuse me, Doctors?"

Harper let himself into the compartment. "I come," he greeted the fifteen.

"We see," they responded. The old woman asked how their brothers and sisters were "in the other cave."

"They are well. . . . Have you eaten, have you drunk? Yes? Then let us sleep," Harper said.

The old woman seemed doubtful. "Is it time? The light still shines." She pointed to it. Harper looked at her. She

had been so afraid. But she had trusted him. Suddenly he bent over and kissed her. She gaped.

"Now the light goes out," Harper said. He slipped off a shoe and shattered the vapor tube. He groped in the dark for the air-switch, turned it off. Then he sat down. He had brought them here, and if they had to die, it was only fitting that he should share their fate. There no longer seemed any place for the helpless, or for those who cared about them.

"Now let us sleep," he said.

WILDERNESS

by Zenna Henderson

In the past, much of the emphasis on special education has centered on the so-called retarded or problem child. Now, in the *Sputnik* era, the necessity for providing the most, or rather the best, education for our gifted youngsters has become a matter of national urgency.

The other side of the exceptional coin—the case of Richard Roe *vs.* Superman, or of "normal" *vs.* "gifted" human beings—has always been a popular s-f theme; but it has seldom been handled with the compassionate and perceptive understanding that Zenna Henderson has brought to her series, about the "People," the most recent addition to which is the following selection.

"Well, how do you expect Bruce to concentrate on spelling when he's so worried about his daddy?" I thumbed through my second graders' art papers, hoping to find one lift out of the prosaic.

"Worried about his daddy?" Mrs. Kanz looked up from her spelling tests. "What makes you think he's worried about him?"

"Why he's practically sick for fear he won't come home this time." I turned the paper upside down and looked again. "I thought you knew everything about everyone," I teased. "You've briefed me real good in these last three weeks. I feel like a resident instead of a newcomer." I sighed and righted the paper. It was still a tree with six apples on it.

"But I certainly didn't know Stell and Mark were having trouble." Mrs. Kanz was chagrined.

"They had an awful fight the night before he left," I said. "Nearly scared the 'waddin' out of Bruce."

"How do you know?" Mrs. Kanz's eyes were suddenly sharp. "You haven't met Stell yet and Bruce hasn't said a word all week except yes and no."

I let my breath out slowly. *Oh no!* I thought. *Not already! Not already!*

"Oh, a little bird told me," I said lightly, busying myself with my papers to hide the small tremble of my hands.

"Little bird, toosh!" she said. "You probably heard it from Marie, though how she—"

"Could be," I said, "could be." I bundled up my papers hurriedly. "Oops! Recess is almost over. Gotta get down stairs before the thundering herd arrives."

The sound of the old worn steps was hollow under my hurried feet, but not nearly so hollow as the feeling in my stomach.

Only three weeks and I had almost betrayed myself already. Why couldn't I *remember!* Besides, the child wasn't even in my room. I had no business knowing anything about him. Just because he had leaned so quietly, so long over his literature book last Monday—and I had only looked a little . . .

At the foot of the stairs, I was engulfed waist-deep in children sweeping in from the playground. Gratefully I let myself be swept with them into the classroom.

That afternoon I leaned with my back against the window sill and looked over my quiet class. Well, quiet insofar as moving around the room was concerned, but each child humming audibly or inaudibly with the untiring dynamos of the young—the mostly inarticulate thought patterns of happy children. All but Lucine, my twelve-year-old first grader, who hummed briefly to a stimulus and then clicked off, hummed again and clicked off. There was a short somewhere, and her flat empty eyes showed it.

I sighed and turned my back on the room, wandering my eyes up the steepness of Black Mesa as it towered above the school, trying to loose myself from apprehension, trying to forget why I had run away—nearly five hundred miles of it—trying to forget those things that tugged at my

sanity, things that could tear me loose from reality and set me adrift. . . . Adrift? Oh, glory! Set me free! Set me free! I hooked my pointer fingers through the old wire grating that protected the bottom of the window and tugged sharply. Old nails grated and old wire gave and I sneezed through the dry, acid bite of ancient dust.

I sat down at my desk and rummaged for a Kleenex and sneezed again, trying to ignore, but knowing too well, the heavy nudge and tug inside me. That tiny near-betrayal had cracked my tight protective shell. All that I had packed away so resolutely was shouldering and elbowing its way—

I swept my children out of spelling into numbers so fast that Lucine poised precariously on the edge of tears until she clicked on again and murkily perceived where we had gone.

"Now, look, Petie," I said, trying again to find a way through his stubborn block against number words. "This is the picture of two, but this is the name of two. . . ."

After the school buses were gone, I scrambled and slid down the steep slope of the hill below the gaunt old schoolhouse and walked the railroad ties back toward the hotel-boardinghouse where I stayed. Eyes intent on my feet, but brightly conscious of the rails on either side, I counted my way through the clot of old buildings that was town, and out the other side. If I could keep something on my mind, I could keep ghosts out of my thoughts.

I stopped briefly at the hotel to leave my things and then pursued the single rail line on down the little valley, over the shaky old trestle that was never used any more, and left it at the tailings dump and started up the hill, enjoying fiercely the necessary lunge and pull, tug and climb, that stretched my muscles, quickened my heartbeat and pumped my breath up hard against the top of my throat.

Panting, I grabbed a manzanita bush and pulled myself up the last steep slope. I perched myself, knees to chest, on the crumbly outcropping of shale at the base of the huge brick chimney, arms embracing my legs, my cheek pressed to my knees. I sat with closed eyes, letting the late afternoon sun soak into me. If only this could be all, I thought

wistfully. If only there were nothing but sitting in the sun, soaking up warmth. Just being, without questions. And for a long, blissful time, I let that be all.

But I couldn't put it off any longer. I felt the first slow trickling through the crack in my armor. I counted trees, I counted telephone poles, I said times tables until I found myself thinking six times nine is ninety-six and then I gave up and let the flood gates open wide.

It's always like this, one of me cried to the rest of me. *You promised! You promised and now you're giving in again—after all this time!*

I could promise not to breathe, too, I retorted.

But this is insanity—you know it is! Anyone knows it is!

Insane or not, it's me! I screamed silently. *It's me!* IT'S ME!

Stop your arguing, another of me said. *This is too serious for bickering. We've got problems.*

I took a dry manzanita twig and cleared a tiny space on the gravelly ground, scratching up an old square nail and a tiny bit of sun-purpled glass as I did so. Shifting the twig to my other hand, I picked up the nail and rubbed the dirt off with my thumb. It was pitted with rust, but still strong and heavy. I wondered what it had held together back in those days, and if the hand that last held it was dust now, and if whoever it was had had burdens—

I cast the twig from me with controlled violence and, rocking myself forward, I made a straight mark on the cleared ground with the nail. This was a drearily familiar inventory and I had taken it so many times before, trying to simplify this complicated problem of mine, that I fell automatically into the same old pattern.

Item one. Was I really insane—or going insane—or on the way to going insane? It must be so. Other people didn't see sounds. Nor taste colors. Nor feel the pulsing of other people's emotions like living things. Nor find the weight of flesh so like a galling straitjacket. Nor more than half believe that the burden was not lay-down-able short of death.

But then, I defended, I'm still functioning in society and I don't drool or foam at the mouth. I don't act very crazy

and as long as I guard my tongue, I don't sound crazy.

I pondered the item a while, then scribbled out the mark. *I guess I'm still sane . . . so far.*

Item two. Then what's wrong with me? Do I just let my imagination run away with me? I jabbed holes all around my second heavy mark. No, it was something more, something beyond just imagination, something beyond—what?

I crossed that marking with another to make an X.

What shall I do about it then? Shall I fight it out like I did before? Shall I deny and deny and deny until . . . I felt a cold grue, remembering the blind panic that had finally sent me running until I ended up at Kruper, and all the laughter went out of me, clear to the bottom of my soul.

I crosshatched the two marks out of existence and hid my eyes against my knees again and waited for the sick upgushing of apprehension to foam into despair over my head. Always it came to this. Do I *want* to do anything about it? Should I stop it all with an act of will? *Could* I stop it all by an act of will? Did I *want* to stop it?

I scrambled to my feet and scurried around the huge stack, looking for the entrance. My feet cried, *No no!* on the sliding gravel. Every panting breath cried, *No no!* as I slipped and slithered around the steep hill. I ducked into the shadowy interior of the huge chimney and pressed myself against the blackened crumbling bricks, every tense muscle shouting, *No no!* And in the wind-shuddery silence, I cried, "No!" and heard it echo up through the blackness above me. Almost I could see the word shoot up through the pale elliptical disk of the sky at the top of the stack.

"Because I could!" I shrieked defiantly inside me. "If I weren't afraid, I could follow that word right on up and erupt into the sky like a Roman candle and never, never, never feel the weight of the world again!"

But the heavy drag of Reason grabbed my knees and elbows and rubbed my nose forcibly into Things As They Really Are and I sobbed impotently against the roughness of the curving wall. The sting of salty wetness across my cheek shocked me out of rebellion.

Crying? Wailing against a dirty old smelter wall because

of a dream? Fine goings on for a responsible pedagogue!

I scrubbed at my cheeks with a Kleenex and smiled at the grime that came off. I'd best get back to the hotel and get my face washed before eating the inevitable garlicky supper I'd smelled on my way out.

I stumbled out into the red flood of sunset and down the thread of a path I had ignored when coming up. I hurried down into the duskiness of the cottonwood thicket along the creek at the bottom of the hill. Here, where no eyes could see, no tongues could clack at such undignified behavior, I broke into a run, a blind, headlong run, pretending that I could run away—just away! Maybe with salty enough tears and fast enough running, I could buy a dreamless night.

I rounded the turn where the pinky-gray granite boulder indented the path—and reeled under a sudden blow. I had run full tilt into someone. Quicker than I could focus my eyes, I was grabbed and set on my feet. Before I could see past a blur of tears from my smarting nose, I was alone in the dusk.

I mopped my nose tenderly. "Well," I said aloud. "That's one way to knock the nonsense out of me." Then immediately began to wonder if it was a sign of unbalance to talk aloud to yourself.

I looked back uphill when I came out of the shadow of the trees. The smelter stack was dark against the sky, massive above the remnants of the works. It was beautiful in a stark way and I paused to enjoy it briefly. Suddenly there was another darkness up there. Someone had rounded the stack and stood silhouetted against the lighter horizon.

I wondered if the sound of my sorrow was still echoing up the stack and then I turned shame-faced away. Whoever it was up there had more sense than to listen for the sounds of old sorrows.

That night, in spite of my outburst of the afternoon, I barely slipped under the thin skin of sleep, and, for endless ages, clutched hopelessly for something to pull me down into complete forgetfulness. Then despairingly I felt the familiar tug and pull and, hopelessly, eagerly, slipped head-

long into my dream that I had managed to suppress for so long.

There are no words—there are no words anywhere for my dream. Only the up-welling of delight, the stretching of my soul, the boundless freedom, the warm belongingness. And I held the dearness close to me—oh, so close to me! knowing that awaking must come—

And it did, smashing me down, forcing me into flesh, binding me leadenly to the earth, squeezing out the delight, cramping my soul back into finiteness, snapping bars across my sky and stranding me in the thin watery glow of morning, so alone again that the effort of opening my eyes was almost too much to be borne.

Lying rigidly under the press of the covers, I gathered up all the tatters of my dream and packed them tightly into a hard little knot way back in the back of my consciousness. *Stay there. Stay there,* I pleaded. *Oh stay there!*

Forcing myself to breakfast, I came warily into the dining room at the hotel. As the only female-type woman in the hotel, I was somewhat disconcerted to walk into the place when it was full and have every hand pause and every jaw still itself until I found my way to the only empty seat, and then to hear the concerted return to eating, as though on cue. But I was later this morning, and the place was nearly empty.

"How was the old stack?" Half of Marie's mouth grinned as she pushed a plate of hotcakes under my nose and let go of it six inches above the table. I controlled my wince as it crashed to the table, but I couldn't ignore completely the sooty thumb print etched in the grease on the rim. Marie took the stiffly filthy rag she had hanging as usual from her apron pocket and smeared the print around until I at least couldn't see the whorls and ridges any more.

"It was interesting," I said, not bothering to wonder how she knew I'd been there. "Kruper must have been quite a town when the smelter was going full blast."

"Long's I've been here, it's been dyin'," said Marie. "Been here thirty-five years next February and *I* ain't never been up to the stack. I ain't lost nothing up there!"

She laughed soundlessly but gustily. I held my breath until the garlic went by. "But I hear there's some girls that's gone up there and lost—"

"Marie!" Old Charlie bellowed from across the table. "Cut out the chatter and bring me some grub. If Teacher wants to climb *up* that da—dang stack, leave her be. Maybe she likes it!"

"Crazy way to waste time," muttered Marie, teetering out to the kitchen, balancing her gross body on impossibly spindly legs.

"Don't mind her," bellowed Old Charlie. "Only thing she thinks is fun is beer. Why, lots of people like to go look at worthless stuff like that. Take—well—take Lowmanigh here. He was up there only yesterday—"

"Yesterday?" My lifted brows underlined my question as I looked across the table. It was one of the fellows I hadn't noticed yet. His name had probably been thrown at me with the rest of them by Old Charlie on my first night there, but I had lost all the names except Old Charlie and Severeid Swanson, which was the name attached to a wavery, fragile-looking Mexicano with no English at all who seemed to subsist mostly on garlic and vino, and who always blinked four times when I smiled at him.

"Yes." Lowmanigh looked across the table at me, no smile softening his single word. My heart caught as I saw across his cheek the familiar pale quietness of chill-of-soul. I knew the look well. It had been on my own face that morning before I made my truce with the day.

He must have read something in my eyes, because his face shuttered itself quickly into a noncommittal expression and, with a visible effort, he added, "I watched the sunset from there."

"Oh?" My hand went thoughtfully to my nose.

"Sunsets!" Marie was back with the semi-liquid she called coffee. "More crazy stuff. Why waste good time?"

"What do you spend your time on?" Lowmanigh's voice was very soft.

Marie's mind leaped like a startled bird. *Waiting to die!* it cried.

"Beer." she said, half of her face smiling. "Four beers equal one sunset." She dropped the coffeepot on the table and went back to the kitchen, leaving a clear, sharp, almost visible pain behind her as she went.

"You two oughta get together," boomed Old Charlie. "Liking the same things like you do. Low here knows more junk heaps and rubbish dumps than anybody else in the county. He collects ghost towns."

"I like ghost towns," I said to Charlie, trying to fill a vast conversational vacancy. "I have quite a collection of them myself."

"See, Low!" he boomed. "Here's your chance to squire a pretty schoolmarm around. Together, you two oughta be able to collect up a storm!" He choked on his pleasantry and his last gulp of coffee and left the room, whooping loudly into a blue bandana.

We were all alone in the big dining room. The early morning sun skidded across the polished hardwood floor, stumbled against the battered kitchen chairs, careened into the huge ornate mirror above the buffet and sprayed brightly from it over the cracked oilcloth table covering on the enormous oak table.

The silence grew and grew until I put my fork down, afraid to click it against my plate any more. I sat for half a minute, suspended in astonishment, feeling the deep throbbing of a pulse that slowly welled up into almost audibility, questioning *Together? Together? Together?* The beat broke on the sharp edge of a wave of desolation and I stumbled blindly out of the room.

"No!" I breathed as I leaned against the newel post at the bottom of the stairs. "Not involuntarily! Not so early in the day!"

With an effort, I pulled myself together. "Cut out this cotton-pickin' nonsense!" I told myself. "You're crazy enough to drive anybody crazy!"

Resolutely I started up the steps, only to pause, foot suspended, halfway up. "That wasn't my desolation," I cried silently. "It was his!"

"How odd," I thought when I wakened at two o'clock in the morning, remembering the desolation.

"How odd!" I thought when I wakened at three, remembering the pulsing *Together?*

"How very odd," I thought when I wakened at seven and slid heavy-eyed out of bed—having forgotten completely what Lowmanigh looked like, but holding wonderingly in my consciousness a better-than-three-dimensional memory of him.

School kept me busy all the next week, busy enough that the old familiar ache was buried almost deep enough to forget it. The smoothness of the week was unruffled until Friday when the week's restlessness erupted on the playground twice. The first time I had to go out and peel Esperanza off Joseph and pry her fingers out of his hair so he could get his snub nose up out of the gravel. Esperanza had none of her Uncle Severeid's fragility and waveryness as she slapped the dust from her heavy dark braid of hair defiantly.

"He tells me Mexican!" she cried. "So what? I'm Mexican. I'm proud to be Mexican. I hit him some more if he calls me Mexican like a bad word again. I'm proud to be—"

"Of course you're proud," I said, helping her dust herself off. "God made us all. What do different names matter?

"Joseph!" I startled him by swinging around to him suddenly. "Are you a girl?"

"Huh?" He blinked blankly with dusty lashes, then, indignantly: "'Course not! I'm a boy!"

"Joseph's a boy! Joseph's a boy!" I taunted. Then I laughed. "See how silly that sounds? We are what we are. How silly to tease about something like that. Both of you go wash the dirt off." I spatted both of them off toward the schoolhouse and sighed as I watched them go.

The second time the calm was interrupted when the ancient malicious chanting sound of teasing pulled me out to the playground again.

"Lu-cine is crazy! Lu-cine is crazy! Lu-cine is crazy!"

The dancing, taunting group circled Lucine where she stood backed against the one drooping tree that still survived on our playground. Her eyes were flat and shallow

above her gaping mouth, but smoky flames were beginning to flicker in the shallowness and her twelve-year-old muscles were tightening.

"Lucine!" I cried, fear winging my feet. "Lucine!"

I sent me ahead of myself and caught at the ponderous, murderous, massiveness of her mind. Barely I slowed her until I could get to her.

"Stop it!" I shrieked at the children. "Get away, quick!"

My voice pierced through the mob-mind and the group dissolved into frightened individuals. I caught both of Lucine's hands and for a tense moment had them secure. Then she bellowed—a peculiarly animal-like bellow—and, with one flip of her arm, sent me flying.

In a wild flurry, I was swept up almost bodily, it seemed, into the irrational delirium of her anger and bewilderment. I was lost in the mazes of unreasoning thoughts and frightening dead ends and, to this day, I can't remember what happened physically.

When the red tide ebbed and the bleak gray click-off period came, I was hunched against the old tree with Lucine's head on my lap, her mouth lax and wet against my hand, her flooding quiet tears staining my skirt, the length of her body very young and very tired.

Her lips moved.

"Ain't crazy."

"No," I said, smoothing her ruffled hair, wondering at the angry oozing scratch on the back of my hand. "No, Lucine. I know."

"He does, too," muttered Lucine. "He makes it almost straight, but it bends again."

"Oh?" I said soothingly, hunching my shoulder to cover its bareness with my torn blouse sleeve. "Who does?"

Her head tensed under my hand and her withdrawal was as tangible as the throb of a rabbit trying to escape restricting hands. "He said don't tell."

I let the pressure of my hand soothe her and I looked down at her ravaged face. *Me,* I thought. *Me with the outside peeled off. I'm crippled inside in my way as surely as she is in hers, only my crippling passes for normal. I wish*

I could click off sometimes and not dream of living without a limp—sweet impossible dream.

There was a long moist intake of breath and Lucine sat up. She looked at me with her flat, incurious eyes.

"Your face is dirty," she said. "Teachers don't got dirty faces."

"That's right." I got up stiffly, shifting the zipper of my skirt around to the side where it belonged. "I'd better go wash. Here comes Mrs. Kanz."

Across the play field, the classes were lined up to go back inside. The usual scuffling horseplay was going on, but no one even bothered to glance our way. If they only knew, I thought, how close some of them had been to death—

"I been bad," whimpered Lucine. "I got in a fight again."

"Lucine, you bad girl!" cried Mrs. Kanz as soon as she got within earshot. "You've been fighting again. You go right in the office and sit there the rest of the day. Shame on you!"

And Lucine blubbered off toward the school building.

Mrs. Kanz looked me over. "Well," she laughed, apologetically, "I should have warned you about her. Just leave her alone when she gets in a rage. Don't try to stop her."

"But she was going to *kill* someone!" I cried, tasting again the blood lust, feeling the grate of broken bones.

"She's too slow," said Mrs. Kanz. "The kids always keep out of her way."

"But someday—"

Mrs. Kanz shrugged. "If she gets dangerous, she'll have to be put away."

"But why do you let the children tease her?" I protested, feeling a spasmodic gush of anger.

She looked at me sharply. "I don't 'let,' " she said. "Kids are always cruel to anyone who's different. "Haven't you discovered that yet?"

"Yes, I have," I whispered. "Oh, yes, yes!" And huddled myself into myself against the creeping cold of memory.

"It isn't good, but it happens," she said. "You can't make everything right. You have to get calluses sometimes."

I brushed some of the dust off my clothes. "Yes," I

sighed. "Calluses come in handy. But I still think something should be done for her."

"Don't say so out loud," warned Mrs. Kanz. "Her mother has almost beat her own brains out trying to find some way to help her. These things happen in the best of families. There's no help for them."

"Then who is—" I choked on my suppressed words, belatedly remembering Lucine's withdrawal.

"Who is who?" asked Mrs. Kanz over her shoulder as we went back to the schoolhouse.

"Who is going to take care of her all her life?" I asked lamely.

"Well! Talk about borrowing trouble!" Mrs. Kanz laughed. "Just forget about the whole thing. It's all in a day's work. It's a shame your pretty blouse had to get ruined though."

I was thinking of Lucine while I was taking off my torn blouse at home after school. I squinted tightly sideways, trying to glimpse the point of my shoulder to see if it looked as bruised as it felt, when my door was flung open and slammed shut and Lowmanigh was leaning against it, breathing heavily.

"Well!" I slid quickly into my clean shirt and buttoned it up briskly. "I didn't hear you knock. Would you like to go out and try it over again?"

"Did Lucine get hurt?" He pushed his hair back from his damp forehead. "Was it a bad spell? I thought I had it controlled—"

"If you want to talk about Lucine," I said out of my surprise, "I'll be out on the porch in a minute. Do you mind waiting out there? My ears are still burning from Marie's lecture to me on Proper Decorum for a Female in This Here Hotel."

"Oh." He looked around blankly. "Oh, sure—sure."

My door was easing shut before I knew he was gone. I tucked my shirttail in and ran my comb through my hair.

"Lowmanigh and Lucine?" I thought blankly. "What gives? Mrs. Kanz *must* be slipping. This she hasn't men-

tioned." I put the comb down slowly. "Oh. *'He makes it straight but it bends again.'* But how could that be?"

Low was perched on the railing of the sagging balcony porch that ran around two sides of the second story of the hotel. He didn't turn around as I creaked across the floor toward the dusty dilapidated wicker settle and chair that constituted the porch furniture.

"Who are you?" His voice was choked. "What are you doing here?"

Foreboding ran a thin cold finger across the back of my neck. "We were introduced," I said thinly. "I'm Perdita Verist, the new teacher, remember?"

He swung around abruptly. "Stop talking on top," he said. "I'm listening underneath. You know as well as I do that you can't run away— But how *do* you know? Who are you?"

"You stop it!" I cried. "You have no business listening underneath. Who are *you?"*

We stood there stiffly glaring at each other until with a simultaneous sigh we relaxed and sat down on the shaky wickerware. I clasped my hands loosely on my lap and felt the tight hard knot inside me begin to melt and untie until finally I was turning to Low and holding out my hand only to meet his as he reached for mine. Some one of me cried, *My kind? My kind?* but another of me pushed the panic button.

"No," I cried, taking my hand back abruptly and standing up. "No!"

"No." Low's voice was soft and gentle. "It's no betrayal."

I swallowed hard and concentrated on watching Severeid Swanson tacking from one side of the road to the other on his way home to the hotel for his garlic, his two vino bottles doing very little to maintain his balance.

"Lucine," I said. "Lucine and you."

"Was it bad?" His voice was all on top now and my bones stopped throbbing to that other wave length.

"About par for the course according to Mrs. Kanz," I said shallowly. "I just tried to stop a buzz saw."

"Was it bad!" His voice spread clear across the band.

"Stay out!" I cried. "Stay out!"

But he was in there with me and I was Lucine and he was me and we held the red-and-black horror in our naked hands and stared it down. Together we ebbed back through the empty grayness until he was Lucine and I was me and I saw me inside Lucine and blushed for her passionately grateful love of me. Embarrassed, I suddenly found a way to shut him out and blinked at the drafty loneliness.

". . . and stay out!" I cried.

"That's right!" I jumped at Marie's indignant wheeze. "I seen him go in your room without knocking and Shut The Door!" Her voice was capitalized horror. "You done right chasing him out and giving him What For!"

My inner laughter slid the barrier open a crack to meet his amusement.

"Yes, Marie," I said soberly. "You warned me and I remembered."

"Well now, good!" Half of Marie's face smirked, gratified. "I knew you was a good girl. And, Low, I'm plumb ashamed of you. I thought you was a cut above the gawdanged muckers around here and here you go wolfing around in broad daylight!" She tripped off down the creaky hall, her voice floating back up the lovely, curved stairway. "In broad daylight! Supper'll be ready in two jerks of a dead lamb's tail. Git washed."

Low and I laughed together and went to "git washed."

I paused over a double handful of cold water I had scooped up from my huge china washbowl and watched it all trickle back as I glowed warmly with the realization that this was the first time in uncountable ages that I had laughed underneath. I looked long on my wavery reflection in the water. *And not alone,* one of me cried, erupting into astonishment, *not alone!*

The next morning I fled twenty-five miles into Town and stayed at a hotel that had running water—right in the house, and even a private bath! And reveled in the unaccustomed luxury, soaking Kruper out of me—at least all of it

except the glitter bits of loveliness or funniness or niceness that remained on the riffles of my soul after the dust, dirt, inconvenience and ugliness sluiced away.

I was lying there drowsing Sunday afternoon, postponing until the last possible moment the gathering of myself together for the bus trip back to Kruper. Then suddenly, subtly, between one breath and the next, I was back into full wary armor, my attention twanged taut like a tightened wire and I sat up stiffly. Someone was here in the hotel. Had Low come into town? Was he here? I got up and finished dressing hastily. I sat quietly on the edge of the bed, conscious of the deep ebb and flow of Something. Finally I went down to the lobby. I stopped on the last step. Whatever it had been, it was gone. The lobby was just an ordinary lobby. Nowhere among the selfconsciously Ranch Style furnishings was Low. But as I started toward the window to see again the lovely down-drop of the wooded canyon beyond the patio, he walked in.

"Were you here a minute ago?" I asked him without preliminaries.

"No," he said. "Why?"

"I thought—" I broke off. Then gears shifted subtly back to the commonplace and I said, "Well! What are you doing here?"

"Old Charlie said you were in Town and that I might as well pick you up and save you the bus trip back." He smiled faintly. "Marie wasn't quite sure I could be trusted after showing my true colors Friday, but she finally told me you were here at this hotel."

"But I didn't know myself where I was going to stay when I left Kruper!" I cried.

Low grinned engagingly. "My! You *are* new around here, aren't you? Are you ready to go?"

"I hope you're not in a hurry to get back to Kruper." Low shifted gears deftly as we nosed down to Lynx Hill bridge and then abruptly headed on up Lynx Hill at a perilous angle. "I have a stop to make."

I could feel his wary attention on me in spite of his absorption in the road.

"No," I said, sighing inwardly, visualizing long hours waiting while he leaned over the top fence rail exchanging long silences and succinct remarks with some mining acquaintance. "I'm in no hurry, just so I'm at school by nine in the morning."

"Fine." His voice was amused and, embarrassed, I tested again the barrier in my mind. It was still intact. "Matter of fact," he went on, "this will be one for your collection, too?"

"My collection?" I echoed blankly.

"Your ghost town collection. I'm driving over to Machron—or where it used to be. It's up in a little box canyon above Bear Flat. It might be that it—" An intricate spot in the road—one small stone and a tiny pine branch—broke his sentence.

"Might be what?" I asked, deliberately holding onto the words he was trying to drop.

"Might be interesting to explore." Aware amusement curved his mouth slightly.

"I'd like to find an unbroken piece of sun glass," I said. "I have one old tumbler that's to-taste beautiful purple. It's in pretty good condition except that it has a piece out of the rim."

"I'll show you my collection some time," said Low. "You'll drool for sure."

"How come you like ghost towns?" I asked. "What draws you to them? History? Treasure? Morbid curiosity?"

"Treasure—history—morbid curiosity—" He tasted the words slowly and approved each with a nod of his head. "I guess all three. I'm questing."

"Questing?"

"Questing." The tone of his voice ended the conversation. With an effort I detached myself from my completely illogical up-gush of anger at being shut out, and lost myself in the wooded wonder of the hillsides that finally narrowed the road until it was barely wide enough for the car to scrape through.

Finally Low spun the wheel, and, fanning sand out from our tires, came to a stop under a huge black walnut tree.

"Got your walking shoes on? This far and no further for wheels."

Half an hour later we topped out on a small plateau above the rocky pass where our feet had slid and slithered on boulders grooved by high-wheeled ore wagons of half a century ago. The town had spread itself in its busiest days, up the slopes of the hills and along the dry creeks that spread finger-wise up from the small plateau. Concrete steps led abortively up to crumbled foundations and sagging gates stood fenceless before shrub-shattered concrete walks.

There were a few buildings that were nearly intact, just stubbornly resisting dissolution. I had wandered up one faint street and down another before I realized that Low wasn't wandering with me. Knowing the solitary ways of ghost town devotees, I made no effort to locate him, but only wondered idly what he was questing for—carefully refraining from wondering again who he was and why he and I spoke together underneath like we did. But even unspoken, the wonder was burning deep under my superficial scratching among the junk heaps of this vanished town.

I found a white button with only three holes in it and the top of a doll's head with one eye still meltingly blue, and scrabbled, bare-handed, with delight when I thought I'd found a whole sun-purpled sugar bowl . . . only to find it was just a handle and half a curve held in the silt.

I was muttering over a broken fingernail when a sudden soundless cry crushed into me and left me gasping with the unexpected force. I stumbled down the bank and ran clattering down the rock-strewn road. I found Low down by the old town dump, cradling something preciously in the bend of his arm.

He lifted his eyes blindly to me.

"Maybe . . .!" he cried. "This might be some of it. It was never a part of this town's life. Look! Look at the shaping of it! Look at the flow of lines!" His hands drank in the smooth beauty of the metal fragment. "And if this is part of it, it might not be far from here that—" He broke off

abruptly, his thumb stilling on the underside of the object. He turned it over and looked closely. Something died tragically as he looked. "General Electric," he said tonelessly. "Made in the U.S.A." The piece of metal dropped from his stricken hands as he sagged to the ground. His fist pounded on the gravelly silt. "Dead end! Dead end! Dead—"

I caught his hands in mine and brushed the gravel off, pressing Kleenex to the ooze of blood below his little finger.

"What have you lost?" I asked softly.

"Myself," he whispered. "I'm lost and I can't find my way back."

He took no notice of our getting up and my leading him to the fragment of a wall that kept a stunted elderberry from falling into the canyon. We sat down and, for a while, tossed on the ocean of his desolation as I thought dimly, *Too. Lost, too. Both of us.* Then I helped him channel into speech, though I don't know whether it was vocal or not.

"I was so little then," he said. "I was only three, I guess. How long can you live on a three-year-old's memories? Mom told me all they knew, but I could remember more. There was a wreck—a head-on collision the other side of Chuckawalla. My people were killed. The car tried to fly just before they hit. I remember Father lifted it up, trying to clear the other car, and Mother grabbed a handful of sun and platted me out of danger, but the crash came and I could only hear Mother's cry, 'Don't forget! Go back to the Canyon,' and Father's 'Remember! Remember the Home!' and they were gone, even their bodies, in the fire that followed. Their bodies and every identification. Mom and Dad took me in and raised me like their own, but I've got to go back. I've got to go back to the Canyon. I belong there."

"What canyon?" I asked.

"What canyon?" he asked dully. "The Canyon where The People live now—my People. The Canyon where they located after the starship crashed. The starship I've been questing for, praying I might find some little piece of it to point me the way to the Canyon. At least to the part of the state it's in. The Canyon I went to sleep in before I woke

at the crash. The Canyon I can't find because I have no memory of the road there."

"But *you* know! You surely must know! You aren't like the others. You're one of Us. You must be!"

I shrank down into myself.

"I'm nobody," I said. "I'm not one of anybody. My Mom and Dad can tell me my grandparents and great-grandparents and great-great-grandparents, and they used to all the time, trying to figure out why they were burdened with such a child, until I got smart enough to get 'normal.' "

"You think *you're* lost! At least you know what you're lost from. You could get un-lost. But I can't. I haven't *ever* been un-lost!"

"But you can talk underneath." He blinked before my violence. "You showed me Lucine—"

"Yes," I said recklessly. "And look at this!"

A rock up on the hillside suddenly spurted to life. It plowed down the slope, sending gravel flying, and smashed itself to powder against a boulder at the base.

"And I never tried this before, but look!"

I stepped up onto the crumbling wall and walked away from Low, straight on out over the canyon, feeling earth fall away beneath my feet, feeling the soft cradling sweep of the wind, the upness and outness and unrestrainedness. I cried out, lifting my arms, reaching ecstatically for the hem of my dream of freedom. One minute, one minute more and I could slide out of myself and never, never, *never*—

And then—

Low caught me just before I speared myself on the gaunt stubby pines below us in the canyon. He lifted me, struggling and protesting, back up through the fragile emptiness of air, back to the stunted elderberry tree.

"But I did! I did!" I sobbed against him. "I didn't just fall. For a while I really *did!*"

"For a while you really did, Dita," he murmured as to a child. "As good as I could do myself. So you do have some of the Persuasions. Where did you get them if you aren't one of Us?"

My sobs cut off without an after-echo, though my tears

continued. I looked deep into Low's eyes, fighting against the anger that burned at this persistent returning to the wary, hurting place inside me. He looked steadily back until my tears stopped and I finally managed a ghost of a smile. "I don't know what a Persuasion is, but I probably got it the same place *you* got that tilt to your eyebrows."

He reddened and stepped back from me.

"We'd better start back. It's not smart to get night-caught on these back roads."

We started back along the trail.

"Of course you'll fill in the vacancies for me as we go back," I said, barely catching myself as my feet slithered on a slick hump of granite. I felt his immediate protest. "You've got to," I said, pausing to shake the gravel out of one shoe. "You can't expect me to ignore today, especially since I've found someone as crazy as I am."

"You won't believe—" He dodged a huge buckbrush that crowded the narrow road.

"I've had to believe things about myself all these years that I couldn't believe," I said. "And it's easier to believe things about other people."

So we drove through the magic of an early twilight that deepened into a star-brilliant night and I watched the flick of the stars through the overarching trees along the road and listened to Low's story. He stripped it down to its bare bones, but underneath, the bones burned like fire in the telling.

"We came from some other world," he said, wistful pride at belonging showing in his *we*. "The Home was destroyed. We looked for a refuge and found this earth. Our ships crashed or burned before they could land. But some of us escaped in life ships. My grandparents were with the original Group that gathered at the Canyon. But we were all there, too, because our memories are joined continuously back into the Bright Beginning. That's why I know about my People. Only I can't remember where the Canyon is, because I was asleep the one time we left it, and Mother and Father couldn't tell me in that split second before the crash.

"I've got to find the Canyon again. I can't go on living forever limping." He didn't notice my start at his echoing of that thought of mine when I was with Lucine. "I can't achieve any stature at all until I am with my People.

"I don't even know the name of the Canyon, but I do remember that our ship crashed in the hills and I'm always hoping that someday I'll find some evidence of it in one of these old ghost towns. It was before the turn of the century that we came, and somewhere, somewhere, there must be some evidence of the ship still in existence."

His was a well-grooved story too, worn into commonplace by repetition as mine had been—lonely, aching repetition to himself. I wondered for a moment, in the face of his unhappiness, why I should feel a stirring of pleased comfort, until I realized that it was because between us there was no need for murmurs of sympathy or trite little social sayings or even explanations. The surface words were the least of our communication.

"You aren't surprised?" He sounded almost disappointed.

"That you are an out-worlder?" I asked. I smiled. "Well, I never met one before, and I find it interesting. I only wish I could have dreamed up a fantasy like that to explain me to me. It's quite a switch on the old 'I *must* be adopted, because I'm so different.' But—"

I stiffened as Low's surge of rage caught me offguard.

"Fantasy! I am adopted. I remember! I thought you'd know. I thought since you surely must be one of Us that you'd be—"

"I'm not one of you!" I flared. "Whatever 'you' are. I'm of earth—so much so that it's a wonder the dust doesn't puff out of my mouth when I speak—but at least I don't try to kid myself that I'm normal by *any* standard, earth-type or otherwise."

For a hostile minute we were braced stonily against one another. My teeth ached as the muscles on my jaws knotted. Then Low sighed and, reaching out a finger, he traced the line of my face from brow to chin to brow again.

"Think your way," he said. "You've probably been

through enough bad times to make anyone want to forget. Maybe someday you'll remember that you *are* one of Us and then—"

"Maybe, maybe, maybe!" I said through my weary shaken breath. "But I can't any more. It's too much for one day." I slammed all the doors I could reach and shoved my everyday self up to the front. As we started off, I reopened one door far enough to ask, "What's this between you and Lucine? Are you a friend of the family or something that you're working with her?"

"I know the family casually," said Low. "They don't know about Lucine and me. She caught my imagination once last year when I was passing the school. The kids were pestering her. I never felt such heart-broken bewilderment in all my life. Poor little earth kid. She's a three-year-old in a twelve-year-old body—"

"Four-year-old," I murmured. "Or almost five. She's learning a little."

"Four or five," said Low. "It must be awful to be trapped in a body—"

"Yes," I sighed. "To be shut in the prison of yourself."

Tangibly I felt again the warm running of his finger around my face, softly, comfortingly, though he made no move toward me. I turned away from him in the dusk to hide the sudden tears that came.

It was late when we got home. There were still lights in the bars and a house or two when we pulled into Kruper, but the hotel was dark and, in the pause after the car stopped, I could hear the faint creaking of the sagging front gate as it swung in the wind. We got out of the car quietly, whispering under the spell of the silence, and tiptoed up to the gate. As usual, the scraggly rosebush that drooped from the fence snagged my hair as I went through and, as Low helped free me, we got started giggling. I suppose neither of us had felt young and foolish for so long, and we had both unburdened ourselves of bitter tensions, and found tacit approval of us as the world refused to accept us and as we most wanted to be, and, having at least

glimpsed a kindred soul, well, we suddenly bubbled over. We stood beneath the upstairs porch and tried to muffle our giggles.

"People *will* think we're crazy if they hear us carrying on like this," I choked.

"I've got news for you," said Low, close to my ear. "We *are* crazy. And I dare you to prove it."

"Hoh! As though it needed any proof!"

"I dare you." His laughter tickled my cheek.

"How?" I breathed defiantly.

"Let's not go up the stairs," he hissed. "Let's lift through the air. Why waste the energy when we can—"

He held out his hand to me. Suddenly sober, I took it and we stepped back to the gate and stood hand in hand, looking up.

"Ready?" he whispered, and I felt him tug me upward.

I lifted into the air after him, holding all my possible fear clenched in my other hand.

And the rosebush reached up and snagged my hair.

"Wait!" I whispered, laughter trembling again. "I'm caught."

"Earthbound!" he chuckled as he tugged at the clinging strands.

"Smile when you say that, podner," I returned, feeling my heart melt with pleasure that I had arrived at a point where I could joke about such a bitterness—and trying to ignore the fact that my feet were treading nothing but air. My hair freed, he lifted me up to him. I think our lips only brushed, but we overshot the porch and had to come back down to land on it. Low steadied me as we stepped across the railing.

"We did it," he whispered.

"Yes," I breathed. "We did."

Then we both froze. Someone was coming into the yard. Someone who stumbled and wavered and smashed glassily against the gatepost.

"Ay! Ay! Madre mía!" Severeid Swanson fell to his knees beside the smashed bottle. *"Ay, virgen purísima!"*

"Did he see us?" I whispered on an indrawn breath.

"I doubt it." His words were warm along my cheek. "He hasn't seen anything outside himself for years."

"Watch out for the chair." We groped through the darkness into the upper hall. A feeble fifteen-watt bulb glimmered on the steady drip of water splashing down into the sagging sink from the worn faucets that blinked yellow through the worn chrome. By virtue of these two leaky outlets, we had bathing facilities on the second floor.

Our good nights were subvocal and quick.

I was in my nightgown and robe, sitting on the edge of my bed, brushing my hair when I heard a shuffle and a mutter outside my door. I checked the latch to be sure it was fastened and brushed on. There was a thud and a muffled rapping and my doorknob turned.

"Teesher!" It was a cautious voice. "Teesher!"

Who on earth! I thought and went to the door. "Yes?" I leaned against the peeling panel.

"Lat—me—een." The words were laborious and spaced.

"What do you want?"

"To talk weeth you, Teesher."

Filled with astonished wonder, I opened the door. There was Severeid Swanson swaying in the hall! But they had told me he had no English. . . . He leaned precariously forward, his face glowing in the light, years younger than I'd ever seen him.

"My bottle is broken. You have done eet. It is not good to fly without the wings. *Los ángeles santos, sí, pero* not the lovers to fly to kiss. It makes me drop my bottle. On the ground is spilled all the dreams."

He swayed backward and wiped the earnest sweat from his forehead. "It is not good. I tell you this because you have light in the face. You are good to my Esperanza. You have dreams that are not in the bottle. You have smiles and not laughing for the lost ones. But you must not fly. It is not good. My bottle is broken."

"I'm sorry," I said through my astonishment. "I'll buy you another."

"No," said Severeid. "Last time they tell me this too, but I cannot drink it because of the wondering. Last time, like

birds, all, all in the sky—over the hills—the kind ones. The ones who also have no laughter for the lost."

"Last time?" I grabbed his swaying arm and pulled him into the room, shutting the door, excitement tingling along the insides of my elbows.

"Where? When? Who was flying?"

He blinked owlishly at me, the tip of his tongue moistening his dry lips.

"It is not good to fly without wings," he repeated.

"Yes, yes, I know," I said. "Where did you see the others fly without wings? I must find them—I must!"

"Like birds," he said, swaying. "Over the hills."

"Please," I said, groping wildly for what little Spanish I possessed.

"I work there a long time. I don't see them no more. I drink some more. Chinee Joe give me new bottle."

"Por favor, señor," I cried, *"dónde—dónde . . . ?"*

All the light went out of his face. His mouth slackened. Dead eyes peered from under lowered lids.

"No comprendo." He looked around, dazed. *"Buenas noches, señorita."* He backed out of the door and closed it softly behind him.

"But—!" I cried to the door. "But please!"

Then I huddled on my bed and hugged this incredible piece of information to me.

Others! Flying over the hills! All, all in the sky! Maybe, oh maybe one of them was at the hotel in Town. Maybe they're not too far away. If only we knew . . . !

Then I felt the sudden yawning of a terrifying chasm. If it were true, if Severeid had really seen others lifting like birds over the hills, then Low was right—there *were* others! There *must* be a Canyon, a starship, a Home. But where did that leave me? I shrank away from the possibilities. I turned and buried my face in my pillow. But Mother and Dad! And Granpa Josh and Gramma Malvina and Great-granpa Benedaly and—I clutched at the memories of all the family stories I'd heard. Crossing the ocean in steerage. Starting a new land. Why, my ancestors were as solid as a rock wall back of me, as far back as—as *Adam,* almost. I

leaned against the certainty and cried out to feel the stone wall waver and become a curtain stirring in the winds of doubt.

"No, *no!*" I sobbed, and for the first time in my life I cried for my mother, feeling as bereft as though she had died.

Then I suddenly sat up in bed. "It might not be so!" I cried. "He's just a drunken wino. No telling what he might conjure out of his bottle. It might not be so!"

But it might, one of me whispered maliciously. *It might!*

The days that followed were mostly uneventful. I had topped out onto a placid plateau in my battle with myself, perhaps because I had something new to occupy my mind or perhaps it was just a slack place since any emotion has to rest sometime.

However, the wonder of finding Low was slow to ebb. I could sense his *good morning* with my first step down the stairs each day, and occasionally roused in the darkness to his silent *good night.*

Once after supper, Marie planted herself solidly in front of me as I rose to leave. Silently she pointed at my plate where I had apparently made mud pies of my food. I flushed.

"No good?" she asked, crossing her wrists over the grossness of her stomach and teetering perilously backward.

"It's fine, Marie," I managed. "I'm just not hungry." And I escaped through the garlicky cloud of her indignant exhalation and the underneath amusement of Low. How could I tell Marie that Low had been showing me a double rainbow he had seen that afternoon and that I had been so engrossed in the taste of the colors and the miracle of being able to receive them from him that I had forgotten to eat?

Low and I spent much time together, getting acquainted, but during most of it we were ostensibly sitting with the others on the porch in the twilight, listening to the old mining and cattle stories that were the well-worn coins that slipped from hand to hand wherever the citizens of Kruper gathered together. A good story never wore out; so after a

while it was an easy matter to follow the familiar repetitions and still be alone together in the group.

Don't you think you need a little more practice in lifting? Low's question was a thin clarity behind the rumble of voices.

Lifting? I stirred in my chair, not quite as adept as he at carrying two threads simultaneously.

Flying, he said with exaggerated patience. *Like you did over the canyon and up to the porch.*

Oh. Ecstasy and terror puddled together inside me. Then I felt myself relaxing in the strong warmth of Low's arms instead of fighting them as I had when he had caught me over the canyon.

Oh, I don't know, I answered, quickly shutting him out as much as I could. *I think I can do it OK.*

A little more practice won't hurt. There was laughter in his reply. *But you'd better wait until I'm around—just in case.*

Oh? I asked. *Look.* I lifted in the darkness until I sat gently about six inches above my chair. *So!*

Something prodded me gently and I started to drift across the porch. Hastily I dropped back, just barely landing on the forward edge of my chair, my heels thudding audibly on the floor. The current story broke off in mid-episode and everyone looked at me.

"Mosquitoes," I improvised. "I'm allergic to them."

That's not fair! I sputtered to Low. *You cheat!*

All's fair—he answered, then shut hastily as he remembered the rest of the quotation.

Hmmm! I thought. *Hmmm! And this is war?* And felt pleased all out of proportion the rest of the evening.

Then there was the Saturday when the sky was so tangibly blue and the clouds so puffily light that I just couldn't stay indoors scrubbing clothes and sewing on buttons and trying to decide whether to repair my nail polish or take it all off and start from scratch again. I scrambled into my saddle shoes and denim skirt, turned back the sleeves of my plaid shirt, tied the sleeves of my sweater around my waist and headed for the hills. This was the day to follow

the town water pipe up to the spring that fed it and see if all the gruesome stories I'd heard about its condition were true.

I paused, panting, atop the last steep ledge above the town and looked back at the tumbled group of weathered houses that made up this side of Kruper. Beyond the railroad track there was enough flat land to make room for the four new houses that had been built when the Golden Turkey mine reopened. They sat in a neat row, bright as toy blocks against the tawny red of the hillside.

I brushed my hair back from my hot forehead and turned my back on Kruper. Scattered at haphazard intervals up among the hills I could see sections of the town water pipe stilted up sometimes on timbers to cross from one rise to another, in other places following the jagged contour of the slopes. A few minutes and sections later, I was amusing myself trying to stop with my hands the spray of water from one of the numerous holes in one section of the rusty old pipe and counting the hand-whittled wooden plugs that stopped up others. It looked a miracle that any water at all got down to town. I was so engrossed that I unconsciously put my hand up to my face when a warm finger began to trace—

"Low!" I whirled on him. "What are you doing up here?"

He slid down from a boulder above the line.

"Johnny's feeling porely today," he said. "He wanted me to check to see if any of the plugs had fallen out."

We both laughed as we looked up-line and traced the pipe by the white gush of spray and the vigorous greenness that utilized the spilling water.

"I'll bet he has at least a thousand plugs hammered in," said Low.

"Why on earth doesn't he get some new pipe?" I asked.

"Family heirlooms," said Low, whittling vigorously. "It's only because he's feeling so porely that he even entertains the thought of letting me plug his line. All the rest of the plugs are family affairs. About three generations' worth."

He hammered the plug into the largest of the holes and stepped back, reaming the water from his face where it had squirted him.

"Come on up. I'll show you the spring."

We sat in the damp coolness of the thicket of trees that screened the cave where the spring churned and gurgled, blue and white and pale green before it lost itself in the battered old pipes. We were sitting on opposite sides of the pipe, resting ourselves in the consciousness of each other, when all at once, for a precious minute, we flowed together like coalescing streams of water, so completely one that the following rebound to separateness came as a shock. Such sweetness without even touching one another . . . ?

Anyway, we both turned hastily away from this frightening new emotion and, finding no words handy, Low brought me down a flower from the ledge above us, nipping a drooping leaf off it as it passed him.

"Thanks," I said, smelling of it and sneezing vigorously. "I wish I could do that."

"Well, you can!" said Low. "You lifted that rock at Machron and you can lift yourself."

"Yes, myself." I shivered at the recollection. "But not the rock. I could only move it."

"Try that one over there." Low lobbed a pebble toward a small slaty blue rock lying on the damp sand. Obligingly it plowed a small furrow up to Low's feet.

Startled, he pulled it back.

"*Lift* it," he said.

"I can't," I replied. "I told you I can't lift anything clear of the ground. I can just move it." I slid one of Low's feet to one side.

"But you *have* to be able to lift, Dita," he said. "You're one of—"

"I am not!" I threw the flower I'd been twiddling with down violently into the spring and saw it sucked into the pipe. Someone downstream was going to be surprised at the sink or else one of the thousands of fountains between here and town was going to blossom.

"But all you have to do is—is—" Low groped for words.

"Yes?" I leaned forward eagerly. Maybe I could learn . . .

"Well, just *lift!*"

"Twirtle!" I said, disappointed. "Anyway, can you do

this? Look." I reached in my pocket and pulled out two bobbie pins and three fingernails full of pocket fluff. "Have you got a dime?"

"Sure." He fished it out and brought it to me. I handed it back. "Glow it," I said.

"Glow it? You mean blow it?" He turned it over in his hand.

"No, *glow* it. Go on. It's easy. All you have to do is glow it. Any metal will do but silver works better."

"Never heard of it," he said, frowning suspiciously.

"You must have," I cried, "if you are part of Me. If we're linked back to the Bright Beginning, you must remember!"

Low turned the dime slowly. "It's a joke to you," he said. "Something to laugh at."

"A joke!" I moved closer to him and looked up into his face. "Haven't I been looking for an answer long enough? Wouldn't I belong if I could? Would my heart break and bleed every time I have to say *no* if I could mend it by saying *yes?* If I could only hold out my hands and say *I belong . . .*" I turned away from him, blinking. "Here," I sniffed. "Give me the dime."

I took it from his quiet fingers and, sitting down again, spun it quickly in the palm of my hand. It caught light immediately, glowing stronger and stronger until I slitted my eyes to look at it and finally had to close my fingers around its cool pulsing.

"Here." I held my hand out to Low, my bones shining pinkly through. "It's glowed."

"Light," he breathed, taking the dime wonderingly. "Cold light! How long can you hold it?"

"I don't have to hold it," I said. "It'll glow until I damp it."

"How long?"

"How long does it take metal to turn to dust?" I shrugged. "I don't know. Do your People know how to glow?"

"No." His eyes stilled on my face. "I have no memory of it."

"So I *don't* belong." I tried to say it lightly above the

wrenching of my heart. "It almost looks like we're simultaneous, but we aren't. You came one way. I came t'other." *Not even to him!* I cried inside. *I can't even belong to him!* I drew a deep breath and put emotion to one side.

"Look," I said. "Neither of us fits a pattern. You deviate and I deviate and you're satisfied with your explanation of why you are what you are. I haven't found my explanation yet. Can't we let it go at that?"

Low grabbed my shoulders, the dime arching down into the spring. He shook me with a tight controlled shaking that was hardly larger than a trembling of his tensed hands. "I tell you, Dita, I'm not making up stories! I belong and you belong and all your denying won't change it. We are the same—"

We stared stubbornly at each other for a long moment, then the tenseness ran out of his fingers and he let them slide down my arms to my hands. We turned away from the spring and started silently, hand in hand, down the trail. I looked back and saw the glow of the dime and damped it.

No, I said to myself. *It isn't so. I'd know it if it were true. We* aren't *the same. But what am I then? What am I?* And I stumbled a little wearily on the narrow path.

During this time everything at school was placid and Pete had finally decided that *two* could have a name *and* a picture and learned his number words to ten in one day.

And Lucine—symbol to Low and me of our own imprisonment—with our help was blossoming under the delight of reading her second pre-primer.

But I remember the last quiet day. I sat at my desk checking the tenth letter I'd received in answer to my inquiries concerning a possible Chinee Joe and sadly chalking up another *no.* So far I had been able to conceal from Low the amazing episode of Severeid Swanson. I wanted to give him back his Canyon myself, if it existed. I wanted it to be my gift to him—and to my own shaken self. Most of all I wanted to be able to know at least one thing for sure, even if that one thing proved me wrong or even

parted Low and me. Just one solid surety in the whole business would be a comfort and a starting place for us truly to get together.

I wished frequently that I could take hold of Severeid bodily and shake more information out of him, but he had disappeared—walked off from his job without even drawing his last check. No one knew where he had gone. The last Kruper had seen of him was early the next morning after he had spoken with me. He had been standing, slack-kneed and wavering, a bottle in each hand, at the crossroads—not even bothering to thumb a ride, just waiting blankly for someone to stop for him—and apparently someone had.

I asked Esperanza about him and she twisted her thick shining braid of hair around her hand twice and tugged at it.

"He's a wino," she said dispassionately. "They ain't smart. Maybe he got losted." Her eyes brightened. "Last year he got losted and the cops picked him up in El Paso. He brang me some perfume when he came back. Maybe he went to El Paso again. It was pretty perfume." She started down the stairs. "He'll be back," she called. "Unless he's dead in a ditch somewhere."

I shook my head and smiled ruefully. And she'd fight like a wildcat if anyone else talked about Severeid like that. . . .

I sighed at the recollection and went back to my disappointing letter. Suddenly I frowned and moved uneasily in my chair. What was wrong? I felt acutely uncomfortable. Quickly I checked me over physically. Then my eyes scanned the room. Petie was being jet planes while he drew pictures of them and the soft *skoosh! skoosh! skoosh!* of the takeoffs was about the only on-top sound in the room. I checked underneath and the placid droning hum was as usual. I had gone back on top when I suddenly dived back again. There was a sharp, stinging buzz like an angry bee—a malicious, angry buzz! Who was it? I met Lucine's smoldering eyes and I knew.

I almost gasped under the sudden flood of hate-filled anger. And when I tried to reach her, down under, I was

rebuffed—not knowingly, but as though there had never been a contact between us. I wiped my trembling hands against my skirt, trying to clean them of what I had read.

The recess bell came so shatteringly that I jumped convulsively and shared the children's laughter over it. As soon as I could, I hurried to Mrs. Kanz's room.

"Lucine's going to have another spell," I said without preface.

"What makes you think so?" Mrs. Kanz marked 46½% on the top of a literature paper.

"I don't think so, I know so," I said. "And this time she won't be too slow. Someone will get hurt if we don't do something."

Mrs. Kanz laid down her pencil and folded her arms on the desk top, her lips tightening. "You've been brooding too much over Lucine," she said, none too pleased. "If you're getting to the point where you think you can predict her behavior, you're pretty far gone. People are going to be talking about your being queer pretty soon. Why don't you just forget about her and concentrate on—on —well, on Low. He's more fun than she is anyway, I'll bet."

"He'd know," I cried. "He'd tell you too! He knows more about Lucine than anyone thinks."

"So I've heard." There was a nasty purr to her voice that I didn't know it could have. "They've been seen together out in the hills. Well, it's only her mind that's retarded. Remember, she's over twelve now, and some men—"

I slapped the flat of my hand down on the desk top with a sharp crack. I could feel my eyes blazing and she dodged back as though from a blow. She pressed the back of one hand defensively against her cheek.

"I—" she gasped. "I was only kidding!"

I breathed deeply to hold my rage down. "*Are* you going to do anything about Lucine?" My voice was very soft.

"What can I do?" she asked. "What is there to do?"

"Skip it," I said bitterly. "Just skip it."

I tried all afternoon to reach Lucine, but she sat lumpish and unheeding—on top. Underneath violence and hatred were seething like lava and once, without apparent

provocation, she leaned across the aisle and pinched Petie's arm until he cried.

She was sitting in isolation with her face to the wall when the last bell rang.

"You may go now, Lucine," I said to the sullen stranger who had replaced the child I knew. I put my hand on her shoulder. She slipped out of my touch with one fluid, *quick* motion. I caught a glimpse of her profile as she left. The jaw muscles were knotted and the cords in her neck were tensed.

I hurried home and waited, almost wild from worry, for Low to get off shift. I paced the worn oriental rug in the living room, circling the potbellied cast-iron heater. I peered a dozen times through the lace curtains, squinting through the dirty, cracked window panes. I beat my fist softly into my palm as I paced, and I felt physical pain when the phone on the wall suddenly shrilled.

I snatched down the receiver.

"Yes!" I cried. "Hello!"

"Marie. I want Marie." The voice was far and crackling. "You tell Marie I gotta talk to her."

I called Marie and left her to her conversation and went out on the porch. Back and forth, back and forth I paced, Marie's voice swelling and fading as I passed.

". . . well, I expected it a long time ago. A crazy girl like that—"

"Lucine!" I shouted and rushed indoors. "What happened?"

"Lucine?" Marie frowned from the telephone. "What's Lucine gotta do with it? Marson's daughter ran off last night with the hoistman at the Golden Turkey. He's fifty if he's a day and she's just turned sixteen." She turned back to the phone. "Yah, yah, yah?" Her eyes gleamed avidly.

I just got back to the door in time to see the car stop at the gate. I grabbed my coat and was down the steps as the car door swung open.

"Lucine?" I gasped.

"Yes." The Sheriff opened the back door for me, his

deputy goggle-eyed with the swiftness of events. "Where is she?"

"I don't know," I said. "What happened?"

"She got mad on the way home." The car spurted away from the hotel. "She picked Petie up by the heels and bashed him against a boulder. She chased the other kids away with rocks and went back and started to work on Petie. He's still alive, but Doc lost count of the stitches and they're transfusing like crazy. Miss Kanz says you likely know where she is."

"No," I shut my eyes and swallowed. "But we'll find her. Get Low first."

The shift bus was just pulling in at the service station. Low was out of it and into the Sheriff's car before a word could be spoken. I saw my anxiety mirrored on his face before we clasped hands.

For the next two hours, we drove the roads around Kruper. We went to all the places we thought Lucine might have run to, but nowhere, nowhere in all the scrub-covered foothills or the pine-pointed mountains could I sense Lucine.

"We'll take one more sweep—through Poland Canyon. Then if it's no dice, we'll hafta get a posse and Claude's hounds." The Sheriff gunned for the steep rise at the canyon entrance. "Beats me how a kid could get so gone so fast."

"You haven't seen her really run," said Low. "She never can when she's around other people. She's just a little lower than a plane and she can run me into the ground any time. She just shifts her breathing into overdrive and takes off. She could beat Claude's hounds without trying, if it ever came to a run-down."

"Stop!" I grabbed the back of the seat. "Stop the car!"

The car had brakes. We untangled ourselves and got out.

"Over there," I said. "She's over there somewhere." We stared at the brush-matted hillside across the canyon.

"Gaw-dang!" moaned the Sheriff. "Not in Cleo II! That there hell-hole's been nothing but a jinx since they sunk the first shaft. Water and gas and cave-in sand, every gaw-

dang thing in the calendar. I've lugged my share of dead men out of there—me and my dad before me. What makes you think she's in there, Teacher? Yuh see something?"

"I know she's somewhere over there," I evaded. "Maybe not in the mine but she's there."

"Let's get looking," sighed the Sheriff. "I'd give a pretty to know how you saw her clear from the other side of the car." He edged out of the car and lifted a shotgun after him.

"A gun?" I gasped. "For Lucine?"

"You didn't see Petie, did you?" he said. "I did. I go animal hunting with guns."

"No!" I cried. "She'll come for us."

"Might be," he spat reflectively. "Or maybe not."

We crossed the road and plunged into the canyon before the climb.

"Are you sure, Dita?" whispered Low. "I don't reach her at all. Only some predator—"

"That's Lucine," I choked. "That's Lucine."

I felt Low's recoil. "That . . . that *animal?*"

"That animal. Did we do it? Maybe we should have left her alone."

"I don't know." I ached with his distress. "God help me, I don't know."

She *was* in Cleo II.

Over our tense silence, we could hear the rattling of rocks inside as she moved. I was almost physically sick.

"Lucine," I called into the darkness of the drift. "Lucine, come on out. It's time to go home."

A fist-sized rock sent me reeling and I nursed my bruised shoulder with my hand.

"Lucine!" Low's voice was commanding and spread all over the band. An inarticulate snarl answered him.

"Well?" The Sheriff looked at us.

"She's completely crazy," said Low. "We can't reach her at all."

"Gaw-dang," said the Sheriff. "How we gonna get her out?"

No one had an answer and we stood around awkwardly

while the late afternoon sun hummed against our backs and puddled softly in the mine entrance. There was a sudden flurry of rocks that rattled all about us, thudding on the bare ground and crackling in the brush—then a low guttural wail that hurt my bones and whitened the Sheriff's face.

"I'm gonna shoot," he said thinly. "I'm gonna shoot it daid." He hefted the shotgun and shuffled his feet.

"No!" I cried. "A child! A little girl!"

His eyes turned to me and his mouth twisted.

"That?" he asked and spat.

His deputy tugged at his sleeve and took him to one side and muttered rapidly. I looked uneasily at Low. He was groping for Lucine, his eyes closed, his face tense.

The two men set about gathering up a supply of small-sized rocks. They stacked them ready to hand near the mine entrance. Then, taking simultaneous deep breaths, they started a steady bombardment into the drift. For a while there was an answering shower from the mine, then an outraged squall that faded as Lucine retreated farther into the darkness.

"Gotter!" The two men redoubled their efforts, stepping closer to the entrance, and Low's hand on my arm stopped me from following.

"There's a drop-off in there," he said. "They're trying to drive her into it. I dropped a rock in it once and never heard it land."

"It's murder!" I cried, jerking away, grabbing the Sheriff's arm. "Stop it!"

"You get her any other way," grunted the Sheriff, his muscles rippling under my restraining hand. "Better her dead than Petie and all the rest of us. She's fixing to kill."

"I'll get her," I cried, dropping to my knees and hiding my face in my hands. "I'll get her. Give me a minute." I concentrated as I had never concentrated before. I sent myself stumbling out of me into the darkness of the mine, into a heavier, deeper, uglier darkness and I struggled with the darkness in Lucine until I felt it surging uncontrollably into my own mind. Stubbornly I persisted, trying

to flick a fingernail of reason under the edge of this angry unreason to let a little sanity in. Low reached me just before the flood engulfed me. He reached me and held me until I could shudder myself back from hell.

Suddenly there was a rumble from inside the hill—a cracking crash and a yellow billow of dust from the entrance.

There was an animal howl that cut off sharply and then a scream of pure pain and terror—a child's terrified cry, a horrified awakening in the darkness, a cry for help—for light!

"It's Lucine!" I half sobbed. "She's back. What happened?"

"Cave-in!" said the Sheriff, his jaws working. "Shoring gone—rotted out years ago. Gotter for sure now, I guess."

"But it's Lucine again," said Low. "We've got to get her out."

"If that cave-in's where I think it is," said the Sheriff, "she's a goner. There's a stretch in there that's just silt. Finest, slitheriest stuff you ever felt. Comes like a flood of water. Drowns a feller in dirt." His lips tightened. "First dead man I ever saw, I dragged out of a silt-down in there. I was sixteen, I guess—skinniest feller in the batch, so they sent me in after they located the body and shored up a makeshift drift. Dragged him out feet first. Stubborn feller—sucked out of that silt like outa mud. Drownded in dirt. We'll sweat getting this body out, too.

"Well," he hitched up his levis. "Might as well git on back to town and git a crew out here."

"She's not dead," said Low. "She's still breathing. She's caught under something and can't get loose."

The Sheriff looked at him through narrowed eyes. "I've heard you're kinda tetched," he said. "Sounds to me like you're having a spell yourself, talking like that.

"Wanta go back to town, ma'am?" His voice gentled. "Nothing you can do around here anymore. She's a goner."

"No, she isn't," I said. "She's still alive. I can hear her."

"Gaw-dang!" muttered the Sheriff. "Two of them. Well, all right then. You two are deppytized to watch the mine so

it don't run away while I'm gone." Grinning sourly at his own wit, he left, taking the deputy with him.

We listened to the echoes of the engine until they died away in the quiet, quiet upsurging of the forested hills all around us. We heard the small wind in the brush and the far cry of some flying bird. We heard the pounding of our own pulses and the frightened bewilderedness that was Lucine. And we heard the pain that began to beat its brassy hammers through her body, and the sharp piercing stab of sheer agony screaming up to the bright twanging climax that snapped down into unconsciousness. And then both of us were groping in the darkness of the tunnel. I stumbled and fell and felt a heavy flowing something spread across my lap, weighting me down. Low was floundering ahead of me. "Go back," he warned. "Go back or we'll both be caught."

"No!" I cried, trying to scramble forward. "I can't leave you!"

"Go back," he said. "I'll find her and hold her until the men come. You've got to help me hold the silt back."

"I can't," I whimpered. "I don't know how!" I scooped at the heaviness in my lap.

"Yes, you do," he said down under. "Just look and see."

I scrambled back the interminable distance I hadn't even been conscious of when going in, and crouched just outside the mine entrance, my dirty hands pressed to my wet face. I looked deep, deep inside me—down into a depth that suddenly became a height. I lifted me, mind and soul, up, up, until I found a new Persuasion, a new ability, and slowly, slowly, stemmed the creeping dry tide inside the mine—slowly began to part the black flood that had overswept Lucine so that only the arch of her arm kept her mouth and nose free of the invading silt.

Low burrowed his way into the mass, straining to reach Lucine before all the air was gone.

We were together, working such a work that we weren't two people any more. We were one, but that one was a multitude, all bound together in this tremendous outpouring of effort. Since we were each other, we had no need for words

as we worked in toward Lucine. We found a bent knee, a tattered hem, a twisted ankle—and the splintery edge of timber that pinned her down. I held the silt back while Low burrowed to find her head. Carefully, we cleared a larger space for her face. Carefully we worked to free her body. Low finally held her limp shoulders in his arms—*and was gone! Gone completely, between one breath and another.*

"Low!" I screamed, scrambling to my feet at the tunnel's mouth, but the sound of my cry was drowned in the smashing crash that shook the ground. I watched horrified as the hillside dimpled and subsided and sank into silence after a handful of pebbles, almost hidden in a puff of dust, rattled to rest at my feet.

I screamed again and the sky spun in a dizzy spiral rimmed with sharp pine tops and suddenly unaccountably Severeid Swanson was there joining the treetops and the sky and spinning with them as he said, "Teesher! Teesher!"

The world steadied as though a hand had been put upon it. I scrambled to my feet.

"Severeid!" I cried. "They're in there! Help me get them out! Help me!"

"Teesher," Severeid shrugged helplessly, *"no comprendo.* I bring a flying one. I go get him. You say you gotta find. I find him. What you do out here with tears?"

Before I was conscious of another person standing beside Severeid, I felt another person in my mind. Before I could bring my gasping into articulation, the words were taken from me. Before I could move, I heard the rending of rocks, and turning, I sank to my knees and watched, in terrified wonder, the whole of the hillside lift itself and arch away like a furrow of turned earth before a plowshare. I saw silt rise like a yellow-red fountain above the furrow. I saw Low and Lucine rise with the silt. I saw the hillside flow back upon itself. I saw Low and Lucine lowered to the ground before me and saw all the light fading as I fell forward, my finger tips grazing the curve of Low's cheek just before I drank deeply of blackness.

The sun was all. Through the thin blanket I could feel the cushioning of the fine sand under my cheek. I could hear the cold blowing overhead through the sighing trees, but where we were, the warmth of the late fall sun was gathered between granite palms and poured down into our tiny pocket against the mountain. Without moving I could reach Low and Valancy and Jemmy. Without opening my eye, I could see them around me, strengthening me. The moment grew too dear to hold. I rolled over and sat up.

"Tell me again," I said. "How did Severeid ever find you the second time?"

I didn't mind the indulgent smile Valancy and Jemmy exchanged. I didn't mind feeling like a child—if they were the measure of adults.

"The first time he ever saw us," said Jemmy, "was when he chose to sleep off his vino around a boulder from where we chose to picnic. He was so drunk, or so childlike, or both, that he wasn't amazed or outraged by our lifting and tumbling all over the sky. He was intrigued and delighted. He thought he had died and by-passed purgatory and we had to restrain him to keep him from taking off after us. Of course, before we let him go we blocked his memory of us so he couldn't talk of us to anyone except others of The People." He smiled at me. "That's why we got real shook when we found that he'd told you and that you're not of The People. At least not of The Home. You're the third blow to our provincialism. Peter and Bethie were the first, but at least they were half of The People; but you—" He waggled his head mournfully. "You just didn't track."

"Yes," I shivered, remembering the long years I hadn't tracked with anyone. "I just didn't track. . . ." And I relaxed under the triple reassurance that flooded in from Low and Jemmy and his wife Valancy.

"Well, when you told Severeid you wanted to find us, he stumbled as straight as a wino string back to our old picnic grounds. He must have huddled over that tiny fire of his for several days before we found him—parched with thirst and far past his last memory of food." Jemmy drew a long breath.

"Well, when we found out that Severeid knew of what we thought were two more of Us—we've been in-gathering ever since the ships first arrived—*well!* We slept him all the way back. He would have been most unhappy with the speed and altitude of that return trip—especially without a car or plane.

"I caught your struggle to save Lucine when we were still miles away, and, praise the Power, I got there in time."

"Yes," I breathed, taking warmth from Low's hand to thaw my memory of that moment.

"That's the quickest I ever platted anything," said Jemmy. "And the first time I ever did it on a scale like that. I wasn't sure that the late sunlight, without the moonlight, was strong enough, so I was open-mouthed myself at the way the mountain ripped open." He smiled weakly. "Maybe it's just as well that we curb our practice of some of our Persuasions. It was really shake-making!"

"That's for sure!" I shivered. "I wonder what Severeid thought of the deal?"

"We gave Severeid forgetfulness of the whole mine episode," said Valancy. "But, as Jemmy would say, the Sheriff was considerably shook when he got back with the crew. His only articulate pronouncement was, 'Gaw-dang! Cleo II's finally gone!' "

"And Lucine . . . ?" I asked, saving the answer I already knew.

"And Lucine is learning," said Valancy. "Bethie, our Sensitive, found what was wrong and it is mended now. She'll be normal very shortly."

"And . . . me?" I breathed, hoping I knew.

One of us! the three cried to me down under. *Earth born or not—one of us!*

"But what a problem!" said Jemmy. "We thought we had us all catalogued. There were those of us completely of The People and those who were half of The People and half of earth like Bethie and Peter. And then *you* came along. Not one bit of The People!"

"No," I said, comfortably leaning against my ancestral stone wall again. "Not one bit of The People."

"You look like confirmation of something we've been wondering about though," said Valancy. "Perhaps after all this long time of detour, the people of earth are beginning to reach the Persuasions too. We've had hints of such developments but in such little bits and snippits in these research deals. We had no idea that anyone was so far along the Way. No telling how many others there are all over the world waiting to be found."

"Hiding, you mean," I said. "You don't go around asking to be found. Not after the first few reactions you get. Oh, maybe in the first fine flush of discovery you hurry to share the wonder, but you learn quickly enough to hide."

"But so like us!" cried Valancy. "Two worlds and yet you're so like us!"

"But she can't inanimate-lift," teased Low.

"And you can't glow," I retorted.

"And you can't sun-and-moon-light-plat," said Jemmy.

"Nor you cloud-herd," I said. "And if you don't stop picking on me, I'll do just that right now and snatch that shower away from—from Morenci and drench you all!"

"And she could do it!" laughed Valancy. "And we can't, so let's leave her alone."

We all fell silent, relaxing on the sun-warmed sand until Jemmy rolled over and opened one eye.

"You know, Valancy, Dita and Low can communicate more freely than you and I. With them it's sometimes almost involuntary."

Valancy rolled over too. "Yes," she said. "And Dita can block me out too. Only a Sorter is supposed to be able to block a Sorter and she's not a Sorter."

Jemmy waggled his head. "Just like earthlings! Always out of step . . . What a problem this gal's going to be!"

Yep, Low cut in underneath. *A problem and a half, but I think I'll keep her anyway.* I could feel his tender laughter.

I closed my eyes against the sun, feeling it golden across my lids.

I'm un-lost, I thought incredulously, aching with the sudden joy of it. *I'm really un-lost!*

I took tight hold of the hem of my dream, knowing

finally and surely that someday I would be able to wrap the whole fabric of it around me, and not only around me but around others who were lost and bewildered, too. Someday we would all *Be* what was only a dream now.

Softly I drowsed, Low's hand warm upon my cheek—drowsed finally, without dreading an awakening.

FLYING HIGH

by Eugène Ionesco

Translated by Donald M. Allen

Eugène Ionesco, a high-ranking member of the Parisian literary *avant garde*, has been called "the most controversial playwright in Europe." Aside from a brief run of two plays ("The Lesson" and "The Chairs") at an off-Broadway theater last fall, the only chance the American public has had to learn anything at first hand about the work of this man has been through the publication of one play, "The Bald Soprano."

"Flying High" is Ionesco's first short story to be published in America.

"Why didn't you declare his death at the time?" Madeleine asked me. "Or at least you might have got rid of the corpse earlier, when it was easier!"

Ah, I'm lazy, indolent, disorganized, exhausted by doing nothing! I never know where I've put things. I waste all my time, I fray my nerves, I wear myself out looking for them, digging around in drawers, crawling under beds, shutting myself up in storerooms, burying myself in closets. I'm always starting all kinds of things that I never finish, I abandon my projects, I let everything slide. No will power, because I've no real aim in life. If it weren't for my wife's dowry, her meager little income . . .

"You've let ten years pass by! It's beginning to smell, all through the building. The neighbors are getting wind of it, they're asking where it's coming from. They're sure to find out eventually. It's your lack of initiative that's the cause of it all. You'll have to go and tell the commissioner. And there'll be trouble! If we could only prove that he's been dead for ten years: the statute of limitations runs out at the end of ten years. If you had declared his death at the time

we'd now be in the clear. We could rest in peace! We would not have to hide from the neighbors; we could have visitors like other people!"

I wanted to reply: "But, Madeleine, we would have been arrested, don't you see, for the statute of limitations would not have run out, we would have been thrown into prison or guillotined ten years ago—that's obvious." But try to teach logic to a woman! I let her go on talking and tried not to listen.

"It's because of him that everything goes so badly. Nothing works out for us!" Madeleine exclaimed.

"That's only a supposition."

"And besides, he's taking up the prettiest room in our apartment—our bridal bedroom!"

For the ten-thousandth time, perhaps, I pretended to go to the toilet but turned to the left in the hallway in order to go look at the dead man in his room.

I opened the door. All hope was vain: he would never disappear by himself. He had even grown larger. Before long he'd be needing another sofa. His beard had grown longer and now it reached to his knees. As for his fingernails, they were all right because Madeleine kept them trimmed.

Just then I heard her footsteps. I could never manage to be alone with the corpse. In spite of the infinite precautions I'd take, she'd catch me every time. She suspected me, spied on me, never let me move freely, called after me, followed me, was always there.

I'm subject to insomnia. She isn't. In spite of the bad luck that clings to us, Madeleine sleeps soundly.

Sometimes, in the middle of the night, hoping to be able to profit from the darkness and Madeleine's sleeping, I'd leave my bed, taking great care not to make the spring squeak. Holding my breath, I would get as far as the door, but scarcely had I seized the doorknob than the night light would come on. Madeleine, with one foot already outside the covers, would call after me: "Where are you going? You're going to look at him? Wait for me!"

At other times, thinking she was busy in the kitchen, I

would rush to the dead man's room in the senseless hope of being finally, at least for a few seconds, alone with him. There she would be, seated on the sofa, holding the deceased by the shoulder, waiting for my arrival.

Thus I was not surprised to have, this time again, Madeleine on my heels, ready to reproach me as was her habit. As I drew her attention to the beauty of his eyes shining in the darkness of the room, she cried out, completely insensitive to this beauty, although it was unusual: "In all these ten years you still haven't closed his eyelids!"

"That's true . . ." I agreed, with a pitiful air.

"How could anyone be that thoughtless?" she went on. "You're not going to try to tell me that you were too busy, for you don't do a thing all day long!"

"I can't think of everything."

"You think of nothing!"

"Good. I know it. You've told me that and repeated it a hundred thousand times!"

"If you know it, why don't you correct it?"

"You could very well have closed his eyes yourself."

"I have enough other things to do and I can't be after you all the time, picking up things that you've dropped, completing things that you've abandoned, putting everything in order. My time is taken up with all the work of the apartment, with the cooking; I wash, I mend, I wax the floor. I change his linen and yours too. I dust, I wash the dishes, I write poems that I sell to augment our meager income. I sing—at the open window—in spite of my worries, so that the neighbors won't think there's anything wrong with us, for you know very well that we haven't got a maid. Ah! With your earnings—if I weren't here, where would you be?"

"It'll be all right . . ." I said, overwhelmed, and started to leave the room.

"Where are you going? You've forgotten again to close his eyes!"

I turned back. I approached the corpse. How old, how old he was! The dead age more rapidly than the living. Who

could have recognized in him the handsome young man who, one evening ten years ago, had paid us a visit, suddenly fallen in love with my wife, and—taking advantage of my absence for five minutes—become her lover, the same evening?

"You," Madeleine said to me, "if you had only gone to the commissioner the day after the murder and confessed that you had killed him in a moment of anger or of jealousy, which is the simple truth, then, since it was a crime of passion, you would have had nothing to worry about. They'd have made you sign a declaration and let you go, they'd have stuck the declaration in a dossier and the whole affair would have been filed away and forgotten long ago. It is because of your negligence that we are in this mess. Each time that I've told you to go make a declaration, you've replied: Tomorrow, tomorrow, tomorrow! And your tomorrows have added up to ten years. So here we are now. All through your fault, through your fault alone!"

"I will go tomorrow," I said, hoping she'd leave me in peace.

"Oh! I know you, you won't go. Besides, what good would that be, now? It's too late. Nobody's going to believe —after ten years—that you killed him in a moment of anger. When one waits ten years, it begins to look like premeditation. I keep asking myself what we could tell them if we wanted to clear ourselves one of these days. Since he's grown old, perhaps you could say that he's your father, that you killed him yesterday. But then again maybe that's not a good excuse."

"Nobody would believe us. Nobody would believe us," I murmured.

I am a realist; I may lack will power but I reason clearly. Thus Madeleine's lack of logic, her unrealistic opinions have always seemed intolerable to me.

"Let's go to the other room," I said, and took two steps.

"Again you're forgetting to close his eyes! Why don't you pay a little more attention to what people say to you!" Madeleine cried.

Two weeks rolled by. He was growing older and larger more and more rapidly. This alarmed us. All the evidence points to the fact that this incurable disease of the dead progresses geometrically. How had he managed to catch it in our home?

Before long the sofa was unable to hold him. We were obliged to lay his body out on the floor. This enabled us to recover that piece of furniture, which we installed in the dining room. And that gave me an opportunity, for the first time in ten years, to stretch out and take a nap after lunch, when Madeleine's cries suddenly woke me.

"Are you deaf?" she said in a panic. "Nothing worries you, you, you sleep the whole day—"

"It's because I don't sleep at night."

"—as though there were nothing going on in this house. Listen!"

I could hear some cracking noises coming from the dead man's room. The plaster must be falling from the ceiling. An irresistible pushing was making the walls groan. The floors all through the apartment, even the one in the dining room, were vibrating, creaking like a boat. A window broke, the panes shattering into pieces. Fortunately, it was a window on the inside court.

"What will the neighbors think?" Madeleine was desperate.

"Let's go see."

We'd scarcely taken two steps toward the dead man's room when the door gave way, crashing down and splintering, and there was the enormous head of the old man, lying on the floor, looking up at the ceiling.

"His eyes are still open," Madeleine remarked.

Yes, they were certainly open. They were very large now and round, and they lighted up the whole corridor with a cold white light like two searchlights.

"Fortunately the door is broken," I said, to calm Madeleine. "Now he'll have more room, for the hallway is long."

"Always the optimist! Look at that!"

While she was shrugging her shoulders, I looked. It was very disturbing.

He was growing right under our eyes. I made a chalk mark several inches from his head. This mark was reached and then passed in a matter of minutes.

"We've got to act!" I declared. "We really can't wait any longer."

"At last you've come to your senses," Madeleine said. "You've finally, finally understood. You should have acted a long time ago, my poor friend."

"Maybe it's still not too late."

I realized my errors. Trembling all over, I tried to apologize.

"Idiot!" Madeleine replied, as though to give me courage.

I couldn't start anything before nightfall. We were in the month of June and we still had several hours to wait. Several hours—it was much time. I would have had time to rest, to think of other things or to sleep if Madeleine hadn't been there, more agitated than ever. You can imagine what it was like—there was no way of finding a minute's peace with her speeches, her "I told you so," her mania for always having been in the right.

However, the head of the corpse continued to advance along the hallway, approaching nearer and nearer to the dining room, the door of which I was soon obliged to open. The stars had scarcely come out in the sky when the head appeared on the doorsill. But we still had to wait for there were too many people walking in the street. It was the hour for dinner, but we weren't hungry. Thirsty, yes; the glasses were in the kitchen, however, and that would have required straddling the corpse. Even this little effort was beyond our strength.

We had no need to turn on the lights. His eyes sufficiently illuminated the room.

"Close the shutters," Madeleine suggested. Then, pointing at the head of the corpse, she said: "He's going to overturn the whole house."

His head had reached the edge of the rug, which it was now pushing and rumpling. I lifted up his head and placed it on the carpet. "This way it won't spoil the rug."

All in all, I was feeling rather depressed. This business

had been going on for so many years. Besides, I was nervous that evening because I had "to do something." I felt a little sweat forming at my temples. I was shivering.

Madeleine uttered a cry of revolt: "It's unbearable, really. That such things should happen, and they could only happen to us!"

I looked at her poor tortured face. I felt pity for her. I went to her and said tenderly: "If we loved each other, truly, none of this would matter in the least." I took her hand. "Let us love each other, please, Madeleine, for, you know, love will find a way, love makes everything all right, it changes one's life. Do you understand me?"

I tried to kiss her. But she disengaged herself, her eyes dry, her mouth hard.

"I really believe it," I went on mumbling. Then, getting into the swing of it, I said: "Do you remember, in the old days, how every dawn was a victory for us? We were on the threshold of the world. You do remember, don't you? The universe was and was no longer, or was only a transparent veil through which shone a dazzling light, a light of glory coming from all sides, from several suns. The light penetrated us like a soft warmth. We felt ourselves light, in a world delivered from its heaviness, astonished to be alive, happy to be. That was love, that was youth. If we really willed it, from the depths of our hearts, nothing would matter in the least, we would sing hymns of joy!"

"Don't talk nonsense," replied Madeleine. "It's not love that's going to rid us of this corpse. Nor hate either. Feelings have nothing to do with this."

"I'll get rid of it for you," I said, letting my arms fall.

I withdrew into my corner. I sat down in my armchair. I was silent. Madeleine, in her chair, her brows knitted, took up her sewing.

I contemplated the head of the corpse, which was now no more than twenty inches, more or less, from the wall opposite the door. He had aged even more in the last few minutes. It was bizarre how much, in spite of everything, we had grown used to him; I realized suddenly that I was

sincerely sorry at the prospect of losing him. If only he had remained quiet we could have kept him with us for a long time still, for always perhaps. After all, he had grown, aged in our home, with us, and that means something. Everyone knows how attached one becomes to anything—such is the heart of man. The house will seem very empty, I thought, when he is no longer here. What memories he brought us! He was the mute witness of a whole past, not always agreeable, admitted—one could even say: Because of him, not agreeable! As we all know, life is never gay. By now I only vaguely remember that it was I who had killed him, or rather, to employ an expression less unfavorable to me—"executed" in a moment of anger or of indignation. In time I had come to forgive myself, tacitly; if everything were taken into account there were faults on both sides. After all, had *he* truly forgotten?

Madeleine interrupted my thoughts. "His forehead is touching the wall. The time has come!"

"Yes," I decided.

I rose, opened the shutters and looked out the window. It was a beautiful summer's night, about two hours after midnight. There was no one in the streets and all around the windows were dark. The flowering acacias embalmed the air. Up high, in the center of the sky, the moon was round and full, a truly living star. The Milky Way. Nebulae, a profusion of nebulae, and tails of comets passing along the routes of the sky, streams of liquid silver, palpable light, velvety snow. And white flowers, bouquets and bouquets of flowers, gardens in the sky, glittering forests and meadows. And space above all, space, an infinite space!

"Come on," Madeleine said. "What are you dreaming about? No one must see us. I'll go keep a lookout."

She stepped through the window and ran to the corner of the street. There she looked to the left and to the right, then gave me the high sign. "Come on!"

The river was three hundred yards from the house. To reach it I would have to cross two streets and the little Square T., where there was always the risk of running into American GI's who patronized the bar and the whorehouse

run by our landlord. The barges moored along the bank of the river had to be avoided too, and that meant making a detour, which complicated the whole undertaking even more. But now the die was cast and I was committed.

After throwing a last glance along the street, I took the corpse by the hair, lifted his head with difficulty and placed it on the balustrade, then jumped down on the sidewalk. (If only he doesn't knock over the flowerpots, I thought.) I pulled from outside. It felt as though I were dragging the bedroom, the long hallway, the dining room, the whole apartment, furniture and all; and then it was as though I were dragging up, through my mouth, my own entrails, together with my lungs, my stomach, my heart and heaps of obscure sentiments, insoluble desires, malodorous thoughts, moldy, stagnating images, a corrupt ideology, decomposed morals, poisoned metaphors and deleterious gases clinging to the viscera like parasitic plants. I suffered atrociously. I was at the end of my strength. I sweated tears and blood. I had to hold on for dear life, but this was most difficult, and then there was the fear of being surprised on top of it all. I had gotten his head out through the window, and his long beard, his neck and his trunk, and found myself in front of the entrance of the house next door while his feet were still in our hallway. Madeleine, who had joined me, was trembling with fear. I went on pulling with all my strength, barely able to suppress a cry of pain. Still pulling, walking backward ("There's nobody up," Madeleine said, "all the windows are dark"), I reached the corner of the street, turned, crossed it, turned, crossed again. A sudden jolt. The whole corpse was outside the house. We had reached the exact center of the little Square T., which was lighted as bright as day. I was panting. A truck rumbled in the distance. A dog barked. Madeleine had had enough. "Leave him here and let's go back!" she said.

"That would be most imprudent! Return if you wish. I'll finish the job."

I stayed on alone. I was astonished to see how much lighter the corpse had become. It had grown much larger, obviously, but it had become thinner too, since he had had

no nourishment. As I turned around where I stood, the deceased curled about my body like a ribbon. This way it will be easier to carry him to the river, I thought.

Alas! When his head reached my hip it suddenly made the prolonged shrill whistle of the dead. One could not mistake it.

At this whistle, others replied from all sides: the police! Dogs barked, trains departed, all the windows around the square lighted up and heads were stuck out. The GI's rushed out of the bar with their girls.

Two cops appeared at the corner of the street, blowing their whistles. They came running. When they were only two steps from me I knew I was lost.

Suddenly the beard of the corpse deployed like a parachute and lifted me from the earth. One of the cops took a giant's jump—too late, he only caught my left shoe. I threw him the other. The GI's enthusiastically took snapshots. I mounted very quickly, while the cops shook their fingers at me and cried: "You rascal! You little rascal!" There was applause from all the windows. Only Madeleine, at hers, lifted her eyes toward me and screamed scornfully: "You never will be serious! You rise up in the air but you don't rise in my esteem!"

I could still hear the Americans, thinking this was a sporting event, call after me: "Hello, boy!" I let my clothes fall and my cigarettes; the cops divided them. Then there were only milky ways and I was soaring through them, flying high, flying high.

THE EDGE OF THE SEA

by Algis Budrys

The Century of the Common Man has become the Era of the Cool Cat. Optimism is out of favor. The beat generation wears dark glasses, and does not expose itself to rose-colored dawns.

So be it. I expect I owe my unconquerable squaredom to the early influence of Pollyanna. But thank God, say I, there are enough *cheerful* oddballs still unsquelched so that not *every* rocket falls back on its firing pad from sheer ennui, and so that some stories like this one still get written.

The Overseas Highway, two narrow white lanes on yellowed old concrete piers, lay close to the shallow water, passed over the little key, and went on.

All afternoon the sea had been rising. Long, greasy-faced green swells came in from the Atlantic Ocean and broke on the sharp rocks with a sudden upsurge of surf. At mid-day, the water had been far down among the coral heads. But now it was in the tumbled limestone blocks and concrete prisms that had been dumped there to build up the key. In a little while it would be washing its spume over the highway itself, and it might well go farther, with the increasing wind.

It was dark with twilight, and darker with clouds thick as oil smoke covering the sun over the Gulf of Mexico. The Gulf was stirring, too, and bayous were flooding in Louisiana. But it was over the Atlantic that the hurricane was spinning. It was the broad, deep, deadly ocean that the tide and wind were pushing down through the gloom onto the side of the key where Dan Henry was struggling grimly, his massive back and shoulders naked and running with spray.

His pale eyes were red-rimmed with salt and his hide

slashed shallowly in a dozen places where he had lost his balance on the tumbled stones and fallen. He had been lurching through the surf all afternoon, working frantically to save what he had seen, leaden and encrusted, rolling ponderously at the edge of the water. His shirt, the seat covers from his car—the fan-belt, too—and what few scraps of rope and wire had been in the trunk, all had gone for him to twist into an incredible rag of a hawser.

The men who built the Overseas Highway on the old railroad right-of-way had built up the little key, but it was still no more than a hundred feet in diameter. If the thing trapped on the rocks had chosen any other islet to wash against, there would have been a reasonable chance of saving it. But there was no one living here, and nothing to use for tools or anchors. The thing was rolling and grinding against the rocks, too heavy to float but too bulky to resist the push of storm-driven water. There were bright silver gouges on its thick metal flanks, and in a little while it would break up or break free, and be lost either way. The rope—the stubborn, futile rope passed around the two stubby struts at its nose and wrapped around the great concrete block it was now butting at with brute persistence—was as much use as though Dan Henry had been a spider and tried to hold this thing in a hurriedly created web. But he had had to try, and he was trying now in another way. He jammed the soles of his feet against one concrete block and pushed his bare shoulders against another. With his belly ridged and his thighs bulging, his face contorted and his hands clenched, he was trying to push another massive piece of stone into place behind the plunging metal thing, though his blood might erupt from his veins and the muscles tear open his flesh.

The thing was as thick through as a hogshead, and as long as two men. There was a thick-lipped, scarred opening a foot across at one end, where the body rounded sharply in a hemispherical compound curve. There were three stumpy fins rooted in the curve, their tips not extending beyond the bulge of the body, and two struts at the blunt nose like horns on a snail but bent forward so that the entire

thing might have been fired out of a monstrous cannon or launched from the tubes of some unimaginable submarine. There were no visible openings, no boltheads, no seams. The entire thing might have been cast of a piece—might have been solid, except for the tube in the stern—and though barnacles clung to it and moss stained it, though the rocks gouged it and other blows had left their older scars on its pitted surface, still the thing was not visibly damaged.

Dan Henry strained at the rock, and sand grated minutely at its base. But the world turned red behind his eyes, and his muscles writhed into venomous knots, and his breath burned his chest with the fury of fire. The sea broke against him and ran into his nose and mouth. The wind moaned, and the water hissed through the rocks, crashing as it came and gurgling as it drew back. The thing groaned and grated with each sluggish move. The day grew steadily darker.

Dan Henry had stopped his car on the key at noon, pulling off the highway onto the one narrow space of shoulder. He had opened the glove compartment and taken out the waxed container of milk and the now stale sandwich he had bought in Hallandale, above Miami, at ten that morning. He lit a cigarette and unwrapped the sandwich, and began to eat. The milk had turned warm in the glove compartment and acquired an unpleasant taste, but Dan Henry had never cared how his food tasted. He paid no attention to it as he chewed the sandwich and drank the milk between drags on the cigarette. He had bought the food when he stopped for gas, and when he finished it he planned to go on immediately, driving until he reached Key West.

There was nothing specific waiting for him there. Nothing in his life had ever been waiting for him anywhere. But everywhere he went, he went as directly and as efficiently as possible because that was his nature. He was a physically powerful, reasonably intelligent, ugly man who drew his strength from a knowledge that nothing could quite overcome him. He asked no more of the world. He was thirty

years old, and had been a construction foreman, a police officer, an MP sergeant in Germany and a long-haul trailer truck driver. In addition to these things he had been born into a derrick rigger's family in Oklahoma and raised in his father's nomadic, self-sufficient tradition.

When he first saw the dull color of metal down among the rocks, he got out of the car to see what it was. He was already thinking in terms of its possible usefulness when he reached the thing. Once near it, the idea of salvage rights came naturally.

Looking at it, he felt immediately that it had to be a military instrument of some kind. The Navy, he knew, was constantly firing rockets from Cape Canaveral, up in Central Florida. But the longer he looked at the thing, the longer he doubted that possibility. The thing was too massive, too obviously built to take the kind of vicious punishment it was receiving at the hands of the sea, to be the light, expendable shell that was a missile prototype or a high altitude test rocket. There were tons of metal in it, and the barnacles were thick on it. He wondered how long it had been surging along the bottom, urged and tumbled by the great hidden forces of the ocean, drifting this way and that until finally this morning the first high tide had heaved it up here to lie caught and scraping on the rocks, steaming as it dried under the early sun.

He did not know what it was, he decided finally. Rocket, torpedo, shell, bomb, or something else, whatever it was, it was valuable and important. The Navy or the Army or Air Force would need it or want it for something.

There was nothing on it to mark it as anyone's property. If anything had ever been written or engraved on that hull, it was gone now. He began to think of how he might establish his rights until he could reach a Navy installation of some kind. The only reason he had for going to Key West was that he had a friend in the sponge diving business down there. The friend did not know he was coming, so there was no reason not to delay for as long as this business might take him.

He had begun with nothing more than that to urge him

on, but as the afternoon grew, the sea and the thing between them had trapped him.

The thing lay awash with half its length over the usual high water mark, and even when he found it, at low tide, the water curled among the rocks above it. He had thought about that, too, but he had not thought that a hurricane might have taken an unexpected turn during the night, while he drove his old car without a radio to tell him so. Only when the clouds turned gray and the water swirled around his knees like a pack of hounds grown hungry did he stop for a moment and look out to sea.

He had been clearing the smaller rocks away from around the thing and piling them in an open-ended square enclosing its forward sections, and had been scraping a clean patch in the barnacles with a tire iron. It had been his intention to make it obvious someone was working on the thing, so he could then leave it and report it with a clear claim. The few cars going by on the highway had not stopped or slowed down—there was no place to stop, with his car on the bit of shoulder, and no real reason to slow down—and after a while the cars had stopped coming entirely.

It was that, telling him the storm had probably caused the highway to be blocked off at either end, together with the look of the sea, that made him go up to the car and try to make a hawser. And by then he could not have left the thing. It was too obvious that a man had begun a job of work here. If he left it now, it would be too plain that someone had let himself be backed down.

If he had gotten in his car and driven away, he would not have been Dan Henry.

The water was almost completely over the thing now. He himself was working with the waves breaking over his head, trying to dislodge him. More important, the thing was rocking and slipping out of its trap.

The next nearest key was a third of a mile away, bigger than this one, but still uninhabited. The nearest inhabited place was Greyhound Key, where the rest stop was for the

buses, and that was out of sight. It would be battened down, and probably evacuated. Dan Henry was all alone, with the highway empty above him and the sea upon him.

He set his back once more, and pushed against the concrete block again. If he could wedge the thing, even a storm tide might not be able to take it away from him. He could untangle his homemade rope and put the fan-belt back on his car. Then he could drive away to some place until the storm died down.

The blood roared in Dan Henry's ears, and the encrusted concrete block opened the hide over his shoulders. A coughing grunt burst out of his mouth. The block teetered—not much, but it gave a little way. Dan Henry locked his knees and braced his back with his palms, pushing his elbows against the block, and when the next wave threw its pressure into the balance, he pushed once more. The block slipped suddenly away from him, and he was thrown aside by the wave, flung into the wet rocks above. But the thing was wedged. It could roll and rear as much as it wanted to, but it could not flounder back into the sea. Dan Henry lay over a rock, and wiped the back of his hand across his bloody mouth in satisfaction.

It was over. He could get out of here now, and hole up somewhere. After the storm, he would come back and make sure it was still here. Then he would make his claim, either at one of the little Navy stations along the chain of keys, or at the big base at Boca Chica. And that would be that, except for the check in the mail. The bruises and breaks in his skin would heal over, and become nothing more than scars.

He took his rope off the thing and took it apart far enough to pick out the fan-belt. He let the rest of it wash away, shredded. As he got out of the surging water at last, he scowled slightly because he wondered if the car's spark plugs weren't wet.

It was dark now. Not quite pitch-black, for the hurricane sky to the west was banded by a last strip of sulphur-colored light at the horizon, but dark enough so that his car was

only a looming shape as he climbed up to it. Then, suddenly, the wet finish and the rusty chrome of the front bumper were sparkling with the first pinpoint reflections of faraway lamps. He turned to look southward down the highway, and saw a car coming. As it came nearer, its headlights let him see the clouds of spray that billowed across the glistening road, and the leaping white heads of breakers piling up on the piers and rebounding vertically to the level of the highway. The storm was building up even more quickly than he'd thought. He wondered what kind of damned fool was crazy enough to drive the stretches where the highway crossed open water between keys, and had his answer when a spotlight abruptly reached out and fingered him and his car. Either the state or the county police were out looking to make sure no one was trapped away from shelter.

The police car pulled up, wet and hissing, half-blocking the highway, and the driver immediately switched on his red roof beacon, either through force of habit or force of training, even though there was no oncoming traffic to warn. The four rotating arms of red light tracked monotonously over the road, the key, and the water. By their light, Dan Henry realized for the first time that it was raining furiously. The spotlight was switched off, and the headlights pointed away, up the highway. It was the red beacon that lit the scene and isolated the two men inside its color.

The officer did not get out of the car. He waited for Dan Henry to come around to his side, and only then cranked his window down halfway.

"Trouble with the car?" he asked, hidden behind the reflection on the glass. Then he must have thought better of it, seeing Dan Henry's broken skin. He threw the door open quickly, and slid out with his hand on the bone-gripped butt of his plated revolver. He was thick-bodied, with a burly man's voice and brusqueness, and he kept his eyes narrowed. "What's the story here, Mac?"

Dan Henry shook his head. "No trouble. I was down on the rocks. Waves threw me around some."

The officer's uniform pants and leather jacket were al-

ready sodden. Water ran down his face, and he wiped it annoyedly out of his eyes. "What were you doin' down there? No brains?" He watched carefully, his hand firm on his gun.

Dan Henry had been a policeman himself. He was not surprised at the officer's attitude. A policeman was paid to be irritated by anything that didn't have a simple answer.

"I've got something down there I was salvaging," he said reasonably. "Storm caught me at it and knocked me around some before I got finished." Telling about it made him realize he was tired out. He hoped this business with the policeman would be over in a hurry, so that he could fix his car and get into its shelter. The wind was chilly, and the constant impact of driven water on his skin was beginning to make him numb.

The officer risked a quick glance down at the thrashing surf before he brought his hard eyes back to Dan Henry. "I don't see nothin'. What kind of a thing was it? What're you carryin' that belt around for?"

"It's metal," Dan Henry said. "Big. Never seen anything just like it before. I was using the belt to hold it."

The officer scowled. "What's holdin' it now? What d'you mean, big? How big? And how come I can't see it?"

"I pushed a rock behind it," Dan Henry said patiently. "It's damn near as big as a car. And it's under water, now."

"Buddy, that don't begin to sound like a likely story." The policeman pulled his gun out of the holster and held it down alongside his thigh. "What kind of a lookin' thing is it?"

"Kind of like a rocket, I guess."

"Now, why the hell didn't you say so!" the policeman growled, relaxing just a little bit. "That makes sense. It'll be one of those Navy jobs. They've got 'em droppin' in the ocean like flies. But you ain't goin' to get anything out of it, Buddy. That's government property. You're supposed to turn it in. It's your duty."

"I don't think so."

"What d'you mean, you don't think so?" The policeman's gun arm was tense again.

"It doesn't look like a Navy rocket. Doesn't look like anybody's rocket, that I know of. I said it was *kind* of like like a rocket. Don't know what it is, for sure." Now Dan Henry was growing angry himself. He didn't like the way things were going. He kept his attention carefully on the gun.

"Know all about rockets, do you?"

"I read the papers. This thing isn't just a piece. It isn't the bottom stage or the top stage. It's one thing, and it never was part of anything bigger. And it's been in the water maybe a couple of years without getting broken up. You show me the Navy rocket that's like that."

The policeman looked at him. "Maybe you're right," he said slowly. "Tell you what—suppose you just step over here and put my spotlight on it. Reach through the window." He stepped back casually.

Dan Henry reached around and switched the spot on. He swept it down across the water, a little startled to see how far up the breakers had come. Under the light, the water was a venomous green, full of foam, rain-splotched and furiously alive. A gust of wind rocked the car sharply, and the light with it. The pale beam shot over the sea before it fell back, reaching beyond the swinging cross of red from the roof beacon, and out there the lashing waves disappeared in a mist of rain.

He found the thing, finally, after having to hunt for it. For an instant he thought it had been swept away after all, and felt a stab of sharp anger. But it was still there, heaving insensately under the waves, with only the dim, broad mottling of its back near enough to the surface to be seen at all, that and a constant stirring in the water, roiling it like an animal. "There it is." He was surprised how relieved he felt. "See it?"

"Yeah. Yeah, I seen enough of it," the officer said. "You got somethin' down there, all right." There was a sudden hardness in his voice that had been waiting all along for him to make the decision that would bring it completely out. "I got my gun on you, buddy. Just step back from that car easy. Anybody foolin' around out here in a hurricane

must want somethin' awful bad. If that somethin's a Navy rocket, I guess I know what kind of a son of a bitch that would be."

"Jesus Christ," Dan Henry whispered to himself. He was angry with the fine-drawn kind of rage that is almost a pleasure. And not because the cop thought he was a Commie, either, Dan Henry suddenly realized, but because he persisted in not understanding about the rocket. Or whatever it was.

He turned around with a jump. The fan-belt in his hand whipped out with all the strength in his arm and all the snap in his wrist, and snatched the cop's gun out of his hand. It skittered across the wet concrete of the highway, and Dan Henry pounced after it. He scooped it up with a scrape of his finger tips, and crouched with the muzzle pointed dead at the cop's belly.

"Back off," he said. "Back off. You're not takin' that thing away from me. I sweated blood to hang on to it, and you're not goin' to come along and throw me in jail to get it away."

The cop retreated watchfully, his hands up without his being told, and waited for his chance. Dan Henry backed him up the highway until the cop was past the cars, and opened the door of his own car. He threw the gun inside, together with the belt. He slammed the door and said, "You can get that back later. Or you can try and take it away from me now, barehanded." He was shaking with the tension in his bunched shoulders, and his arms were open wide. He was crouched, his broad chest deep as his lungs hunted for more and more oxygen to wash the rush of blood his heart was driving through his veins. The red flood of revolving beacon on the police car swept over him in regular flashes.

"I'll wait," the cop said.

"Now," Dan Henry said, "I want to use your radio. I want you to call in and report this. Only I want you to report it to the Navy before you call your headquarters."

The cop looked at him with a puzzled scowl. "You on

the level?" he asked, and Dan Henry could see him wondering if he hadn't made a mistake, somewhere, in his thinking about what was going on here. But Dan Henry had no more time for him. The wind was a steady, strong pressure that made him brace his left leg hard against it. The water flying across the highway was coming in solid chunks, instead of spray, and the two cars were rocking badly on their springs. The rain was streaming over them, leaving the officer's jacket a baggy, clinging mess and pounding on the top of Dan Henry's head. The sea was smashing violently into the highway piers, thundering to the wind's howl, and even here on solid ground the shock of the impacts was coming clearly up through Dan Henry's bones.

His throat was raw. Bit by bit, he and the officer had had to raise their voices until they had been shouting at each other without realizing it. "Get in the car and do it!" he yelled, and the officer came forward as he backed away to give him room.

The policeman got into his car, with Dan Henry standing watchfully a little behind the open door frame, and switched on his radio. "Tell them where we are," Dan Henry said. "Tell them my name—Daniel Morris Henry—tell them what I said about it's not being one of their rockets—and tell them I'm claiming salvage rights. Then you tell them the rest any way you see it."

The officer grudgingly turned the dials away from their usual settings. After a minute, he picked his microphone out of the dashboard hanger and began calling Boca Chica in a stubborn voice. At intervals, he said, "Over," and threw the Receive switch. They heard the peculiar, grating crackle of radiotelephone static, trapped in the small speaker. And only that.

"Look, buddy," the policeman said at last, "we're not goin' to get any answer. Not if we ain't got one by now. Boca Chica radio may be knocked out. Or maybe my transmitter's shorted, with all this wet. Could be anything." He jerked his head toward the water. "How much longer you want us to stay out here?" Probably because he had seen so many hurricanes, he was beginning to grow nervous.

"Try it again," Dan Henry said. He watched the officer closely, and couldn't see him doing anything wrong. Dan Henry didn't know the Boca Chica frequency; that was where the trouble might be. But he'd used a police radio often enough so that any other trick wouldn't have gotten by him.

The officer called Boca Chica for another five minutes. Then he stopped again. "No dice. Look, buddy, you've had it. Maybe you're just a guy looking for some salvage money, like you say you are. Maybe not. But there's goin' to be waves coming across this road in a little while. Why don't we get out of here and straighten things out when this blows over?"

Dan Henry set his jaw. "Get the vibrator out of that radio. Do it." Now he had no choice. If he went with the cop, that was that. They'd throw him in some jail for resisting arrest and assaulting an officer, and keep him there until they were good and ready to let him out. By then, whatever happened to the thing down here, somebody would have figured out some way to get that Navy check instead of him. The only thing to do was to cripple the cop's radio and send him down the highway until he reached a phone. There was no guarantee that radio wouldn't work on the police frequency.

Maybe the cop would call the Navy right after he called his headquarters. Or maybe, even if he didn't, some higher brass at the headquarters would report to the Navy. Either way—if you believed it was a Navy rocket or if you didn't —it was government business. Then, maybe, the Navy would get here before the cops did. Or soon enough afterward so he'd still be here to talk to them. Once he got taken away from here, that chance was gone.

On that decision, he was ready to cling to a hundred-foot key in the middle of an Atlantic hurricane. "Let's have that vibrator. Right now."

The officer looked at him, and reached slowly under the dash. He fumbled in the narrow space where the radio hung, and pulled the sealed aluminum cylinder out of its

socket. But he was getting ready to grab for Dan Henry if he could reach him quickly enough.

"Okay," Dan Henry said, "drop it on the road and get out of here. You can get it back along with your gun. And just in case you get some brains in your head, when you get to a phone, call the Na—"

The policeman had dropped the vibrator, and the wind had rolled it under Dan Henry's Chevrolet. Dan Henry had been in the act of letting the open police car door close, when a sharp thread of brilliant violet fire punched up from down in the green water, through the red light, up through the rain, up through the black clouds, and out to the stars beyond.

"There's something *in* that thing!" the officer blurted.

Dan Henry threw the door shut. "Get out of here, man!"

Down in the drowned rocks, an arc hissed between the two struts in the thing's nose. The water leaped and bubbled around it, but for all the breakers could do, the blaze of light still illuminated the thing and the rocks it ground against, turning the sea transparent; and from the crown of the arc the thin violet column pointed without wavering, without dispersing, straight as a line drawn from hell to heaven.

The police car's tires smoked and spun on the pavement. "I'll get help," the officer shouted dimly over the squeal and the roar of his engine. Then he had traction and the car shot away, headlights slashing, glimmering in the rain and the spray, lurching from side to side under the wind's hammer, roof beacon turning at its unvarying pace, the siren's howl lost quickly in the boom of the water. And Dan Henry was left in the violet-lanced darkness.

Without the windbreak of the police car in front of him, he was pushed violently backward until his own car's fender stopped him. Water struck his eyes, and the night blurred. He bent forward and rubbed his face until the raw ache of the salt was dulled to a steady throbbing, and then he staggered across the highway to the guard rail on the Atlantic side. The tops of the incoming waves washed over his shoes,

just as the surf at noon had lapped at him, twelve feet below.

The rain and the spray streamed over him. He cupped one hand over his nose, to breathe, and hung on the rail.

There was nothing more to see. The pillar of light still shot up from the arc, and the bulk of the thing loomed, gross and black, down there in the water. It was feet below the surface now, cushioned from the first smash of the waves, and it stirred with a smooth, regular motion like a whale shark in a tank.

The radio, he thought. It had felt the radio in the police car. Nothing else had happened to bring it to life at that particular moment. It had waited a little—perhaps analyzing what it had encountered, perhaps then noticing the regular flash of the car's roof beacon for the first time. And for the first time since the day, years ago, when it entered the sea, it had found a reason for sending out a signal.

To where? Not to him, or the policeman. The light was not pointed toward the highway. It went up, straight up, going out of sight through the clouds as his eyes tried to follow it before the lash of water forced his head down again.

There was no one inside the thing, Dan Henry thought. There couldn't be. He had scraped on the side with regular, purposeful strokes, clearing an exactly square patch, and gotten no response. And the thing had lain in the ocean a long time, sealed up, dragging its armored hide over the bottom as the currents pushed and pulled it, rolling, twisting, seamless, with only those two horns with which to feel the world about it.

He could be wrong, of course. Something could be alive in there, still breathing in some fantastic way from a self-contained air supply, eating tiny amounts of stored food, getting rid of its wastes somehow. But he didn't see how. It didn't seem logical that anything would trap itself like that, not knowing if it was ever going to escape.

He could be wrong about it all. It might not have been reacting to anything that happened on the highway. It might be ignoring everything outside itself, and following

some purpose that had nothing to do with this world or its people. But whether it was that, or whether he was at least partly right, Dan Henry wondered what was sending things to drop down on the Earth and make signals to the stars.

The water came higher. It came up the key too quickly to split and go around it, and spilled over the highway to plunge into the rocks on the Gulf side. It broke halfway up the side of his car. He remembered the policeman's vibrator. That would be far to the west of him by now, skipping at a thrown stone's velocity over waves whose tops were being cut off by the wind. Dan Henry's mouth twisted in a numb grimace. Now he'd have to buy one. They probably wouldn't let him get away that cheaply. They could make that stick for a robbery charge. And destroying public property. While on the other hand, if he was swept off this key they wouldn't even have to pay for his burial. He laughed drunkenly.

A wave broke over him. He had made a sling for himself by knotting the legs of his dungarees around one of the guard-rail uprights, and when the wave was past he lolled naked with the bunched tops of the dungarees cutting into his chest under his arms. The wind worked at him now, with a kind of fury he had never felt by simply putting his head out through the window of a speeding car, and then the next wave came. It was warm, but the wind evaporating it as soon as he was exposed again made his skin crawl and his teeth chatter. He reached behind him with a wooden arm and felt the knot in the dungaree legs to make sure it was holding. The pressure had tightened it into a small hard lump.

That was good, at any rate. That and the blessed practicality of the engineers who built the highway. When they laid the roadway where the hurricane-smashed railroad had been, they had cut the rusted rails up with torches, set the stumps deep in the concrete, and welded the guard-rails together out of T-shaped steel designed to hold a locomotive's weight.

Dan Henry grinned to himself. The rail would hold. The dungarees would hold, or the trademark was a liar. Only

about Dan Henry was there any doubt. Dan Henry—hard, sure Dan Henry, with his chest being cut in half, with his torn skin being torn again as the waves beat him against the highway, with his head going silly because he was being pounded into raw meat.

Dear God, he thought, am I doing this for *money?* No, he thought as a wave filled his nostrils, no, not any more. When that thing turned its light on and I didn't jump in the car with that cop, that's when we found out I wasn't doing it for the money. For what? God knows.

He floundered half over on his side, arched his neck, and looked at the violet arrow through the clouds. Signal, you bastard! Go ahead and signal! Do anything. As long as I know you're still there. If you can stay put, so can I.

Well, what *was* he doing this for? Dan Henry fought with the sling that held him, trying to take some of the pressure off his chest. God knew, but it was up to Dan Henry to find out for himself.

It wasn't money. All right—that was decided. What was left—vanity? Big Dan Henry—big, strong, Dan Henry . . . take more than a hurricane to stop big, strong, wonderful Dan Henry—was that the way his thoughts were running?

He croaked a laugh. Big, strong Dan Henry was lying here limp as a calico doll, naked as a baby, praying his pants wouldn't rip. The storm had washed the pride out of him as surely as it had his first interest in the salvage money.

All right, *what,* then! He growled and cursed at his own stupidity. Here he was, and he didn't even know why. Here he was, being bludgeoned to death, being drowned, being torn apart by the wind. He was stuck out here now, and nobody could save him.

A wave roared over the highway and struck his car a blow that sent a hubcap careening off into the darkness. The car tilted onto the Gulf-side guard-rail. The rail bellied outward, and the car hung halfway over the rocks on the other side. Successive waves smashed into it, exploding in spray, and the guard-rail groaned in the lull after each strike. Dan Henry watched it dully in the violet light, with the water sluicing down over his head and shoulders for a

moment before the wind found it and tore it away in horizontal strings of droplets.

The car's door panels had already been pushed in, and the windows were cracked and bulged. Now the exposed floor-boards were being hammered. The muffler was wrenched out.

With the next smash of solid water, the horizontal rail broke its weld at one end and the car heeled forward to the right, impaling its radiator on an upright. It hung there, gradually tearing the radiator out of its brackets, spilling rusty water for one instant before a wave washed it clean, scraping its front axle down the sharp edge of the roadway, breaking loose pieces of the concrete and raising its left rear wheel higher and higher. The radiator came free with a snap like a breaking tooth, and the car dropped suddenly, its front end caught by the edge of the left wheel, kept from falling only by the straining uprights still jammed against it farther back on the right side. The hood flew back suddenly and was gone with a twang in one gust of wind.

Am I going to have to buy that cop a new gun, too? Dan Henry thought, and in that moment the wind began to die. The water hesitated. Three waves rolled across the road slowly, much higher than when the wind was flattening them, but almost gentle. The rain slackened. And then the eye of the storm had moved over him, and he had calm.

He pushed himself to his feet at last, after he sagged out of the hold the dungarees had on his chest. He leaned against the guard-rail and stared woodenly at the ocean and the thing.

The beam went up out of sight, a clean, marvelously precise line. But down at the surface, the sea was finally hiding the thing, and making a new noise that had none of a storm-sea's clean power. It filled his ears and unnerved him.

With the wind and the pressure gone, the waves were leaping upward, clashing against each other, rebounding, colliding again, peaking sharply. Dan Henry could hear the highway over the water booming faintly as the waves slammed up against its underside. But he could actually see

very little. It had grown sharply darker, and what he saw were mostly the tops of the exploding waves, glimmering pale violet.

The thing was buried deep, where it lay at the foot of the key, and the arc that had diffused most of the light was visible only as a fitful glow that shifted and danced. The violet beam seemed to spring into life of itself at the plunging surface, and it kept most of its light compressed within itself.

Dan Henry swayed on the guard-rail. It was stifling hot. The thick mugginess filled his lungs and choked him. He lolled his head back. The clouds were patchy overhead, and the stars shone through in places.

There was a sudden high-pitched chime, and a concentric circle of coruscating ice-blue flame came hurtling down the beam from the thing. It came out of the sky and shot into the water, and when it touched the glimmer of the arc there was another chime, this time from the thing, and this time the water quivered. The violet beam flickered once, and a red halo spat up with a crackle, traveling slowly. When it was a hundred feet over Dan Henry's head it split in two, leaving one thin ring moving at the old rate, and a larger one that suddenly doubled its speed until it split again, doubled its speed and split again, accelerated again, and so blazed upward along the violet beam's axis, leaving a spaced trail of slowly moving lesser rings behind it. They hung in the air, a ladder to the stars. Then they died out slowly, and before they had stopped glowing the violet beam was switched off.

The sky was abruptly empty, and the thing lay quiescent in the water once more. Dan Henry blinked at the flashes swimming across his eyes. It was pitch dark. He could barely see the white of swirling water as it dashed itself into the rocks at his feet.

Except that far up the highway, coming toward him, were two headlights with a swinging red beacon just above them.

The police car was plastered with wet leaves and broken palm fronds. The policeman slammed it to a halt beside him,

and flung the door open. He stopped long enough to turn his head and say, "Jesus Christ! He's still here! He ain't gone!" to someone in the front seat with him, and then he jumped out. "What happened?" he asked Dan Henry. "What was that business with the lights?"

Dan Henry looked at him. "You made it," he mumbled.

"Yeah, I made it. Got to this Navy skywatch station. Phone was out, so I couldn't call in to headquarters. Found this Navy professor up there. Brought him down with me when the eye came over. He figures we got maybe twenty minutes more before the other side of the hurricane comes around."

The other man had slid out of the car. He was a thin, bony-faced man with rimless glasses. He was dressed in a badly fitted tropical suit that was pleated with dampness. He looked at Dan Henry's purpled chest, and asked, "Are you all right?"

"Sure."

The man twitched an eyebrow. "I'm assigned to the satellite tracking station north of here. What is this thing?"

Dan Henry nodded toward it. "Down there. It got an answer to its signal, acknowledged and switched off. That's what I think, anyhow."

"You do, eh? Well, you could be right. In any case, we don't have much time. I'll notify the naval district commandant's office as soon as the telephones are working again, but I want a quick look at it now, in case we lose it."

"We're not going to lose it," Dan Henry growled.

The professor looked at him sharply. "What makes you sure?"

"I wedged it," Dan Henry said with a tight note in his voice. "I almost ruined myself and I almost drowned, but I wedged it. I took a gun away from a cop to keep it from getting left here without anybody to watch it. And I stayed here and got almost drowned, and almost cut in half, and almost beat to death against this highway here, and *we're not going to lose it now.*"

"I . . . see," the professor said. He turned to the policeman. "If you happen to have some sedatives in your first

aid kit, they might be useful now," he murmured.

"Might have something. I'll look," the policeman said.

"And put your spotlight on the thing, please," the professor added, peering over the guard-rail. "Though I don't suppose we'll see much."

The yellow beam of the spotlight slid over the top of the water. If it penetrated at all, it still did not reach any part of the thing. The policeman hunted for it, sweeping back and forth until Dan Henry made an impatient sound, went over to him, and pointed it straight. "Now, leave it there. That's where it is."

"Yeah? I don't see anythin' but water."

"That's where it is," Dan Henry said. "Haven't been here all this time for nothin'." He went back to the railing, but there was still nothing to see.

"You're sure that's where it is?" the professor asked.

"Yes. It's about ten feet down."

"All right," the professor sighed. "Tell me as much as you can about its activities."

"I think it's a sounding rocket," Dan Henry said. "I think somebody from some place sent that thing down here a while ago to find out things. I don't know what those things are. I don't know who that somebody is. But I'm pretty sure he lost it somehow, and didn't know where it was until it signaled him just now. I don't know why it worked out that way. I don't know why the rocket couldn't get its signal through before this, or why it didn't go home."

"You think it's of extraterrestrial origin, then?"

Dan Henry looked at the professor. "You don't think so?"

"If I did, I would be on my way to district headquarters at this moment, hurricane or no hurricane," the professor said testily.

"You don't believe it?" Dan Henry persisted.

The professor grew uneasy. "No."

"Wouldn't you *like* to believe it?"

The professor looked quickly out to sea.

"Here," the policeman said, handing Dan Henry a flat brown half-pint bottle. "Sedative." He winked.

Dan Henry knocked the bottle out of the cop's hand. It broke on the pavement.

"Look up!" the professor whispered.

They turned their heads. Something huge, flat, and multi-winged was shadowed faintly on the stars.

"Oh, Lord," the officer said.

There was a burst of chiming from the thing down in the water, and violet pulses of light came up through the water and burst on the underside of the thing up in the sky.

Answering darts of tawny gold came raining down. The thing in the water stirred, and they could see the rocks move. "Tractor rays," the professor said in a husky voice. "Theoretically impossible."

"What's it going to do?" the policeman asked.

"Pick it up," the professor answered. "And take it back to wherever it comes from."

Dan Henry began to curse.

The thing in the sky slipped down, and they could feel the air throb. After a moment, the sound came to them—a distant, rumbling purr, and a high metallic shrieking.

The thing in the water heaved itself upward. It struggled against the rocks.

"We'd better get back," the professor said.

The distant sound grew stronger and beat upon their ears. The professor and the policeman retreated to the car.

But Dan Henry did not. He straightened his back and gathered his muscles. As the tawny fire came down, he leaped over the guard-rail into the water.

He swam with grim fury, thrown and sucked by the water, sputtering for breath, his feet pounding. Even so, he would not have reached the thing. But the water humped in the grip of the force that clutched at the thing, and the waves collapsed. Dan Henry's arms bit through the water with desperate precision, and just before the thing broke free, he was upon it.

"No, sir," he grunted, closing his hand on one of the struts. "Not without me. We've been through too much together." He grinned coldly at the hovering ship as they rose to meet it.

From Science Fiction to Science Fact: Sputnik and Beyond

HOW NEAR IS THE MOON?

by Judith Merril

"The exploration of outer space will dominate the affairs of mankind just as the exploration of the Western Hemisphere dominated the affairs of mankind in the sixteenth and seventeenth centuries . . .

"It is urgent that we lay our plans now . . ."

The quotation is not from a science-fiction story. It is from a speech delivered in the U. S. Senate in February, 1958, by Senate Majority Leader Lyndon Johnson, in connection with the establishment of a new Senatorial Committee to study issues involving "the exploration of outer space and the control, development, and use of astronautical resources."

When I started work on this collection, *Sputnik I* was riding high and wide in the sky overhead, still issuing the beep-beep-beep that was humanity's first Space-to-Earth broadcast. The newspapers were full of words like thrust and orbit, minitrack, ion drive, cosmic particle density, and moon rocket. The weekly news magazines were frantically replating their covers to emerge with familiar rocket ships and doughnut-shaped space station paintings: the same kind —and in some cases reprints of the same paintings—I used to carry home carefully cover-side-down on science-fiction magazines (to avoid the inevitable, "You mean you read *that stuff?*").

Nineteen fifty-seven was the year the American public learned to think of space travel in connection with escape velocity rather than escape fiction. It was the year in which man's aspirations finally landed him with one foot in heaven, reaching out gingerly for a toehold on the stars.

Unfortunately, the other foot was (is) still balancing precariously on the old, tired banana peel of international (and interracial, intercultural, interfaith, inter-you-name-it) squabbling. The psychological shock wave that swept this country in the wake of the first orbit of the Russian-made 1957 Alpha Earth Satellite—*Sputnik I*—was hardly less powerful than the one that ended the last "total" war with the explosion of the American-made atomic bomb in Japan.

This latest science-fiction dream come true did not destroy thousands of lives or millions of dollars' worth of property. It did effectively lance the swollen boil of self-satisfaction which has of late disfigured the face of the American public consciousness.

For the first time in the experience of any living Americans, we had cause to wonder seriously whether it could be remotely possible that we, as a nation, might be in some way weaker or inferior to some other people.

When the news of the ascent of the Jupiter-C *Explorer I*—1958 Alpha Earth Satellite—burst over the countryside on January 31, you could almost hear the collective national sigh of relief. Wernher von Braun's triumphant grin, reproduced on virtually every front page in the country that day, did more, I suspect, to undermine the anti-egghead, anti-science cult of smug know-nothingism than all the educators' arguments could ever do. One week later the U. S. Senate was emboldened to offer its official recognition of the Age of Space.

The same issue of *The New York Times* which reported Senator Johnson's significant words said, summing up Congressional attitudes, "critics tax the Administration with failure to grasp the implications of man's first venture into space."

Many harsher-sounding criticisms had been made since last October; but I see this one as the most realistic indictment possible—not of the Administration only, but of most of our leaders, military and political, in both parties, at all levels—which ultimately means at the level of the voter-in-the-street. In retrospect, it seems nearly incredible that either the informed citizenry of this country, or its elected representatives, could have been astonished at the events of 1957.

For more than two years before last October, ever since President Eisenhower's 1955 announcement of our plans for participation in the International Geophysical Year, a veritable flood of Project Vanguard news flowed out of Pentagon P. R. offices into the public press. Before this news flow started, in May, 1954, approximately forty-two million televiewers had seen Walt Disney's effective and accurate "Man In Space" film. Three years before that, in March 1952, copies of *Colliers'* magazine sold out overnight when an issue appeared with a rocket-ship cover headed "MAN WILL CONQUER SPACE SOON . . . *Top Scientists Tell How in 15 Pages.*"

This remarkable presentation, based on the first (1951) of the Hayden Planetarium's Space Travel Symposiums (and later published in book form by Viking as *Across the Space Frontiers),* included articles by Von Braun, astronomer Fred Whipple, space-medicine researcher Heinz Haber, space-lawyer Oscar Schechter, science-writer Willy Ley, and I.G.Y. National Chairman Joseph Kaplan. An introduction stated soberly:

"What you will read here is not science fiction. It is serious fact. Moreover, it is an urgent warning that the U. S. must immediately embark on a long-range development program to secure for the West 'space superiority' . . . the scientists of the Soviet Union, like those of the U. S., have reached the conclusion that it is now possible to establish an artificial satellite or 'space station' in which man can live and work far beyond the earth's atmosphere."

Von Braun's article on the next page began: "Within the next ten or fifteen years, the earth will have a new companion in the skies, a man-made satellite. . . ."

All this publicity was probably instrumental in the adoption by the U. S. Office of Naval Research in the summer of 1954 of a development program proposed by the American Rocket Society to place an artificial satellite in orbit by using one of Von Braun's Redstone rockets. But the publicity was by no means the only factor influencing Navy thought; as early as 1948, former Defense Secretary James Forrestal included a paragraph in his year-end report stating that official studies had been made about an earth satellite.

It is hard to reconcile all this with the apparent fact that neither the general public nor the U. S. Government were able to comprehend until after the event that the successful placement of an artificial satellite did not mean merely the last step in global armament, but the first step into a new frontier.

Long before Senator Johnson's pronouncement there was a sizable group of people here (outside the inner circle of the working rocket men) who believed firmly in the inevitability of man's venture into Space, anticipated the imminence of that adventure, and were willing to listen to the prophets of the Age of Space.

To the best of my knowledge, that 1952 issue of *Collier's* was the first popular general fiction magazine to take Space seriously. But articles (not just stories), and frequently authoritative ones, have appeared in s-f magazines as long as they have existed. "The Dawn of The Conquest of Space," by Willy Ley, for example, appeared in *Astounding* in 1937; "Orbits, Take-Offs, and Landings," also by Ley, in the same magazine, came a year later. Arthur C. Clarke wrote "We Can Rocket to the Moon—*Now!*" for the British *Tales of Wonder* in 1939. "Luna Observatory No. I," in *Astounding,* 1940, was the work of Palomar astronomer R. S. Richardson. The same year, Ley wrote "Stations in Space" for *Amazing Stories;* in 1949, he wrote

a comprehensive four-part series for *Startling Stories* called "The Road to Space Travel." That year, also, *New Worlds* published Clarke's "The Shape of Ships to Come."

These are not isolated examples; they are selected for the names of authors reasonably familiar to the general public, and for their self-explanatory titles. *Astounding,* for instance, has averaged one serious scientific article per issue for about the last twenty years. *Galaxy* has carried a column by Willy Ley each month since 1952; *Venture* now runs a science article by Dr. Isaac Asimov in every issue.

These articles, written in many cases by top experts, have covered not only space flight (and such associated topics as fuel chemistry, electronics, rocketry, nuclear physics, astronomy, cosmology, etc.) but a range of subject matter that includes theoretical mathematics, linguistics, biochemistry, psychiatry, cybernetics, anthropology, and medicine.

"Our age, like most others, lives on two planes," said Bertrand Russell in a recent *London Times* article. "There is one world of the things that we profess, which cannot be controverted without enduring some kind of penalty. There is another quite different world, consisting of the facts which we know, but dare not acknowledge except in nightmare fantasies. This has had the curious result that there is more truth in fiction which professes to be mere imagination than in serious works which profess to give the facts.

"One illustration of this state of affairs is science fiction, which has been viewed as consisting of fantasies for the amusement of adolescents. We are gradually being compelled to view it, instead, as intelligent anticipation—much more intelligent, in fact, than the anticipations of statesmen."

Mr. Russell's orchids for s-f's intelligence are nice to have; but I take issue with his choice of praise. Science fiction is not more intelligent than other literary or philosophic disciplines; *it is more thoughtful.* It is not better-informed; only *more open to new information.* And it is interesting,

and to the point, that these *are* adolescent qualities—the best qualities of adolescents. I think that the fantasies of space-fiction were perhaps a necessary growing-period to precede Space itself . . . and then perhaps the fantasies of 'sociological-fiction' being written now are another phase of an adolescent race's preparations for the adult act of leaving home?

"Don't tell me man doesn't belong out there," said Von Braun to reporters when *Explorer* hit the sky. "Man belongs wherever he wants to go—and he'll do plenty well when he gets there."

The old team pep talk? Maybe so, but I believe it. I expect, in my own lifetime, to see men traveling in space. And when it happens I will feel a special, personal identification because I know that my kind of escape-fiction provided a part of the necessary initial power for the space-traveler's escape velocity.

The speculative imaginations of science-fiction writers may or may not have made any direct contribution to rocket research. But science-fiction, and the way of thinking that it encourages, has served as a sort of spark from which scientific imaginations have been lighted.

TRANSITION—FROM FANTASY TO SCIENCE

by Arthur C. Clarke

Arthur C. Clarke is best known to American audiences as the author of the Book-of-the-Month Club selection of a few years back, *The Exploration of Space*, and of some more recent reporting on skin-diving in the coral seas. He is a fellow of the British Astronomical Society, and a former President of the British Interplanetary Society. He has also managed to turn out a great deal of top-notch science-fiction during the last twelve years: most notably the sensitive and moving *Childhood's End*.

The following selection is from his most recent book, *The*

Making of a Moon. The excerpts reprinted here are from the chapter entitled, "Transition—from Fantasy to Science," in which the author tells some of the story-behind-the-story of how the Earth Satellite Program came into being.

The first scientist to have a clear conception of the importance of artificial satellites was Hermann Oberth, who is widely and rightly regarded as the father of modern astronautics. In his classic work *Wege zur Raumschiffahrt (The Way to Space Flight)* Oberth described in careful detail most of the possible uses of space stations—and this in a book the first edition of which appeared as long ago as 1924!

* * *

His most imaginative suggestion was the proposal that huge mirrors might be constructed in space to reflect sunlight onto the Earth. Owing to the weightless conditions which prevail in all freely orbiting bodies, it would be possible to build mirrors literally miles in diameter out of a very small amount of material. Such floating mirrors might produce alterations in the intensity of sunlight over large areas of the Earth, thus preventing frosts, controlling wind directions, and making the Arctic and Antarctic regions more habitable.

* * *

The manned space station appealed strongly to the imaginations of the European rocket enthusiasts of the 1930's. One Captain Potočnik, writing under the pen name Hermann Noordung, produced detailed plans for an elaborate three-unit station consisting of observatory, power plant and living quarters. But all these speculations, fascinating though they were, were some fifty or more years premature. The less glamorous but more practical unmanned satellites which would have to come first received scarcely any publicity or attention.

When space exploration began to receive serious notice after the Second World War, interest in artificial satellites

was immediately revived. Even official circles interested themselves in satellite studies, as was revealed by Secretary of Defense Forrestal in his report on the National Military Establishment in 1948. This was the first indication that the United States had concerned itself with extraterrestrial matters, but the Forrestal report gave very little definite information. It merely stated that each of the services had been conducting studies of the subject, and that a coordinating committee had been established to prevent unnecessary overlapping.

In October, 1948, one of the first fruits of this American research made its appearance in the *Journal of Applied Physics*. It was in the form of a paper by George Grimminger, entitled "Probability That a Meteorite Will Hit or Penetrate a Body Situated in the Vicinity of the Earth." One of the most interesting things about this paper was its source: it had originally been a report prepared by the supersecret RAND Corporation for the United States Air Force. The RAND (*R*esearch *AN*d *D*evelopment) Corporation is a somewhat mysterious body which prepares confidential studies on subjects ranging from Russian foreign policy to the application of the Theory of Games to strategy, and Grimminger's paper was only one of a number of reports relating to satellites. It came to the reassuring conclusion that meteors were not a really serious danger to permanent structures in space, since even a modest thickness of hull would give a high degree of protection.

In the early 1950's, more and more attention began to be focused on artificial satellites, and the useful abbreviation ESV (*E*arth *S*atellite *V*ehicle) came into general use. The advocates of ESV's fell into two distinct camps; one contained Dr. Wernher von Braun, while the other contained practically everyone else. This was not quite so unequal a division as it might seem at first sight, and with the assistance of *Collier's Magazine*, Dr. von Braun was able to make a large fraction of the United States extremely satellite-conscious in early 1952.

His thesis (later embodied in book form in the volume *Across the Space Frontier*) was that a manned space station

could be built with existing rocket techniques, and that in addition to its uses as a scientific observatory it could also be an orbital fortress, dominating the Earth. It would, Von Braun argued persuasively, be an impregnable launching base for atomic missiles, and it was up to the United States to see that nobody else built one first.

This attempt to scare the U.S. into conquering space was not very well received by most other rocket scientists, even those who were great personal admirers of Dr. von Braun. We will return later to the military uses of satellites, which undoubtedly exist, but it can be said here and now that the conception of the invulnerable space fortress has few adherents today.

* * *

In addition to Dr. von Braun's campaign, two other events in the early 1950's had helped to focus attention on the importance of satellites. The Second Congress of the International Astronautical Federation took place in London in September, 1951, under the aegis of the British Interplanetary Society, and the First Symposium on Space Flight was held in New York a month later at the Hayden Planetarium. The theme of both meetings was the artificial satellite, so it will be seen that the subject was—if one may use a somewhat inadequate metaphor—very much in the air.

* * *

Early 1953 provided an interesting example of public relations techniques as applied to satellites. Some years before, an energetic young physicist named Fred Singer had been appointed Scientific Liaison Officer to the United States Embassy in London, and as he had already been connected with high-altitude rocket research it was not surprising that his thoughts turned wistfully toward satellite vehicles soon after he made contact with the British Interplanetary Society. One of the best ways of promoting this idea, he decided, was to find a good name for the proposed ESV.

The name was concocted one evening in a London club by Dr. Singer, A. V. Cleaver (past chairman of the B.I.S.

and now head of rocket development at Rolls Royce) and myself. After a great deal of doodling we contrived the abbreviation MOUSE (*M*inimum *O*rbital *U*nmanned *S*atellite of *E*arth), and during the next couple of years this name received world-wide publicity. There seemed something much more friendly and unpretentious about a modest MOUSE—which would weigh less than a hundred pounds—than an orbital space fortress bristling with atomic weapons.

Dr. Singer's proposals, backed by his practical knowledge of high-altitude rocket instrumentation, had a great deal of influence in scientific circles. When he returned to the United States to take up the post of Associate Professor of Physics at the University of Maryland, he was able to develop his ideas still further, and he presented some of them at the Third Symposium on Space Travel at the Hayden Planetarium, New York, on May 4, 1954. Among Dr. Singer's most important suggestions was the proposal that MOUSE should spin on its axis so that it behaved like a gyroscope, always facing the same direction in space. He also pointed out the advantages of a satellite orbit that passed over the Earth's Poles, so that it could explore the variations in our planet's magnetic field.

* * *

This type of promotion—propaganda, if you like—was essential before the bulk of practicing scientists would take the idea of the satellite seriously. The change of attitude on the subject has been so swift that one sometimes forgets that only a few years ago the entire conception of artificial moons was regarded as pure fantasy by all except a handful of enthusiasts. Even those who conceded that such things might be possible failed to see that they would be of any use.

A perfect example of this was given by one leading scientist from whom, when I was Chairman of the Hayden Planetarium's Third Symposium on Space Flight, I requested a paper on the value of the satellite in his particular

field of research. He replied that he couldn't write such a lecture, because satellites wouldn't be of any use to him. Disappointed but still game, I wrote back saying that if this was so he should write a paper to stop the satellite salesmen from talking nonsense and wasting people's time.

He rather reluctantly agreed, and by the time he had finished his paper he was as enthusiastic as anyone who had been boosting ESV's for years. He has been lecturing and writing about them ever since, is heavily involved in the IGY program, and, I am sure, has completely forgotten that he ever had any reservations about the scientific uses of satellites.

SPUTNIK: ONE REASON WHY WE LOST

by G. Harry Stine

Before the fifth of October, 1957, rocket engineer G. Harry Stine was better known to the reading public under his science-fiction pseudonym of Lee Correy. National prominence came suddenly with his statement in a news interview about *Sputnik*, that "We better catch up fast, or we're dead." *Life* magazine quoted him as also saying, "We lost five years because nobody here would listen to men of vision. . . . We're a smug, arrogant people who just sat dumb, fat and happy, underestimating Russia." Shortly afterward, he was fired from his job.

Mr. Stine worked for several years at White Sands, in rocket research, and is the author of two recent books on satellites and Space—*Earth Satellites* and *Rocket Power and Space Flight*. He is now president of his own Model Missiles, Inc., the first company to produce rocket-powered, scale-model missiles commercially. "I am probably the only rocketeer in the country," Mr. Stine writes, "who can sit down, design a missile, go out to the shop, build it, then take it out and test it."

In 1775, a group of undisciplined, unruly Massachusetts riflemen "fired the shot heard round the world." In October, 1957, somewhere in the Kara Kum Desert east of the Caspian Sea, a group of Communist rocketmen fired a shot which was, literally, heard around the world. The "beep-beep-beep" of the *sputnik,* the Soviet unmanned satellite, came to the ears of anyone in the world who had a radio capable of tuning to 20 or 40 megacycles.

This contemporary "shot heard round the world" shook American citizens to their very cores. It was unthinkable that a communistic society could conquer space before we could. After all, weren't we secure in our belief that our country could build anything bigger and faster and better than any other country?

The first reaction of Americans was disbelief. It couldn't have happened! It was communist propaganda! But . . . the persistent "beep-beep-beep" of the *sputnik* came from countless radio loudspeakers.

The second reaction followed within several days. Everyone in the United States looked around and wondered, "How did it happen? Why did the Russian communists beat us to the draw?" After all, didn't we have the world's first unmanned satellite and its vehicle, almost ready to go but somehow plagued with troubles which had set it five months behind schedule?

There are many reasons why it happened the way it did. Some of them are contemporary, some of them can be remedied, but some of them go far back into our history. No single one of us is to blame; all of us are to blame, and even our ancestors must share part of that blame because they formulated the spirit and thought of this country.

Although this country is the finest thing that has happened to the human race in all history, it has had its faults and shortcomings from the very beginning. This is something that few people realize, perhaps because of the fact that our very history has made us into a confident, almost arrogant people secure in our belief in American Perfectibility, a belief which was well founded in our culture by 1830.

Almost everyone has forgotten just what this country was like when it began a rather precarious existence in 1776. Few people realize that the American colonies comprised a mere 2,500,000 people existing in small scattered communities up and down the Atlantic seaboard of the North American continent. We were a poor and motley collection of people, all distrusting each other and hating the British Crown. In the 1770's, there were only five men in the colonies who spent more than $10,000 a year on themselves and their families. Only half of the towns in Massachusetts had schools, but that colony levied a one shilling fine on any parent who neglected his children's education! The colony of Virginia was deliberately illiterate; there were very few schooled people even among the planters. (These facts will probably bring the wrath of certain organizations down around my head, but they are facts nonetheless!) There were in all the thirteen colonies fewer than 300 men in college, and the colleges were graduating only 50 men a year.

Towering far above the mutual distrust of the colonies for each other and their united hatred for the Crown was the awful fear of the Wilderness which began less than 100 miles west of the coastline and ran for an unknown distance to the Pacific. Beyond the scattered towns, villages, and farms were the silent, brooding forest, the endless, sweeping plains, and the towering, remorseless mountains. It was unknown, but it had to be conquered.

This awareness of the Wilderness touched every facet of American life at the time. To some extent, it still does. It determined our national character and the nature and course of our science and technology. We had no use for petty theories and useless hypotheses: leave those to the Europeans who did not face a wilderness! We needed tools and techniques for the conquest of the Wilderness.

As a result, Americans became more pragmatic than any people in history, including the Romans. The pragmatic philosophy itself is an American product. Our science became a strategy for exploring and settling the unknown world to the west of us.

And what did we have to start with in this conquest of the Wilderness? *Nothing.* We had no scientists, no engineers. We had tradesmen, but these tradesmen were quite inferior to the European craftsmen. In America a tradesman could not specialize; he had to be a jack-of-all-trades in order to make any sort of a living at all. Because of the British Mercantile Treaty, Americans were forbidden to engage in the arts and crafts based on natural phenomena; this deprived Americans of the necessary incentive to pursue these crafts. When we won our independence, we found ourselves woefully short of everything needed to fight the Wilderness.

The first fifty years of our history as a country were devoted to attempting to remedy this situation. We developed Yankee Ingenuity. We became gadgeteers, interested in the pragmatic application of ideas and not in the ideas themselves. Our original scientists and engineers had other professions—Franklin was famed as a printer in the United States, but as a scientist abroad; Robert Fulton was an artist, as was Morse.

By 1830, fifty years after our fight for independence, we had developed the concept of Manifest Destiny and the American Perfectibility. Strangely enough, we did this without developing any scientists or engineers of real note. Until about 1850, an engineer was a man who erected and worked the engines of war—towers, catapults and fortifications—and was considered only a skilled craftsman. There were no engineering colleges or curriculums in America until after the Civil War.

Only 500 patents had been granted by 1838, yet Americans had developed—probably in self-defense—a belief that "The Yankee Nation Can Beat All Creation!" Practical inventors were glorified in the American mind of the time.

And American inventors starved when they persisted in working with devices which had, as far as the layman was concerned, no practical value whatsoever.

Our tune had changed by the time the Centennial rolled around in 1876. We had just fought the greatest war in our history and the first of the modern wars. Gold had been

discovered in the West, and, lured by that golden promise, men had won the West, a portion of the continent which had hitherto been peopled only by trappers and explorers. (Who counted Mexicans and Indians?)

Our engineering had also, in a way, blossomed. We had pride in our past engineering achievements now, and we put our reliance on precedent in our engineering design. Our railway coaches resembled the stagecoaches from which their design had been taken. Our architecture embodied concepts of Greece and Rome while being based on iron structures. We did not like radical designs or ideas.

(We still don't. The popularity of one of the new portable electric mixers is based on the fact that it resembles an electric iron, a fact which came to light in a study done to determine just what the mixer should look like to have the greatest sales appeal!)

From the 1870's through the early 1900's, our invention and science continued to be dedicated to individual freedom. But during the First World War, a new note crept in: the concept of a "team." Our practical science and technology took on such wide ramifications during that period that it became apparent that no one man could know it all. Research teams developed.

And while the rise of the team concept was going on, a man by the name of Langmuir was turned loose in the General Electric laboratories, working on what he pleased, on what interested him, on what nudged his curiosity. The serendipitous* results of Langmuir's work, along with others such as Steinmetz, made General Electric into the largest corporation of its kind, controlling more money and manpower than the empires of the Hohenzollerns or the Napoleons. Inventions and science dedicated to individual freedom had created untold wealth and personal power as a byproduct.

* Serendipity—the gift of finding valuable or agreeable things not sought for; a word coined by Walpole, in allusion to a tale, "The Three Princes of Serendip," who in their travels were always discovering, by chance or by sagacity, things they did not seek.

Yet the rise of the team concept continued. The lone inventor working in his basement shop became an item in the history books. The inventors and scientists became "other-directed" men, always prodding for an improvised method or technique for use in the particular company's product, always looking for the obvious as determined by conferences, always attempting to satisfy the desires of the Front Office run by lawyers, bankers, and others who didn't know an electron from Uncle George. It became the vogue in these teams to "play safe," to "get along," to get that raise or that directorship of the lab by not taking chances.

There was no room, no place, no niche in these teams for the individualistic inventor who had developed the devices and basic principles on which our entire technology is based.

In addition, our present-day science is spoiled . . . spoiled rotten. The interferometer with which Slipher discovered the red-shift of the far galaxies at Lowell Observatory would be thrown into the junk heap by the physics department of the country's poorest college. I know; I've seen it. A scientist or research team today feels it must have multi-million-dollar setups of test equipment and rooms full of very impressive gadgetry in order to justify the fact that it is accomplishing something. We may have forgotten an important factor in scientific work: it is not the appearance or cost or amount of equipment that counts. It is the *mind* of the man who operates the equipment.

Why did the communists beat us into space with their *sputnik?* It is not because they have a better system of living together, nor because they have better scientists.

It may be because we have consistently underestimated them. The predominant belief of a hundred years ago that "The Yankee Nation Can Beat All Creation" still lingers with us, even in this age of science and with the knowledge that "Science Knows No Country."

Basically, it boils down to four points fixed in our nation's history and development:

1. Our pragmatic approach to knowledge was excellent for the conquest of the Wilderness, but may not be quite

so wonderful in the conquest of the greater Unknown. We distrust basic scientific research that does not know what answers it may get.

2. We have a historical lack of appreciation of science itself. The Europeans don't. Until very recently, the greater part of the basic research in science was carried out in Europe. We do not basically understand or appreciate the nature of serendipitous discoveries.

3. Our science is spoiled. We do not believe we can accomplish results with simple equipment. We feel we must add complexity to complexity to achieve results. We understand gadgets and feel we *must* have them to bolster our thinking, for we do not truly understand what thinking is.

4. The growth of the team in our scientific and engineering work has nearly killed the individualistic approach which produced the basic groundwork for our present-day technology. If a team member speaks out for himself, he becomes dangerous to the integrity of the team.

What can we do in order to prevent a future *sputnik* incident from putting us firmly in the back seat in terms of national prestige and personal pride in our country? In the first place, aping the opposition won't do us a bit of good; our national beliefs will not tolerate their methods or approach. Nor will it help to go into panic and hysteria, grabbing at every straw in the wind and falling back on a shotgun approach.

If we are to survive as a nation in a world of science and an age of flight into space, we must gain a better understanding of our own scientific shortcomings.

We must learn to temper our pragmatic approach with a realization that apparently useless work can yield tremendous benefits.

We must learn to appreciate basic knowledge itself.

We must realize that our knowledge comes from the mind of man and not from devices, and that knowledge may come in strange ways from the minds of men.

We have conquered the Wilderness of our forefathers and now lie athwart a continent, 170,000,000 strong, with

a way of life which the founding fathers could not possibly have envisioned. We have created our own type of Utopia, carrying with us the beliefs of an age long dead into an age where distance is measured only in terms of the time necessary to traverse it. The sovereign nation of arrogant Yankee gadgeteers with a Manifest Destiny has arisen to take its place among the nations of the world with an overwhelming desire to be liked by everyone; and has managed, in spite of blunders and shortcomings and red tape and getting caught standing when the contest started, to survive and grow.

We now stand on the edge of a greater Wilderness. Perhaps now we should stop to consider ourselves and decide where we want to go from here.

In spite of the fact that the *sputnik* was perhaps the worst blow we have received in our so-called "soft" solar plexus, it may turn out to be just what we needed.

GOING UP!

by Dennis Driscoll

This article is a slightly shortened version of the prize-winner in a contest run by *Boys' Life* magazine last spring. When I asked the author to send me some information about himself, he replied:

"My chief interests are in physics, chemistry and mathematics. This past summer I worked in the Aeronautical Laboratory at the University of Notre Dame and am planning to work there again this summer. At the present time, I am starting to develop an instrument which I call the Photo-Ray. From this, I hope to compare the actual refraction of light by optical pieces with geometrically proven formulas. I am sixteen and a Junior at Central High School in South Bend, Indiana."

Although some of the questions posed in the article have since been answered (and many more undoubtedly will have been by publication time) it remains a provocative survey of

the problems of "Space Medicine"—the study of man's biological and psychological capacity to survive in Space. It is in this area that some of the greatest challenges to the future of space flight now lie; and it is in the ability of a teen-ager to write such an article that our greatest potential for that future rests.

When will man be able to travel in space? Engineers can put a craft up there, but can the human body stand the strange environment? How much acceleration can the human body stand and for how long? What are the dangers of cosmic and ultraviolet rays beyond the earth's atmosphere? How can man be protected against the intense concentration of radiant heat? What would happen to humans if the pressurized cabin should spring a leak or be punctured by meteors? How will man adapt himself to weightlessness? Some of the questions do have answers, but there are many more that don't.*

Scientists now are working on the problem of gravity which must be licked before man can enter space. At the present time they have come up with several theories on how to make gravity. So far they are not satisfactory enough for man's needs. One of the theories is that when the outside air indicator of a spaceship registers almost zero, the nose will open up with fins forming the shape of an airplane propeller. This will start the ship spinning, which will bring our old friend centrifugal force into the act. When the centrifugal force gets to a certain point, the fins will retract back into the nose. As you can see, this is not too good an idea, because it will not permit free movement.

Food will be cooked by induction heating. This heat will come from the highly intense radiant heat rays. Knives, forks, and spoons will be replaced by a tool which is a cross between scissors and tweezers. Drinking will be done from a nippled plastic bag, from which you will squeeze the

* As of February, 1958, a good many additional answers had been found: some supplied by Major David G. Simons' record-breaking 19-mile-high balloon flight in September, 1957; some by data broadcast from *Explorer;* some by Airman Donald Farrell's week-long stay in the "space cabin" at Randolph Field.

liquid into your mouth. Liquid in a cup would merely ball up and have to be jogged loose.

A final manifestation of weightlessness concerns the air around you, which brings up the problem of ventilation. Since air currents are caused by lighter air rising to the top and vice versa for the cold air, it's thought that there will be no air movements. When man exhales his breath, it will hang in front of him as a moist cloud in which the waste carbon dioxide will increase until the mixture becomes life-extinguishing. Scientists will beat this problem by using the chemical baths which remove carbon dioxide and moisture, as already used in submarines. But this does not take care of the problem of air movements. This is one of the problems which will be ironed out in the near future.

As the spaceship emerges from the depths of the protective covering of the earth's atmosphere, it will constantly be bombarded by cosmic and ultraviolet rays. Quite recently, extreme high-altitude rocket observations have led to the discovery of a more alarming kind of cosmic ray—"heavy particle" cosmic rays which are composed of iron and calcium nuclei.

These compare with lightweight particles as cannonballs do with bullets. An alpha (type of ray) particle can pass through a living cell without serious damage; an iron or calcium particle would wreck the cell. Scientists still are not sure what these cosmic rays can do because nobody has as yet been exposed to them. Space medicine experts think that the cosmic rays may perforate the body with wounds such as a sterilized needle would leave. They would also cause flashes of bright light as they strike the eye retina, perhaps with permanent damage to the vision. Scientists think that they might be able to stop radiation from entering the ship by building an electromagnet into the spaceship which would deflect these rays enough so as not to affect the health of man.

Space voyagers may face hazards, not only from collision with big meteors but from the erosive high-speed impact of dustlike micrometeors. These micrometeors fly through space with speeds up to fifty miles per second.

Scientists figure the erosion of the spaceship caused by micrometeors can be stopped by polishing the outside of the ship to a very high, smooth and lustrous finish. This will not stop the larger meteors so scientists had to figure out another theory: build a bumper guard around the ship to stop any meteors from protruding into the main hull.

One of the big problems of getting the ship out of the atmosphere is acceleration and its effects on man. Suppose you are traveling in a car at the rate of thirty miles per hour, and you push the accelerator pedal down, increasing your speed to forty miles per hour. The acceleration period was the time when you increased your speed from thirty to forty miles per hour.

As you are taking off in a rocket ship, you will feel the effects of acceleration. At first you may gasp for your breath; your chest may feel heavy and out of proportion; you'll think a dozen elephants are standing on you. Acceleration is measured as 1, 2, 3, 4, 5, 6, 7, 8 or 9 g's.

This letter "g" stands for the acceleration that makes the body weight equal to gravity. Therefore, if you weigh 100 pounds, at 2g's you will weigh 200 pounds, and so on. You will feel faint and dizzy, and you may even become unconscious or "blackout," as acceleration increases.

You have all heard of the "black-out" period which some pilots of high-speed airplanes undergo. Scientists think that these "blackouts" are caused by a "fluid shift" which distends the pilot's lower blood vessels, and partially drains the blood from the brain. Scientists find that if the crew is in a prone position (lying flat) "blackouts" can be limited to a short time, perhaps even avoided. Experimental whirling of men in the end of a centrifuge arm in the prone position has proven that no physiological damage is done.

When the spaceship leaves the protective covering of the atmosphere which serves as a miles-thick attic insulation, it will be exposed to great extremes of temperature. The direct solar heat-radiation, plus the heat reflected from the earth's surface could make it uncomfortably hot in the cabin. When the spaceship passes in the shadow of the earth or some other heavenly body, there will be extreme coldness. Scien-

tists find that in our atmosphere the temperature varies from minus 67 degrees F. to 4,000 degrees F. when the sun is shining.

One plan to ease the cooling and heating extremes will be to provide a double-wall of insulation against excessive heat, which will be further minimized by painting the hull of the ship white. Now turning to the other extreme, heating will be accomplished by capturing solar heat and storing it. Storage of this heat is still a big problem, but you may be sure that scientists will solve this problem soon. Heat loss through windows can be prevented by coating the window with a very thin layer of gold—to be exact, two millionths of an inch, or about a tenth of a light wave—furthermore, this amount will not reduce the quality of transparency.

"Explosive decompression," an effect like a tire blowout, would be a major emergency in space. Scientists now are testing pressure changes on animals. They find that this problem is not as bad as predicted.

Once it was believed that a major leak at 70,000 feet would cause the body literally to explode (this theory was based on the observation of deep-sea fish). Then it was found that because of bone structure in the mammal, men could stand up better under pressure changes. They discovered this after tests at Randolph Field Laboratories, when scientists were amazed at the punishment a mammal can take.

Acting as his own subject, Dr. Ulrich Luft, who was in charge of the test, was locked in an air-tight chamber; then scientists pumped the air out of another chamber which surrounded his chamber to the equivalent of 48,000 feet. Then his chamber was opened up, allowing all of the pressure to rush into the other chamber. The results showed that it did him no harm. Monkeys have survived pressure changes up to 75,000 feet. One monkey survived a dozen decompression tests within a twenty-four-hour period. From these tests space travel will be made safer.

As you step out into space, a pair of work-overalls will not be sufficient protection. So scientists have developed a special article of clothing called a space suit. These suits

will have to be very strong. This difficulty does not arise in the case of the deep-sea diving suit where the greater pressure is outside. Even though space suits have to be made strong, they also have to be flexible. On a smaller satellite such as the moon, weight would not be too important, because on the moon gravity is one-sixth of the earth's. (On the moon it would be six times easier to lift a sledge hammer, but just as hard to swing it.) A more serious problem is temperature control, particularly on a body like the moon, where if one moved a few yards from sunlight to a shadow the temperature could drop 400 degrees F. in a matter of seconds. Since air is a poor conductor of heat and coldness, the suits may have a layer of air for insulation purposes. This air will be kept at a constant and comfortable temperature in all the different parts of the suit, providing uniform protection.

Some say space travel will come within fifty years, others say sooner, and some say later. When the time for space travel arrives (it surely will), I'm sure man will be absolutely ready for it. The space comics and stories which you are reading now *will* come true, just as the books and stories of Buck Rogers, when he lay in bed wondering of the jet age, have come true. One thing that you can rely on, the men who will go on this first expedition are probably already alive. So you see, space travel is already here!

WHERE DO WE GO FROM HERE?

Thoughts on Some Future Horizons

by Willy Ley

Willy Ley was not quite twenty years old when his first book on rockets and space travel was published in Germany in 1926. Two years later, he was editor and co-author of *The*

Possibility of Space Travel, a collaboration by seven top authorities of the newly formed *Verein für Raumschiffahrt* (German Rocket Society). The Society became the first active experimental rocket group and attracted enthusiasts from all over Europe. (Assisting at a rocket demonstration in 1930 was a new member of the VfR, a young student named Wernher von Braun.)

Hitler's rise to power in Germany led to the dissolution of the group in 1933, and both events contributed to Ley's decision to leave Germany the following year. It was ten years —and 64 articles—later that his first book, *Rockets* was published in the United States. This slim volume proved to be the forerunner of his comprehensive *Rockets, Missiles, and Space Travel*.

Mr. Ley's standing as a prophet of science is well established. The following selection, outlining his predictions for the future, was written for this book on request.

Some things are easy to predict. More research satellites this year. Several shots to the moon, not necessarily during the calendar year of 1958 but within a year from writing this. Also the first satellite with a TV camera. Since the resolution of a TV screen is very poor—try to ascertain what kind of earrings an actress wears, or even whether she wears earrings, unless she is in close-up—this satellite TV camera will not "see" (or show) anything smaller than ten miles in diameter. This, however, would still be most useful to weather forecasters. And, of course, there is always the possibility that somebody will come up with an entirely new type of TV which has good resolution.

Next year will also see the first flight to an altitude of one hundred miles performed by a man, most likely Captain Kincheloe, and the first manned flight into an orbit around the earth is only three or four years farther in the future. Then comes the manned space station. Then the piloted trip around the moon. After that the first explorations of the moon and of the neighboring planets.

All this, as far as one can foretell, with only somewhat unusual chemical fuels. This statement will hardly disappoint anybody save, possibly, old-time science-fiction

readers who have, so to speak, grown up equating space travel and atomic energy.

If today we hitched up an atomic reactor to supply the energy for a rocket motor, we would end up with 2,200 feet per second of exhaust velocity, as compared to the 7,700 feet per second generated by a motor fueled with alcohol and liquid oxygen. Moreover, the gases roaring out at 7,700 feet per second are carbon dioxide and water vapor, while whatever emerges from the atomic motor would probably be highly radioactive. The longer one looks at atomic energy for rocket propulsion the poorer it looks. It still boils down to something I said years ago: unless somebody makes a radically new discovery in the field of atomic energy, the rockets will continue to burn chemical fuels.

Well, doesn't *anybody* have any new ideas? How about abolishing, nullifying, neutralizing gravity? I have to quote myself once more by pointing out that there is absolutely no known starting point for an investigation of properties, supposed to exist, that are peculiar to gravity. And as long as you don't know how to start an investigation, you obviously can't get any results—sheafs of wild newspaper stories notwithstanding. Recently, on the occasion of a lecture to a southern university, I was told by the gentleman who showed me around that Professor So-and-So had felt rather injured when he read my statement. Professor So-and-So has spent the last four and a half years in an intensive study of gravity. Admittedly he hasn't had any success.

No, I don't think that gravity is, of necessity, forever untouchable. But before I believe that it can be really defeated, I'll have to see a good theory that both makes sense and offers a few opportunities.

The horizon as regards power sources is even more uncertain, but with a few flashes of light in some places. The very simple fact is that, in one area at least, the type of capitalism which grew out of the industrial revolution

has behaved in a most self-defeating manner: It has used up its capital. Capital, in this case, is the fossil fuels—coal and oil. If there is any coal left in Europe by the year 2000, it will only be because in the interim something better has been developed. The same statement is true if you say "western hemisphere" and add one century to the date.

As power needs go up by the hour, the capital of the fossil fuels dwindles by the hour. It cannot be replaced in the same form. It is in limited supply, even though that supply once looked large. Without new science the picture would be all black.

The flashes of light come from several places. One is uranium fission. This, of course, just means tapping a new kind of capital which, once more, looks large at the present moment. It can be used for something bankers call a "bridging credit." At the end of the uranium bridge is hydrogen fusion. Both in the United States and in England the first steps toward hydrogen fusion for power have been made. We can't tell how long it will take until the end of the bridge is reached. But the uranium bridge is fairly long.

There is, however, a theory that you must not touch capital; instead you are supposed to create an income, spend a self-renewing supply of money. In the realm of energy sources there are such self-renewing supplies. The level difference between a mountain lake and the valley below is such a self-renewing supply. So is the power of the tides. So is the difference in thermal level between ocean water at the surface and ocean water near the bottom. So is solar energy.

All have drawbacks. Solar energy is intermittent because of day and night—not to speak of cloud cover. Tidal energy appears in useful form only where the shore has the right shape. To tap the thermal level in the ocean waters—warm near the surface and cold at the bottom—you need large and expensive equipment, also a warm ocean.

But growing plants are self-renewing income too. One of the best liquid fuels is alcohol, which comes from plants that you can grow virtually without limit.

How about the other kind of capital which is called minerals? Because they are inorganic, they are, of course, in much better supply than fossil fuels. But even here you have the perpetual self-renewing source—the oceans. The tin which was concentrated from the ore and then ends up on the city dump must, in time, end up in the ocean. Long tables have been compiled about the metals (and minerals) contained in one mile of ocean water. Some, like magnesium, are worth industrial concentration into magnesium metal. Others, which might be valuable if concentrated, are impractical to extract because they are too finely distributed.

Admittedly there has been no need for this yet, but why think only in terms of pipes, pumps, coils and so forth when the problem is to concentrate something? Selenium is a fairly rare element, but sometimes, without wanting to, you get it in concentration because certain plants do the concentrating. And it seems that among the plants which formed the British coal there were some that concentrated germanium. At least that is the simplest hypothesis which accounts for the unexpectedly high germanium content of some coal from England. We might do worse than to start looking for plants which are likely to concentrate things we want.

So where do we go from here?

We can go on with the essentially simple, but in detail very complicated, business of living, with the assurance that we don't have to do without energy or raw materials. Most especially we can be sure that the next generations won't run out of work, or of discoveries to be made. The new horizons are just beginning to unroll, and contentment lies largely in the knowledge that one can do something.

SCIENCE FICTION STILL LEADS SCIENCE FACT

by Anthony Boucher

The author of this article is a devotee of football, the opera and the limerick, of Gilbert and Sullivan, Sherlock Holmes, *Alice In Wonderland* and Pogo; a student of history and criminology, mathematics and theology. He is also a founder, past president, and active member of the Mystery Writers of America; regular book reviewer for both *The New York Times* and *New York Herald Tribune*; author of numerous short stories, novels, articles, verse, and radio and television dramas; consulting editor for a line of detective books; and editor, until a short time ago, of *Fantasy and Science Fiction*.

Author, editor, critic—Mr. Boucher has played a uniquely influential role in furthering the cause and quality of science-fiction through the years.

For the past several decades the word "space" has connoted science-fiction to the general public, and such words as "space suit," "space ship," "space flight" have seemed to possess about the same degree of reality as zap-guns and Bug-Eyed Monsters.

Now, in an interesting reversal of opinion, science-fiction is looked upon in some quarters as no longer wildly imaginative but as prosaically passé. Space, it is now patent, is for real and we have entered it, so who needs fiction about it? And uninformed reporters go on to write of the latest scientific project as "outstripping the dreams of the science-fiction writer."

Well, from what we have seen to date, it takes a little time to outstrip or even to catch up with those dreams.

* * *

NOTE: Limitations of space prevented the reprinting of this article in its entirety as it appeared in the *New York Times Sunday Magazine*. The section omitted is a documented history of science-fiction, with running commentary, from Lucian's *True History* in 160 A.D. up to date.

The physical sciences have slipped into the background in the large body of modern science-fiction. In many stories the primary emphasis is on fiction rather than on science: that is, the stress is on the characters and their problems, their conflicts, their emotions as determined to some extent by the future civilizations in which they live. (But if the Greek tragedies of 2,400 years ago are still emotionally meaningful, these future conflicts cannot be wholly alien to us.)

When science is emphasized as strongly as fiction, the science is apt to be a non-physical one: sociology, anthropology, psychology. The first two are excellent vehicles for satires on our own mores and institutions (historically, one of science-fiction's prime functions); the third has developed, particularly under the tutelage of John W. Campbell Jr., editor of *Astounding Science Fiction*, into what is known to the indoctrinated as "psionics," a fiction-science which embraces the Duke University researches in extrasensory perception and other "psi" faculties together with any other unexplored frontiers of the mind, including sympathetic magic. (And if you are inclined to smile at the notion, by now fairly common in science-fiction, of a space ship driven by mental powers, remember how you felt only last year about the feasibility of a rocket-driven space ship.)

Twenty years ago science fiction readers were taking for granted television, atomic bombs, peacetime atomic power, cybernetic machines, artificial satellites—not as special discoveries in a given story but as part of the accustomed background of the future.

That accustomed background includes other items now probable—according to varying non-fiction estimates—within your lifetime, your son's or your grandson's: worldwide television, broadcast from a satellite; an orbiting space platform, used as a research center and fueling station (and sometimes as an armed threat—but improbably, since it would of necessity be so vulnerable); a domed city on the moon, again for research and as a way station and also perhaps as a low-gravity sanitarium; the exploration and even-

tual colonization of the more habitable of the planets and moons. More speculatively, this background includes contact with other intelligent beings (there is even a special branch of science-fiction dealing with the theological implications of such encounters), often with the suggestion that such contact has already been made without our being aware of the fact.

Most optimistically, science-fiction often assumes as part of this background a supranational world government with total racial integration.

Science-fiction is, first of all, imaginative entertainment, but if it has a more serious function it is less that of precisely pin-pointed prophecy than that of creating in its readers a climate of acceptance of new wonders and a willingness to think at least one step ahead. Nineteen fifty-seven is, in all probability, a more significant date in the history of civilization than 1492. We have stepped into a new age —and it is the age in which the science-fiction reader has been living all along.

The science of tomorrow or the day after will, unquestionably, outrun the science-fiction of today, just as today's science rapidly outran Poe and much of Gernsback. Many of the background assumptions mentioned above will become contemporary commonplaces. Conceivably, even time travel and speeds faster than light will, as science advances, turn out not to be fantasies after all.

But as creative, imaginative minds keep thinking ahead to the step beyond the next, it is exceedingly unlikely that tomorrow's science will outrun the science fiction of tomorrow. What prophet can dare to prophesy the utterance of a prophet yet to come?

THE YEAR'S S-F

A Summary

In 1957, the most noticeable trend in science-fantasy was toward a focus on problems of conformism *vs.* individualism, security *vs.* freedom, mechanization *vs.* creativity. A minor trend appeared to be in the direction of the anthropological, or at least sociological, viewpoint, away from the intensely inward, psychiatric vogue of the last two years.

Stories this year were selected from twenty science-fantasy periodicals and twelve short story collections, plus material from non-specialty publications. A complete list of the books and magazines, with abbreviations, will be found immediately preceding the Honorable Mention list.

W. T. Haggert's "A Matter of Security" is deserving of particular mention, as it was to be printed in this volume, but space limitations made it impossible to include it.

Other items of special interest not included in the listing are two notable short story collections with some exceptional science-fantasy content: Jack Finney's *The Third Level* (Rinehart), and Charles Beaumont's *Hunger, and Other Stories* (Putnam's). *Satellite* magazine deserves a nod for printing Al Capp's "Time Capsule"; and *Fantasy and Science Fiction* for publishing the TV script of "Visit to a Small Planet."

I have mentioned a number of excellent nonfiction books dealing with space travel. Two other recent publications of particular value to any interested lay reader are Dutton's comprehensive (and lucid) *Encyclopedia of Space* and Richard Witkin's *Challenge of the Sputniks* (Doubleday "Headline" Book), where you may find the full text of the Bertrand Russell article from which I quoted earlier.

I should like to express my thanks to Larry M. Harris, James R. Green, Eleanor Hertsch, Merril Zissman and, in particular, Damon Knight, for the assistance extended me in completing this book.

—J.M.

HONORABLE MENTION

ABBREVIATIONS

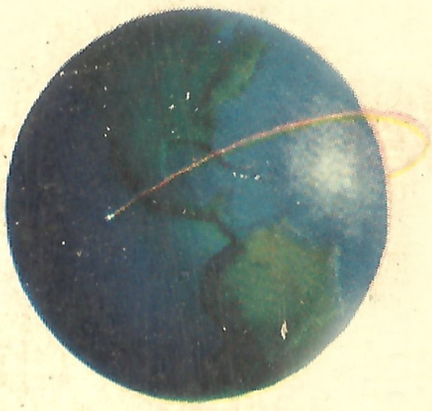
Ast	*Astounding Science Fiction*
"F&SF:7"	"The Best from Fantasy and Science Fiction: Seventh Series," ed. A. Boucher (Doubleday)
"BSF:9"	"The Best Science Fiction Stories and Novels: Ninth Series," ed. T. Dikty (Advent)
Esq	*Esquire*
F.U.	*Fantastic Universe*
F&SF	*Fantasy and Science Fiction*
Fut	*Future Science Fiction*
Gal	*Galaxy Science Fiction*
If	*If Science Fiction*
Inf	*Infinity Science Fiction*
LDH	*London Daily Herald*
McC	*McCalls'*
Neb	*Nebula Science Fiction* (British)
N.W.	*New Worlds* (British)
OSFS	*Original Science Fiction Stories*
Plby	*Playboy*
Satl	*Satellite Science Fiction*
Sat	*Saturn*
SciF	*Science Fantasy* (British)
ShSt	*Short Stories*
"SoNe"	"Sometime, Never," Golding, Peake, Wyndham (Ballantine)
"TFWH"	"Tales from the White Hart," Clarke (Ballantine)
"TIFE"	"Those Idiots from Earth," Wilson (Bantam)
Vent	*Venture Science Fiction*

BRIAN W. ALDISS	"Oh, Ishrael!" *N.W.*, Apr.
POUL ANDERSON	"Call Me Joe," *"BSF:9."*
	"For the Duration," *Vent*, Sept.
DOUGLAS ANGUS	"About Time to Go South," *Esq*, Feb.

CHRISTOPHER ANVIL	"The Gentle Earth," *Ast*, Nov.
ISAAC ASIMOV	"Galley Slave," *Gal*, Dec.
J. G. BALLARD	"Build-Up," *N.W.*, Jan.
STEPHEN BARR	"The Wheel," *Satl*, Apr.
ROBERT BLOCK	"Traveling Salesman," *Plby*, Feb.
	"Welcome Stranger," *Satl*, Apr.
LEIGH BRACKETT	"The Queer Ones," *"BSF:9."*
JOHN BRUNNER	"Eye of the Beholder," *F.U.*, Jan.
ALGIS BUDRYS	"The Skirmisher," *Inf.*, Nov.
	"The War Is Over," *Ast*, Feb.
H. K. BULMER and DAMON KNIGHT	"The Day Everything Fell Down," *F&SF*, Aug.
E. D. CAMPBELL	"The Hybrid Queen," *SciF*, #22.
A. BERTRAM CHANDLER	"The Survivors," *F.U.*, Mar.
ARTHUR C. CLARKE	"The Man Who Ploughed the Sea," *"TFWH."*
MARK CLIFTON	"How Allied," *Ast*, March.
MILDRED CLINGERMAN	"The Wild Wood," *"F&SF:7"*
AVRAM DAVIDSON	"Help! I Am Dr. Morris Goldpepper," *Gal*, July.
	"Mr. Stilwell's Stage," *"F&SF:7."*
	"Summerland," *F&SF*, July.
GORDON R. DICKSON	"Fido," *F&SF*, Nov.
	"St. Dragon and the George," *F&SF*, Sept.
G. C. EDMONDSON	"Rescue," *F&SF*, June
CAROL EMSHWILLER	"The Coming," *F&SF*, May.
	"You'll Feel Better," *F&SF*, July.
CHARLES L. FONTENAY	"The Martian Shore," *Inf*, Apr
DANIEL F. GALOUYE	"All Jackson's Children," *Gal*, Jan
RANDALL GARRETT	"Gentlemen: Please Note," *Ast*, Oct.
ROBERT ERNEST GILBERT	"Hunt the Hog of Joe," *Inf*, Feb.
TOM GODWIN	"Too Soon to Die," *Vent*, Mar.
WILLIAM GOLDING	"Envoy Extraordinary," *"SoNe."*
DAVID GORDON	"The Best Policy," *Ast*, July.
JAMES F. GUNN	"Space Is a Lonely Place," *Vent*, May.
W. T. HAGGERT	"A Matter of Security," *Ast*, Mar.
HARRY HARRISON	"The Stainless Steel Rat," *Ast*, Aug.
PETER HAWKINS	"The Tools of Orlas Boyn," *N.W.*, Mar.

ROBERT A. HEINLEIN	"The Menace from Earth," *F&SF,* Aug.
PHILIP E. HIGH	"Time Bomb," *Neb,* Aug.
JOHN KIPPAX	"After Eddie," *SciF, #23.*
	"Solid Beat," *SciF, #25.*
DAMON KNIGHT	"A for Anything," *F&SF,* Nov.
	"An Eye for a What?" *Gal,* Mar.
C. M. KORNBLUTH	"The Education of Tigress Macardle," *Vent,* July.
ALLEN K. LANG	"The Railhead at Kysyl Khoto," *Inf,* Nov.
FRITZ LEIBER	"The Big Trek," *"F&SF:7."*
	"Time in the Round," *Gal,* May.
MURRAY LEINSTER	"The Grandfathers' War," *Ast,* Oct.
RICHARD MATHESON	"The Holiday Man," *F&SF,* July.
JOHN J. MCGUIRE	"The Queen's Messenger," *"BSF:9."*
WALTER M. MILLER, JR.	"The Last Canticle," *F&SF,* Feb.
	"The Lineman," *F&SF,* Aug.
	"Vengeance for Nikolai," *Vent,* Mar.
KRIS NEVILLE	"In the Beginning," *Neb,* Sept.
JOHN NOVOTNY	"A Trick or Two," *F&SF,* July.
CHAD OLIVER	"Between the Thunder and the Sun," *"F&SF:7."*
	"Didn't He Ramble," *"BSF:9."*
PETER PHILLIPS	"Next Stop the Moon," *LDH,* Oct. 14-17.
H. BEAM PIPER	"The Keeper," *Vent,* July.
ROBERT PRESSLIE	"Chip on My Shoulder," *Neb,* Oct.
ROBERT S. RICHARDSON	"Will Tomorrow Come?" *McC,* Feb.
JANE ROBERTS	"The Canvas Pyramid," *F&SF,* Mar.
MANN RUBIN	"The Three Hours You Left Me All Alone," *Satl,* Apr.
ERIC FRANK RUSSELL	"Nuisance Value," *Ast,* Jan.
RAY RUSSELL	"Incommunicado," *F&SF,* Nov.
JAMES H. SCHMITZ	"The Big Terrarium," *Sat,* May.
THOMAS N. SCORTIA	"John Robert and the Egg," *F.U.,* Aug.
IDRIS SEABRIGHT	"Eithne," *F&SF,* July.
MICHAEL SHAARA	"Death for a Hunter," *F.U.,* Oct.
ROSE SHARON	"The Lady Was a Tramp," *Vent,* Mar.
ROBERT SILVERBERG	"Warm Man," *F&SF,* May.

CLIFFORD D. SIMAK	"Lulu," *Gal,* June.
	"Nine Lives," *ShSt,* Dec.
HENRY SLESAR	"Dream Town," *F.U.,* Jan.
	"The Show Must Go On," *Inf,* July.
CORDWAINER SMITH	"Mark XI," *Sat,* May.
THEODORE STURGEON	"Affair with a Green Monkey," *Vent,* May.
	"The Girl Had Guts," *Vent,* Jan.
JOHN TARA	"The Mile," *Fut,* #32.
WILLIAM F. TEMPLE	"Brief Encounter," *Neb,* Oct.
WILLIAM TENN	"Time Waits for Winthrop," *Gal,* Aug.
WALTER S. TEVIS, JR.	"Operation Gold Brick," *If,* June.
THEODORE L. THOMAS	"Just Rub a Lamp," *OSFS,* Sept.
E. C. TUBB	"The Eyes of Silence," *Inf,* Apr.
CHARLES VAN DOREN	"SR," *F&SF,* July.
EDGAR WELLEN	"Sweet Dreams," *Inf.,* July.
RICHARD WILSON	"Those Idiots from Earth," *"TIFE."*
ROBERT F. YOUNG	"Goddess in Granite," *"F&SF:7."*



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