L'ARC DE JEANNE
by Robert F. Young

APOLOGY TO INKY
by Robert M. Green, Jr.

MARGARET ST. CLAIR
ISAAC ASIMOV
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NOVELETS

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Some of the most colorful and imaginative science fiction stories till the fertile soil of history and legend. Recent examples in this magazine are Avram Davidson's ROGUE DRAGON (July 1965) and Brian Aldiss's THE SALIVA TREE (September 1965). In the story below, Robert Young has laid a tracing of Joan of Arc's career over the setting of a military campaign of the far future. We think you'll enjoy the result.

L'ARC DE JEANNE

by Robert F. Young

INFANTRY UNIT NO. 97 OF DROP XVI had landed on the north bank of Le Fleuve d'Abondance and deployed along the base of the alluvial slope that gave access to the Provençal Plateau. Once the 97th gained a foothold on the plateau the fall of Fleur du Sud, the key city of Ciel Bleu's southern hemisphere, would be assured.

The commander of the 97th, jubilant over the success of his part of the Drop, radioed his position to the GGS Ambassadress, the orbiting flagship from which O'Riordan the Reorganizer was supervising the first phase of the tenth and final campaign of the so-called Second Civil War. O'Riordan was delighted over the news and ordered that the city be taken at once. Soon, he reflected, Ciel Bleu would be as helpless as the nine other secessionist planet-states and the omnipotence toward which he had directed his political sights six years ago on Earth when he destroyed the nucleus of the religio-political Psycho-Phenomenalist Church and established the Galaxi-Government would be his.
Strafe rifles at ready, the 97th started up the alluvial slope. Blue beret-like helmets were set at jaunty angles; crimson battle-fatigues took on the hue of blood in the morning sunlight. The season was spring and a brisk wind was blowing out of the south. It was inconceivable that Fleur du Sud could muster sufficient forces to defend itself.

Nevertheless, when the 97th breasted the slope it found itself confronted by an army of defenders. But it was a ragged army indeed, and even distance could not hide the fact that it was comprised primarily of old men, housewives, and boys. Earlier that morning, the main contingent of Drop XVI had landed far to the north, decoying the troops that had been stationed near Fleur du Sud away from the city. The battle appeared to be in the bag.

The 97th paused. It consisted of veterans of nine planetary wars, and yet whispers rustled through its ranks like frightened leaves.

Two hundred meters from the beginning of the slope, the black stallion came to a stop. The girl fitted her shining arrow to her shining bow and drew the bowstring back. In the dead silence the bowstring sang, and the arrow stabbed into the sky. Up, up it soared into the nonpareil blue, to pause, finally, high above the 97th. But it did not fall back down to Earth. Instead, it became a bolt of blue-bright lightning. Thunder sounded then, and the sky above the slope grew as dark as death. It began to rain.

The rest of the sky remained a serene and cloudless blue, and sunlight lay upon the plateau like golden grain.

The rain intensified. It came down in sheets; in torrents. It became a wall of falling water. The 97th’s officers screamed to their men to charge, but the men were already mired in mud up to their ankles. The edge of the plateau gave way and the whole slope began to slide.

Desperately, the 97th tried to fight its way to safety, but it was part of a river of mud now—a vindictive merciless river in which the men could only flounder as it bore them ineluctably into the swollen waters of another river—Le Fleuve d’Abondance. Officers,
noncoms, privates—all suffered the same ignominious fate; but Le Fleuve d’Abondance, even in a swollen state, was anything but a raging torrent, and all gained the safety of the opposite shore.

They lined up like bedraggled rats along the bank and counted their blessings and their dry cigarettes. The commander radioed a description of the debacle—and its authoress—to the orbiting Ambassadress; then he withdrew his men behind a nearby ridge, deployed them, and smoked a damp cigarette while he awaited instructions from O’Riordan.

O’Riordan was no stranger to history. He spotted the analogy right away, and it was the analogy as much as the threat of meteorological warfare that gave him pause. He knew what a modern Maid of Orleans could do for the relatively primitive people of Ciel Bleu—knew that even without a weapon that influenced the weather she could very well inspire them to a point where he would have to bomb them into submission, and in the process lay waste to property that he already considered his own. So he gave orders not only that the 97th be picked up and returned to the orbiting fleet but that the rest of Drop XVI be picked up and returned as well; then, for the time being, he turned over the campaign to Smith-Kolgoz, his Chief of Intelligence.

In less than a week Smith-Kolgoz had a report ready for him—and a plan.

Raymond D’Arcy, Decoder 2nd class, GGS Watchdog, had never attended a council of war before. Nor had he ever before been on board the Ambassadress. He felt diffident and a little afraid.

The Ambassadress was a city in the sky. In the city, in addition to the crew, dwelled O’Riordan himself, his advisors, his arbiters, his bodyguards, his Ministers of War, his Chiefs of Staff, his Secret Police, his Civilian-Control Corps, his Intelligence Corps, his personal cuisine, and his mistresses, valets, manicurists, barbers, and physicians.

In both shape and color the flagship resembled a monstrous orange. The orange hue, however, was not a true color but resulted from the reflection of the starlight on the special alloy that constituted the hull. There were seven decks altogether, the centermost and largest of which contained the units that housed the executive, administrative, and judicial departments, and their respective personnel-suites. The units encircled a large open area called the Green where real trees and genuine grass grew, and the trees and the grass in turn encircled an asphalt plaza.

The decks were connected by
companionways and elevator shafts and each level was equipped with high-speed conveyor-corridors. In addition, the levels had boat bays that could easily be reached in time of an emergency and whose size and whose number of escape boats were in ratio to the dimensions of the deck. Artificial gravity was constantly maintained by intra-deck attractor-coils and the ship's power unit was located on deck no. 1 where no one, except the Ambassadress's maintenance men, ever ventured.

The Council of War Chamber was part of the executive unit and overlooked the Green. D'Arcy stood at one of the open casements, looking wistfully down at trees and grass and golden puddles of artificial sunshine. There were flowers growing in hydroponic parterres and hidden tapes supplied a nostalgic background of melodic birdsong. He tried to distinguish the various calls and warbles, but the voices in the room behind him made the task impossible. Presently he realized that one of the voices was directed toward him. "Over here, D'Arcy—O'Riordan's on his way down."

D'Arcy approached the long council table and took the seat that the council-co-ordinator had indicated. There was a glass of water in front of him, and he drank some of it. His throat still felt dry. He was uncomfortably aware of the row of important faces across the table; his own face struck a discordant note in a similar row on his own side of the table. There was the sound of a door opening and closing. It was followed by a thunder-clap of silence. "All rise!" the council-co-ordinator commanded. All did.

D'Arcy had seen O'Riordan on telecasts but he had never seen him in person. He was a small dynamic man with a flat face and bright brown eyes. He did not look his sixty-odd years. His face was ruddy, with hardly a wrinkle showing, if you discounted the intense crows' feet at the corners of his eyes. His hair was sandy and faintly flecked with gray. Even in the gorgeous blue and gold trappings of a supreme commander he still managed to look like what he was—a one-time pauper who, by dint of peasant shrewdness and determination, had become a political prince.

Flanked by flint-faced bodyguards, he entered the room and seated himself at the head of the council table. "All sit!" the council-co-ordinator cried. All did.

O'Riordan puffed a cigar to life and looked up and down the two rows of faces. His eyes flickered faintly when they met D'Arcy's, alighted finally on the sharp-featured visage of the Chief of Intelligence. "All right, Smith-Kolgoz—let's hear what you've found out."

Smith-Kolgoz stood up. "I think it will be best, your Magnificence,
if we hear the report directly from the man who prepared it—Leopold McGrawski, Director of Field Operations.”

A burly man in mufti got to his feet. Smith-Kolgoz sat down. McGRAWSKI: “We were successful in tracing the girl, your Magnificence, and I assigned three experienced ship-to-ground agents to investigate the case. They subsequently discovered that her name is Jeanne Marie Valcouris and that she lives all alone in a cave in Le Bois Féerique. Le Bois Féerique is a sizable woods located near a bucolic village named Baudelaire, which lies on the Provençal Plateau some fifty kilometers to the north of Fleur du Sud. She is known to its inhabitants as ‘La Pucelle du Bois Féerique’, and had it not been for your Magnificence’s decision to suspend hostilities temporarily, thereby making it impossible for her to put in an appearance on other battlefields, the cognomen by now would have attained planet-wide circulation and she would be firmly entrenched in the minds of her countrymen as an anti-denationalization Psycho-Phenomenalist heroine. As matters stand, the religio-patriotic zeal which she might have awakened still slumbers.

“Like most Ciel Bleu villages, Baudelaire is backward and bucolic and stubbornly adheres to the anti-progressive spirit of the French colonists who took over the planet three centuries ago. Jeanne Marie Valcouris’ mother died while giving birth to her and her father died nine years later, at which time Jeanne Marie was consigned to a small Provençal-subsidized orphanage on the outskirts of the village. Up until the age of twelve she behaved normally enough and then, unaccountably, she ran away and hid herself in Le Bois Féerique. The orphanage officials finally located her—she was living in a natural cave and appeared to be in excellent health—but when they tried to take her back to the orphanage she did something that frightened them so thoroughly that they fled from the forest and never bothered her again. Exactly what she did, we were unable to ascertain, but it seems that even prior to the Battle of Fleur du Sud the inhabitants of Baudelaire regarded her as an evil witch. Since the battle they have altered their viewpoint and now regard her as a good witch, but they are hardly less reluctant to enter Le Bois Féerique.

“There appears to be considerable justification for their attitude. A number of them claim to have overheard her talking to trees and flowers, and the several who were bold enough to question her claim that she told them that it wasn’t trees and flowers she was talking to but ‘voices in her head’. They—” “Voices?” O’Riordan interrupted.
"Yes, your Magnificence. Obviously she is suffering from audio-visual hallucinations of the type generally associated with acute malnutrition. We know that she was brought up a strict Psycho-Phenomenalist and I think we may safely conclude that she is a fanatic, and fasts for weeks at a time. Under circumstances such as that, it would be strange if she didn't hear voices and see visions."

"But the bow," O'Riordan said. "Where did she get the bow?"

McGrawski: "I'm sorry to say that we were unable to find out, your Magnificence. She carries it with her wherever she goes and there is always a quiverful of arrows on her shoulder. Assuming that a weapon capable of precipitating an isolated cloudburst would be capable of any number of things, I instructed the ship-to-ground agents not to let her see them except when absolutely necessary and not to provoke her in any way. Perhaps if they could have entered her cave when she was absent from it they might have been able to learn more, but—"

O'RIORDAN: "But why couldn't they enter it? What was there to stop them?"

Smith-Kolgoz (hastily getting to his feet): "I ordered them not to, your Magnificence. After they located her I devised a plan for abducting her that would entail a minimum of risk, and I didn't want to take a chance of tipping our hand ahead of time. Moreover, to carry out the plan successfully, I knew I would need to know as much about the girl's personality as possible, so I ordered the agents to concentrate on the villagers who knew her before she ran away from the orphanage and to question them exhaustively about her likes and her dislikes, her habits, and her attitude toward life. You do want her abducted, don't you, your Magnificence?"

O'RIORDAN: "Of course I do."

SMITH-KOLGOZ: "Good. Here then, your Magnificence, is what I've done thus far. First, I fed the data which the agents brought back into the Ambassadors's computer, together with the following command: 'Describe the sort of male which a female of this type would be most susceptible to—physically, emotionally, and intellectually'. Next, I correlated the computer's subsequent description with the dossiers of all the men in the fleet—a task of no mean magnitude, I can assure you, your Magnificence, but well worth the trouble. Naturally I couldn't narrow my choice down to one man on the data alone—the human animal simply isn't that varied. But on the basis of other qualifications I was able to pinpoint the one who was most likely to succeed in carrying out the abduction. In my judgment he has an optimum chance of inspiring affection in this girl; then love, then trust. And once he has
accomplished this, it will be child’s play for him to obtain possession of her bow, and even possible for him to talk her into accompanying him voluntarily back to the Ambassador. And if he is unable to talk her into accompanying him voluntarily, he can always resort to force.”

Smith-Kolgoz paused. He made D’Arcy think of a puppy that had just retrieved a stick thrown by his master and expected to be patted on the head for his prowess. But O’Riordan remained unmoved. “And just who is this irresistible member of the male species?” he asked coldly, eyeing D’Arcy with open contempt.

“D’Arcy, stand up,” Smith-Kolgoz said.

Diffidently, D’Arcy did so. “Raymond D’Arcy, Decoder 2nd class, GGS Watchdog, your Magnificence,” Smith-Kolgoz went on. “Not only does he possess the essential qualities I mentioned before, but he is the descendant of Ciel Bleu immigrants and has an excellent idiomatic command of the language. If we provide him with a believable story, give him the necessary directions to find the cave, and night-sled him into Le Bois Féerique, I am certain that in two weeks’ time he’ll be able to deliver both Jeanne Marie Valcouris and her bow and arrows into our hands.”

O’Riordan shook his head. “Oh, no, Smith-Kolgoz—the girl, yes; but not the weapon. The weapon, we don’t want. Because you see, Smith-Kolgoz, this whole caper may have been designed for no other reason than to trick us into taking the bow and arrows on board the Ambassador, and either or both could be a force that, once it was set in motion, could reduce us to a state of paralysis or turn us into a bunch of mindless puppets. Surely you’ve heard of the Trojan Horse, Smith-Kolgoz, and surely I don’t need to point out to you that while the Ambassador isn’t Troy, its ‘fall’ would mean the end of the Galaxi-Government, for the simple reason that to all intents and purposes it is the Galaxi-Government.”

Smith-Kolgoz’s sharp-featured face had reddened. “The— the analogy failed to occur to me, your Magnificence,” he said lamely. And then, “But what should we do with the bow and arrows, sir?”

“Bury them where they won’t be found. After Ciel Bleu surrenders, I’ll have them dug up and analyzed.”

All this while O’Riordan hadn’t once taken his eyes from D’Arcy’s face. Now he said, “Doesn’t it strike you, Smith-Kolgoz, that you’re sending a boy on a man’s mission?”

Smith-Kolgoz smiled ingratiatingly. “I must confess, your Magnificence, that at first it gave me pause. And then I realized that it wasn’t a man’s mission after all, but a boy’s, and that essentially I
was dealing with a new variation of an age-old love-story plot. Boy meets girl; boy makes girl; boy takes girl.”

D'Arcy was a black-belt karate champion. He could clean and jerk over twice his own weight. He could chin himself ten times in succession with either hand. He had been decorated three times with the Barred Spiral for bravery above and beyond the call of duty. The margins of his palms were as hard as boards, and he could deliver a judo chop with the force of a sixteen-pound sledge. He felt his face grow hot, but he said nothing.

At length, O'Riordan said, “Do you think you can bring her back, boy?”

D'Arcy nodded. He did not trust himself to speak.

O'Riordan's eyes traversed the two rows of faces. “I think we should put the plan in operation. Anyone disagree?”

Heads shook in ludicrous unison. There was a chorus of sycophantic “No, sirs!” O'Riordan grunted and stood up. “All rise!” the council-co-ordinator cried. All did.

To Smith-Kolgoz, O'Riordan said, “I want him in those woods before the passage of the next dawn belt.” To D'Arcy, he said, “I'll give you ten days. If you haven't radiated to be picked up by then, I'll come down and do the job myself.” He turned his back on the council table. “We'll see about those voices of hers,” he muttered. “And if she wants to be Joan of Arc so bad, we'll let her be Joan of Arc.” He stomped out of the room.

When she heard the voices for the first time, Jeanne Marie Valcouris was twelve years old.

There were two of them, and after a while they told her whose voices they were. The gentle one was St. Rachel de Feu's; the authoritative one, Joseph Eleemosynary the alms-giver's. Joseph Eleemosynary was the founder of the Psycho-Phenomenalist Church and had been dead for one hundred and twenty years. Rachel de Feu was the first Psycho-Phenomenalist saint. She had been dead for seventy-six years.

In the beginning the voices were disembodied, but it wasn't long before they acquired faces. As Jeanne Marie had never seen a picture of either Rachel or Joseph, it is not surprising that neither visage bore the slightest resemblance to the original. As Jeanne Marie “saw” it, Rachel's face was round and sweet, with gentle blue eyes and lips that loved to smile. Joseph's face was young and handsome—dashing in a boyish sort of way. He had curly black hair and disturbing dark eyes. His complexion was slightly swarthy but very very clear. Sometimes it was hard for Jeanne Marie to tell which face she liked best.

Go into Le Bois Féerique, Joseph
“said” when they became better acquainted, and Rachel de Feu and I will find a cave for you to live in and help you fix it up like a little house and show you how to do all sorts of wonderful things.

Jeanne Marie didn’t even hesitate. She didn’t like it at the orphanage. She never had. She missed her father too much and kept thinking about him all the time and couldn’t keep up with her lessons. So she went into the woods and Joseph and Rachel found a cave for her and showed her how to turn it into a regular little house by thinking through her hands. They called the process “psychotelluricism,” but she thought of it as “think-making.” It was an ability that the inner hierarchs had developed shortly before O’Riordan the Reorganizer had seized power from the Psycho-Phenomenalist Church and massacred them with radiation guns, Rachel de Feu explained. O’Riordan, when he heard about the process, had scoffed at it, saying that he didn’t believe anyone could create solid objects by intellectual power alone to say nothing of semi-solid objects that could affect a person’s emotions; but just the same, Rachel added, Jeanne Marie must be sure not to tell anyone that she had the ability.

After they showed her how to think-make the cave-house, they showed her how to think-make things to put in it—chairs, tables, dressers, rugs, drapes, lamps, a radio set, an escritoire, a self-regulating stove for the kitchen, a fireplace-furnace for the living room, a washer-drier for the utility room—and, most important of all, how to think-make things to eat. Oh, it was the most marvelous experience she had ever had! It was as though her fingers had little minds of their own and as though her hands were little factories that could produce anything under the sun. Rachel de Feu said that that wasn’t the way it worked at all—that it was the energy she and Joseph Eleemosynary furnished her with that did the trick. This psychic energy, Rachel said, drew the necessary elements out of the ground and the air, combined them, and turned them into whatever Jeanne Marie wanted to make.

When the officials of the orphanage came into Le Bois Féerie and tried to get Jeanne Marie to return with them to the orphanage, Rachel and Joseph helped her to make gouts of smoke of the most horrendous shapes imaginable appear out of thin air and caused sparks to shoot from her fingers and fire to come out of her ears. The officials were so startled they nearly jumped out of their shoes and Jeanne Marie had never seen anyone run so fast in all her born days. After that they left her alone, and people began calling her a witch. She didn’t mind being called a witch, and if what she was was a witch, she was glad of it. She had
never had so much fun in her life.  
When she was fifteen, Rachel and Joseph put her to work making a bow and arrows. The bow turned out to be the most beautiful thing imaginable. It was like a shaft of sunlight that someone had bent and strung with a bowstring made of morning mist. The arrows were scarcely less beautiful—and a good deal more remarkable. They were silver in hue, and so tenuous you had to look hard just to see them. She must take the bow with her everywhere she went, Joseph told her, and the arrows too. She made a little quiver out of daylight, darkness, sand, dust, time, hopes, dreams, wood, metal and a dozen other things and kept it slung over her shoulder except when she slept at night; then she kept it hanging on the bedpost next to her head, beside the golden bow.

When she was sixteen, Rachel and Joseph set her to work on an even more fascinating project—the manufacturing of a doll. Jeanne Marie was enchanted; she had never had a doll before, and wanted one more than anything else in the world. Day by day the doll grew—not rapidly, but very very slowly, for it was an extremely complicated piece of work. Jeanne Marie had had no idea it was so difficult to make a doll, not even such a big one, or that so many different things went into one. The list of elements—even the few she could identify—made her head swim. But such a doll it turned out to be! No girl had ever had a doll that could remotely compare to it. Its very uniqueness was probably the reason that Rachel de Feu told her to enlarge the cave and set aside a special secret place for it. Jeanne Marie did better than that: she made a regular little room and furnished it with a bed, two chairs, a vanity, a dresser, and a little throw rug. By the time the project was completed she was eighteen years old and had almost, but not quite, outgrown her need for dolls.

Her next project was a suit of armor, and compared to the doll-project was a relatively simple one. The purpose of the suit, Joseph “said,” was twofold: to protect her from harm and to exert a psychological influence on the enemy. She made it out of stardust and metal and a hundred other things and when it was finished she tried it on. It was as bright as the sun and as weightless as a cloud.

And now, Joseph and Rachel “said” in unison, the time has almost come, and you must go into the village of Baudelaire and take with you one of the golden combs you made for your hair and trade it for the most beautiful black horse you can find. And Jeanne Marie did, and she named the horse after St. Hermann O'Shaughnessy, the second Psycho-Phenomenalist saint. Then she thought—made a stable for him in the side of the hill next door to her own cave, and
everyday, except when it rained, she went riding in the woods.

And now, Joseph Eleemosynary “said” one day, the time has come; and Jeanne Marie, knowing full well what he meant, had donned the shining suit of armor, mounted St. Hermann O'Shaughnessy, and ridden proudly over the Provençal Plateau and entered the city of Fleur du Sud. Up and down the streets she rode in the morning light, crying, “Come and follow me and I will lead you to victory over the forces of O'Riordan that threaten from the south. Come and help me save the Church of the Psycho-Phenomenalists from the powers of darkness.” And St. Hermann O'Shaughnessy pranced and danced, and the people came out into the streets and cheered and when she set out toward Le Fleuve d'Abondance they formed a ragged vanguard for her; and when the time came she rode through the vanguard and launched a shining arrow into the sky, and the rain had come down in great torrents and washed the enemy away. And Jeanne Marie had returned to her cave in Le Bois Féerique to await her next Call.

One expected woods to be lovely in spring, but not as lovely as these woods were. D'Arcy, clad in Ciel Bleu peasant garb, still shivering from the pre-dawn dampness, rejoiced.

Leaving the clearing in which the pilot of the ship-to-ground sled had deposited him just before the passage of the dawn belt, he set forth into pleasant shadows and warm shafts of sunlight. Some of the trees were like fathers and some were like mothers and some were like little boys and girls. All lived together in a big happy family, green arms intertwined or green fingertips touching. Dawn dew was scattered like diamonds on the forest floor, and in the branches, real birds sang.

He proceeded on a straight course till he came to a brook; then he turned right and began walking upstream. The brook came from the hills, and it was in the hills, overlooking the little stream, that Jeanne Marie’s cave was. The three ship-to-ground agents who had made the reconnaissance had briefed him before he departed and told him everything he needed to know.

About the terrain, that is.

Oh, they had told him about Jeanne Marie Valcouris, too, but he suspected that there were many things they hadn’t told him about her because there were bound to be many things they hadn’t found out about her.

She liked to walk, they had said, and she liked to run and play. She loved to go horseback riding through the woods. As a young girl she had been an avid reader. Her marks at the orphanage school had been about average and probably
would have been higher if she had taken an interest in her studies. She liked to wear bright-colored clothes and she loved brushes and combs and was forever combing her hair. She was very religious, and during her years at the orphanage she had said her mystics morning, noon, and night.

D'Arcy was at a loss to understand why these things should make her physically, emotionally, and intellectually susceptible to him, but who was he to argue with the Ambassadress's computer? The matter drifted from his mind, unable to compete with the distractions afforded by his surroundings. Pastel-colored flowers grew along the bank, ephemerally outlining the footsteps of a playful morning breeze. The brook sang as it purled over chalk-white pebbles, and now and then the shiny shards of fish could be seen, darting this way and that in the pellucid water. Foliage filtered sunlight lay upon the ground like scattered pirate's-treasure.

A kilometer lay behind him. Halfway through another, he heard hoofbeats. They grew rapidly louder, overflowing the aisles and the bowers and the shady byways. Presently the brook broke out into a large clearing and D'Arcy stepped into bright sunlight. Simultaneously, on the opposite side of the clearing, a horse and rider appeared.

He paused, but made no attempt to conceal himself. The horse was a black stallion and the rider was a girl wearing a blue skirt and a red blouse with white stripes. A golden bow hung on her right shoulder and the tufts of arrows showed above her left. She was both barefoot and hatless, and her light-brown hair was caught back from her face with a red ribbon. Her face made him think of a flower that had just opened its petals to the sun.

She rode right up to him and said, "Bonjour, monsieur."

"Bonjour, mademoiselle," he said back. "You must be La Pucelle du Bois Féerique."

She smiled, and little lights danced in her eyes. They were the same shade of brown her hair was, and there was a dimple in her left cheek. She was just beginning to lose the ripe fullness of adolescence and was on the verge of becoming a woman. "My name is Jeanne Marie Valcouris," she said, "and I am a witch."

"So I've heard," he said.

"And you are not afraid?"

He grinned. "Why should I be afraid of a good witch? I can understand why I should be afraid of a bad one—yes. She could turn me into a newt or a toad, but a good witch could only turn me into something better than what I am, and I would be better, instead of worse, off."

Jeanne Marie laughed. Then she grew silent, and the attentive expression on her face indicated
that she was listening, although what she was listening to he could not imagine. At length she said, "The voices like you. I'm glad, because I like you too."

"The 'voices'?"

"Joseph Eleemosynary and Rachel de Feu." Jeanne Marie slid down from the black horse, landing lightly on her bare feet. "And this is Herrmann O'Shaughnessy. I think he likes you too."

St. Herrmann O'Shaughnessy nickered. D'Arcy ran his fingers through the animal's black mane. "It's nice to know I've got so many friends," he said.

Remembering what McGrawski had said about malnutrition-produced hallucinations, he took a good look at the girl's face. Like her body, it bespoke a well-fed healthy female who, if she had ever fasted at all, hadn't done so for at least a month. Another explanation would have to be found for the voices.

But it wasn't up to D'Arcy to find it. His province was to abduct Jeanne Marie, not to find out what made her tick. "My name is Raymond D'Arcy and I'm lost," he went on, somehow managing to make the second part of the statement sound as truthful as the first. "But even if I weren't lost, it wouldn't make much difference, because I couldn't go anywhere anyway. Last night while I was waiting for the air-diligence to Molière I was hit over the head and robbed, and when I came to I found myself lying in a clearing in these woods."

The falsehood had been supplied by Smith-Kolgoz, who had insisted that a peasant girl like Jeanne Marie would be less apt to question a cliche than she would an original lie. Apparently he was right, for she made no attempt to check the story out by examining the bump on the side of the head which D'Arcy had had the pilot of the ship-to-ground sled administer to him. On the other hand, she seemed inordinately interested in D'Arcy's face and incapable of taking her eyes from it. He had no way of knowing that it bore a startling resemblance to Joseph Eleemosynary's—Jeanne Marie's version, that is—nor that at that very moment Rachel de Feu was saying, "He certainly seems like a nice enough young man, child—why don't you help him?"

Jeanne Marie needed no second invitation. "Come, Raymond," she said, "and I will fix you something to eat at my house. It's only a little ways from here."

She set off along the brook, leading St. Herrmann O'Shaughnessy. Guiltily, D'Arcy walked along beside her. "I have a very lovely house," she said, "wait'll you see. Some people would call it a cave, but they would be surprised. Of course," she added, "I've never invited anyone inside before."

He took advantage of their proximity and got a good look at the bow. Aside from discovering
that it had been formed from an alloy which he couldn't identify and which left painful afterimages on his retina, he ended up no wiser than he had been before. A scrutiny of the arrows netted him even less. All he could see of them were notched ends and their silvery tufts, and somehow he got the impression that he wasn't seeing even that much of them.

He wanted to question her about the unusual weapon, but decided to defer doing so till a later date.

For some time now, the ground on either side of the brook, excluding the flower-pied terraces that bordered the water, had been rising. Soon, tree-clad successions of hills appeared, and the hillsides grew more and more abrupt. When at length the girl, D'Arcy, and St. Hermann O'Shaughnessy came opposite the cave, D'Arcy didn't even know it was there. The trees by this time had given way to vine-like growths and it wasn't till Jeanne Marie parted a curtain of these vines that he saw the opening. She parted another curtain, and he saw St. Hermann O'Shaughnessy's cave-stable. The floor was lined with hay, and there was a manger for him to eat out of and one for him to drink out of. He even had a light to see by—a self-perpetuating pinup lamp with a pink shade.

She left Hermann on the terrace to graze—he was such a stay-at-home, she said, that she didn't even bother to tether him except at night—and escorted D'Arcy into her cave-house. He was astonished when he saw the interior. There were four rooms and a closet—at least he assumed that the door in the bedroom gave access to a closet—and each room was completely furnished. Walls and ceilings were composed of fine-grained natural wood; the floors were tile, and strewn with throwrugs. The lights were of the self-perpetuating type, and each of the appliances had its own self-perpetuating motor. Running water was provided by subterranean pressure-pipes leading up from the brook.

Jeanne Marie seated him at the kitchen table and got eggs and bacon out of a little refrigerator that looked for all the world like a hope chest, and while the bacon was sizzling on the stove, she made coffee. She had a cup with him after he finished eating, and when he asked her how in the world a slip of a girl like her had been able to transform an ordinary cave into a house fit for a princess, she smiled. "I can't tell you," she said, "because it's a secret." And then, astonishingly, "Would you like to live here with me?"

He tried not to stare at her, but he wasn't altogether successful. Surely, he thought, she can't be that naive. It seemed almost a shame to take advantage of her. "What do your voices think of the idea?" he countered.
“Oh, they are all for it. I can fix a place for you to sleep on the sofa. It’s quite large, and I’m certain you’ll be quite comfortable. Also, I’ll think—I’ll make you some pajamas, and some trousers and shirts. Would you like another cup of coffee?”

“Thanks,” said D’Arcy weakly.

Living in Le Bois Féerique with Jeanne Marie Valcouris, he discovered presently, was a little like being a child all over again and living—really living, that is—in one of the make-believe worlds your nine- or ten-year-old mind had devised.

Long before his coming Jeanne Marie had invented all sorts of games to amuse herself, and now she made the necessary changes in the rules to permit two people to play. Three, if you counted St. Hermann O’Shaughnessy, for he was an indispensable part of many of them. In addition to the games, there were picnics in idyllic clearings and long and leisurely walks back into the wooded hills. Morning was invariably at seven and the hillsides were just as invariably dew-pearled; and in Jeanne Marie’s heaven, at least, all was right with the world.

Evenings, they spent sitting at the base of the vine curtain that covered the cave-house mouth, looking at the stars and commenting now and then on the various happenings of the day. Some of the stars they looked at were planets—Ciel Bleu had eleven sisters—and some of them were the ships of O’Riordan’s fleet. The latter were easily distinguishable from the others, not only because of their perceptible movement but because they followed a perfect equatorial path. They looked like an attenuated diamond necklace held together by an invisible string. The flagship was the pendant, and was distinguishable from the other diamonds by its size and its orange hue. It reminded D’Arcy of a moon sometimes, and in a way it was a moon—an artificial moon with a man in it who wanted to conquer the cosmos.

Jeanne Marie would look at the flagship again and again from the moment it rose in the northeast to the moment it set in the northwest. But when he commented on her interest she said that it wasn’t she who was interested but Joseph and Rachel. “They see and hear through me,” she explained. “So whenever they are interested in something, I let them look or listen to their hearts’ content.”

He gazed into her eyes, searching them for some sign of guile, but he saw nothing except tiny stars—stars no less lovely than the ones that swam high above her head. It embarrassed him that he himself had brought them into being. Yes, she was in love with him already, Jeanne Marie was. The computer had been right. But iron-
ically he felt nothing for her except a brotherly affection. It was better that way, he supposed—it made what he had to do a lot easier.

Wherever she went, her bow and quiver of arrows went too. One day he asked her why they were such an inseparable part of her, pointing out that she never tried to bring down any of the small game that frequented the region, and she answered him, saying that Joseph and Rachel had instructed her to keep them with her at all times, as they had many magic properties, any one of which would protect her from harm.

D'Arcy had a sudden hunch. "Did Rachel and Joseph help you make the bow and the arrows?" he asked.

She nodded reluctantly. "Yes."

He didn't for one minute believe her, but it was perfectly possible that she believed herself. "And the cave house and the furniture?"

Another reluctant nod.

He grinned. "What would happen if I touched the bow?" he asked. "Would I turn into a grasshopper?"

"Of course not," she laughed. "But if I shot an arrow at you, there's no telling what might become of you. Not," she added hurriedly, "that I'd dream of doing such a thing."

One afternoon when they were walking in the woods, they became separated and D'Arcy was unable to find her. Reasoning that she would probably head back to the cave, he set out in that direction. But although he walked fast, he saw no sign of her. By the time he reached the cave, he was half convinced that something had happened to her.

He went inside and called her name. No answer. Was she hiding on him, perhaps? Frequently she did such things; indeed, hiding on each other was one of the games they played. He looked under the sofa. He went out into the kitchen and peered behind the stove. He searched the utility room. Finally he entered the bedroom and looked under her bed. There was nothing there except one of the pairs of shoes she disdained to wear.

Straightening, he found himself staring at the door to her closet. He snapped his fingers. He'd bet any money she was hiding behind it, concealed, probably, among multicolored dresses, blouses, and skirts. Grinning, he seized the knob, intending to turn it quickly and throw the door wide open. But the knob refused to turn. Looking at it closely, he saw that it was equipped with a fingerprint-lock and that the lock had been depressed.

Frowning, he left the room. None of Jeanne Marie's other doors was equipped with a print-lock—why, then, had she chosen to make a single exception? Was it because
she kept her suit of armor in the closet and didn't want him to see it? Now that he came to think of it, she had never mentioned her role in the Battle of Fleur du Sud. Maybe she was ashamed of what she had done.

He was inclined to doubt it, which meant he would have to look elsewhere for an answer. Then, emerging from the cave, he saw Jeanne Marie coming out of the woods and he was so relieved to see her and to know she was all right that he forgot all about the incident.

On another occasion when he was walking in the woods—alone, this time—he wandered into a deep, gloomy hollow and came upon two skeletons. They were stretched out side by side beneath a granite overhang and one of them—judging from its more delicate bones—was that of a woman. There were several rotted wisps of clothing in evidence, and near the man lay a small brass disk. D'Arcy picked it up. It was thickly corroded, but after scraping away the verdigris with his pocket knife he saw that it was a Psycho-Phenomenalist identification tag. According to it, the man's name had been Alexander Kane. The name rang a bell in D'Arcy's mind, but for the life of him he couldn't remember where he had run across it before.

It also struck a note of incongruity. On Ciel Bleu, as on all nationalist planets, the inhabitants bore names strictly in keeping with their common ancestry, and whatever else it might be, "Alexander Kane" wasn't French.

Before leaving the hollow, D'Arcy pocketed the disk, and when he got back to the cave he showed it to Jeanne Marie and told her about the skeletons. "I have seen them," she said. "They have been there for many years. But I never go near them."

"Are you afraid of them?"

She shook her head. "I—I don't think so. But Rachel and Joseph have expressly forbidden me to visit that part of the forest unless I absolutely have to."

Why? D'Arcy wondered. But he didn't ask the question aloud. For one thing, he doubted very much whether Jeanne Marie knew the answer herself, and for another, he still refused to take the voices seriously and was reluctant to give them credence by discussing them. They were Smith-Kolgoz's problem anyway—not his. And if not Smith-Kolgoz's—O'Riordan's.

But the problem wouldn't leave him alone, especially this new aspect of it. Why, he kept wondering over and over, should two voices in Jeanne Marie's mind—assuming there really were two voices in her mind—be afraid of two harmless sets of bones?

That night as he lay sleeping on the sofa, a low voice awakened him. It was O'Riordan's and its
source—or at least its apparent source—was the miniature receiver-transmitter concealed in D'Arcy's wristwatch. "Two more days to go, D'Arcy. Just thought I'd remind you."

D'Arcy was incredulous, not only because O'Riordan had deigned to radio him personally but because he had lost all track of time. In one way, it seemed as though he had only been in Le Bois Féerique for a few days; in another, it seemed as though he had been there all his life.

"You there, D'Arcy?" O'Riordan demanded.

"Yes—yes, sir."

"Well, I'm glad to hear it," said the man in the moon. "Everything going according to schedule?"

"Yes, sir."

"Good. I'll expect to hear from you within the next forty-eight hours then. If I don't, you can expect to hear from me. And remember—before you leave, bury that bow and those arrows. Deep—and where nobody will find them."

The man in the moon signed off.

That was the end of D'Arcy's sleep for that night. When dawn came he was still battling with his conscience, but he had it pretty well under control. In a way, he would be doing Jeanne Marie a favor by abducting her. Idyllic or not, a forest was no place for a young lady to live in. Charming or not, a cave was not a fitting habitat for a young girl. O'Riordan's arbiters were six sycophants clad in long black robes that made them look like bears and when O'Riordan said "Dance!" the bears danced; but according to the rules agreed upon at the Deimos Convention, Jeanne Marie could not be tried as a war criminal, and while O'Riordan would definitely try her for something, her sentence should be slight. And when Ciel Bleu was conquered—as it would be within a month—she would be turned over to an appropriate department of the new government, which would re-educate her, rehabilitate her, and find a suitable place for her in the new society.

That afternoon, he radioed the Ambassadress, gave the co-ordinates of the cave, and arranged to be picked up two hours before the next dawn belt passed over Le Bois Féerique. He and Jeanne Marie spent the day rambling through the woods, alternately riding St. Hermann O'Shaughnessy or walking along side by side, with St. Hermann bringing up the rear. She had packed a picnic lunch, and they ate in a woodland glen several kilometers from the cave.

Curious from the beginning as to how and where she obtained her food supply, D'Arcy finally got around to asking her point-blank. He expected her to smile and say it was a secret, and that was precisely what she did.

If it hadn't been for two consid-
erations, he would have sworn that she was capable of psycho-telluricism. But, like O'Riordan, he believed psycho-telluricism to be nothing more than a myth that the Psycho-Phenomenalist hierarchy had invented in order to frighten the enemies of the Church; and even if he had believed it to be something more than a myth, he still wouldn't have deemed Jeanne Marie capable of it, because its first prerequisite was a genius-level IQ and its second, the availability of a "parasynthetic mind" of similar IQ level with which "ideal rapprochement" could be both attained and maintained.

Darkness was beginning to gather when they got back to the cave. After putting St. Hermann O'Shaughnessy to bed, they sat down on the hillside and watched the stars come out. The "moon" rose above the horizon right on schedule. On its next pass, a moonbeam would come sliding down the dark and awesome slope of space and take D'Arcy and Jeanne Marie away.

D'Arcy tried not to think about it, only to discover that he had no volition in the matter. That night, before going to bed, he set his mental alarm-clock for two hours after midnight. Arising, he dressed in darkness; then he crept into the bedroom where Jeanne Marie lay lost in sleep in the pale radiance of the nightlight that hung above her bed. Deftly, he lifted the bow and the quiver of arrows from the bedpost. As he did so, she stirred and turned on her side, facing in his direction. He stood there tensely, not daring to move, expecting her to open her eyes at any moment. But her eyes remained closed, and presently she sighed softly, as though still deep in sleep. Relieved, he tiptoed from the room, through the living room, and out into the night.

He buried the bow and arrows in the hollow where the two skeletons lay, reasonably certain that no one ever came there. By the time he got back to the cave, the Ambassador was rising above the horizon again. He sat down in front of the vine-curtain to await the arrival of the moonbeam.

He saw it presently. It was like a falling star. Down, down, it fell, drifting toward Le Bois Féerique now; now homing in on the coordinates he had supplied. At length the little craft settled down on the flower-pied terrace that bordered the brook.

The transparent nacelle opened and the pilot climbed out. Spotting D'Arcy, he came over and asked him if he needed any help. "No," D'Arcy said, and got up and went into St. Hermann O'Shaughnessy's stable and untied him. "Good by, old buddy," he said, patting the animal on the croup. "Jeanne Marie and I are going away, and I'm afraid we won't be back."
Leaving the stable, he entered the cave-house. As he stepped into the bedroom he thought he heard a muffled sob, but he must have been mistaken because Jeanne Marie appeared to be fast asleep. He shook her gently by the shoulder, marveling at the cool smoothness of her skin. "Get up and get dressed, Jeanne Marie," he said when she opened her eyes.

"Is something wrong, Raymond?" she asked. And then, "Where is my bow? Where are my arrows?"

"You mustn't ask questions, Jeanne Marie. You must trust me and do as I say. You do trust me, don't you?"

Her face was inscrutable in the dim radiance of the nightlight. "Yes, Raymond, I trust you completely."

Hating himself, he waited while she dressed; then he led her out of the cave. It wasn't until she saw the ship-to-ground sled that she appeared to guess the truth, but he had a firm grip on her arm and when she tried to break away, she got nowhere. He forced her into the sled and sat down beside her. "I'm sorry, Jeanne Marie," he said. "I hope someday you'll try to forgive me."

She did not look at him, nor did she say a word. The pilot got behind the controls and closed the nacelle, and the little craft rose above Le Bois Féerique and became a moonbeam once again.

FANTASY AND SCIENCE FICTION

NOW HEAR THIS/NOW HEAR THIS/NOW HEAR THIS

GGS AMBASSADOR: 10 9/MONTH, 2353

SUBJECT: TRIAL AND SENTENCING OF ONE JEANNE MARIE VALCOURIS, CHARGED WITH INVOKING THE FORCES OF NATURE AND USING THEM TO SUPPLEMENT THE LEGALIZED WEAPONS OF CIVILIZED WARFARE.

FINDINGS: 1) THAT THE FORCES OF NATURE, WHEN USED AGAINST MAN, CONSTITUTE AN ACT OF GOD, AND THAT SUCH AN ACT IN THE TIME OF WAR IS CONTRARY TO THE RULES LAID DOWN BY THE DEIMOS CONVENTION; 2) THAT A CRIME OF THIS MAGNITUDE CANNOT BE ATONED FOR THROUGH ORDINARY PUNITIVE PROCEDURE; 3) THAT JEANNE MARIE VALCOURIS DID KNOWINGLY COMMIT THIS CRIME AND IS LIABLE FOR IT; AND 4) THAT THE VOICES WHICH JEANNE MARIE VALCOURIS CLAIMS TO HEAR ARE AUDIO-VISUALIZATIONS SIMILAR TO THOSE DESCRIBED BY FRANCIS GALTON, CIRCA A.D. 1883, AND HAVE NO BEARING ON HER CRIME.

SENTENCE: JEANNE MARIE VALCOURIS, HAVING STEADFASTLY REFUSED TO REVEAL TO THIS COURT THE TRUE NATURE OF THE WEAPON WHICH SHE EM-
ployed against the 97th Infantry Unit of Drop XVI and the identity of the person or persons who supplied it, shall, at 0945 hours on the morning of 11 9/month, 2353, be escorted from the Ambassador's brig to the green and there be secured to a wooden stake, which shall in the meantime have been erected on the plaza, and be burned alive before a battery of radio-television transmitters which will carry her image and her screams into every living room on Ciel Bleu.

All off-duty personnel are requested to attend.

D'Arcy was horrified.

Four hours had elapsed since he had turned Jeanne Marie over to Smith-Kolgoz and he had spent them wandering about the Green, waiting for someone to remember his presence and arrange for his return to the Watchdog. When the incredible announcement had appeared on the plaza's tele-type screen he had been sitting under a nearby tree, thinking of Le Bois Féerique.

His first impulse was to storm O'Riordan's heavily guarded suite and kill the man with his bare hands. He had badly underestimated the Reorganizer's ruthlessness and his resourcefulness and he had forgotten that the laws of war, like all laws, could be manipulated to fit any and all situations and to effect whatever result the manipulator desired to bring about. Jeanne Marie had provided O'Riordan with an ideal means of bringing the inhabitants of Ciel Bleu to their knees, and he had intended to burn her at the stake all along, whether she revealed the secret of the bow and arrows to him or not.

But D'Arcy did not act on the impulse. To have done so would have resulted not in O'Riordan's death but his own, and Jeanne Marie would have been no better off than she had been before. His only logical course of action was to concentrate his energies on rescuing her, and this he proceeded to do.

He was already in the right place. All he had to do was to conceal himself and wait till the right moment. Night and day were strictly differentiated on the Ambassador, and every evening at 1800 hours the artificial sunshine that bathed the Green during the day automatically diminished itself to a pale glow that resembled starlight, and every evening at the same time the taped birdsong that provided the sonic background for the daylight hours automatically gave way to the taped pipings and stridulations of insects. He waited till after the metamorphosis took place; then he found a secluded
bower and settled down for the night, praying that his presence on board the Ambassadress would go unremembered for at least another sixteen hours.

He did not try to sleep, but sat in stony silence, wondering why it had taken him so long to see O'Riordan for what he really was. D'Arcy's myopia was inexcusable, for he had read history, and history was full of O'Riordans. Some of them had worn deerskins and some of them had worn tunics and some of them had worn oriental raiment and some of them had worn uniforms and some of them had worn hair shirts and some of them had worn Brooks Brothers suits; but every one of them had been a member of the same fraternity and all of them had placed power on a pedestal, and the ruthless methods they had employed to acquire it were comparable only to the ruthless methods they had employed to keep it.

Toward "dawn" D'Arcy chose a strategically located tree, climbed into its branches, and ensconced himself on a leafy limb that arched over the path down which the brig wardens would lead Jeanne Marie some three hours and forty-five minutes hence. It was his plan to wrest the girl from them, head for the nearest boat bay, board one of the escape boats, plummet to the surface of Ciel Bleu, and land in Le Bois Féerique. There he would dig up the bow and arrows and employ them in Jeanne Marie's defense. It was an ambitious undertaking to say the least, but it was the only chance he had.

At 0700 hours the ship's carpenters showed up and began erecting a wooden stake on the plaza. Around it, they piled synthetic fagots that would burn with ten times the intensity of ordinary wood. After they left, the radio-television techs came around and set up their transmitting equipment. Finally, the maintenance crew appeared, cut a vent in the "sky" directly above the stake, installed a powerful suction fan, and ran two hundred feet of intra-deck ventilation-tubing to the nearest exhaust lock. All was now in readiness for the auto-da-fe.

Toward 0900 hours the Green began to fill with O'Riordan's advisors, his arbiters, his bodyguards, his Ministers of War, his Chiefs of Staff, his Secret Police, his Civilian-Control employees, his Reorganization employees, his Intelligence agents, his personal cuisine, and his mistresses, valets, manicurists, barbers, physicians, and the off-duty members of the Ambassadress's crew. The atmosphere should have been one of horror. It was nothing of the sort. There was laughter and there was levity; there were dirty jokes and there were dirty digs. A male member of the reorganization corps pinched a female member of the civilian-control corps; a barber stole a kiss
from a manicurist behind a weeping willow tree; a homosexual physician struck up a conversation with a homosexual chief of staff. An intelligence agent broke out a fifth of Scotch. Blessed are the sycophants and the civil-service seekers, D’Arcy thought, for they shall inherit the cosmos.

He was hungry and he was tired and his arms and legs were cramped from clinging to the limb. But he was hardly aware of any of these things. He knew only hatred and disgust.

A little after 0900 hours O’Riordan himself appeared, flanked as always by his bodyguards. Two of the guards carried a brocaded armchair, and after the party made its way through the crowd to the edge of the plaza the two guards set the chair on the ground and O’Riordan seated himself. He was wearing a snow-white uniform with epaulettes the color of blood and he was smoking a long cigar.

D’Arcy’s hands had flattened of their own accord and turned themselves into deadly weapons. He forced them to relax; forced himself to go on clinging to the limb. His one remaining mission in life was to rescue Jeanne Marie, not to assassinate O’Riordan.

At length a silence swept the Green, and looking up the path he saw her approaching. Her light-brown hair fell in disarray about her winsome face; her gaudy peasant garb made a vivid splash of color upon the verdant background. As always, she was barefoot.

Accompanying her were three burly brig wardens armed with numbguns. D’Arcy raised himself to his hands and knees and when the quartet was directly beneath him, he sprang.

Alighting on the shoulders of the warden who was bringing up the rear, he dispatched the man with a powerful chop to the side of the neck. He was upon the second warden before the fellow had a chance to turn all the way around. He sent him crashing to the path with a sledge-hammer rabbit punch.

By this time, warden no. 3 was in the process of drawing his numbgun. D’Arcy brought a board-like hand down on the man’s forearm, shattering the bone, and the numbgun went flying. Catching it with one hand, D’Arcy seized Jeanne Marie’s wrist with the other. “Come on,” he said, “we’ll have to run for it!”

To his amazement, she held back. “Why are you still here?” she gasped. “Why weren’t you returned to your own ship?”

He wondered vaguely, way in the back of his mind, how she had found out that he didn’t belong on this one. But he did not pursue the mystery. “Never mind,” he said. “Come on!”

“No, no—you don’t understand!”

Angrily, he picked her up and
slung her over his shoulder. She was surprisingly heavy for so slight a girl, but it wasn't her weight that hampered him—it was her frenzied attempts to free herself. "For heaven's sake, Jeanne Marie," he cried, "do you want them to burn you?"

"Yes, yes!" Abruptly she ceased struggling and went limp. "But you don't understand and I can't make you in so short a time. Oh, it's hopeless!"

He was running now. Behind him and to his left and to his right, people were shouting and screaming. Secret police popped onto the path to bar his way, but he numbgunned them down before they had a chance to bring their own weapons into play. The trees thinned out and he came to the esplanade that bordered the administrative sector. Turning right, he pounded toward the red-lit entrance of the boat-bay corridor. After he passed through it, he and his burden were borne swiftly to their destination. Arriving in the bay, he closed the heavy emergency doors and sealed them. Until such time as they could be burned through, he and Jeanne Marie were safe.

The bay contained eighteen escape boats altogether. They stood side by side on an automatic launcher and the first one was already in position before the self-operating locks. He carried Jeanne Marie over to it and lowered her into the cockpit; then he climbed in after her and closed the nacelle. He leaned forward to inspect the controls. He glimpsed the descending wrench out of the corner of his eye. Where she had obtained it, he did not know. Probably she had found it on the seat. He had a hunch even before he tried to dodge that he was too late, and he was right. The stars that presently swam before his eyes burned almost as brightly as the stars that lay upon the face of night, and the darkness that followed them was almost as black as space.

D'Arcy had been knocked out before; consequently, when he regained consciousness a subjective second later, he suspected that objectively he had been out for a far longer period of time.

A brief survey of his surroundings more than confirmed it.

The escape boat hung like a tiny ornament on the vast Christmas tree of space. Behind it—perhaps a hundred kilometers distant—hung the larger ornament of the *Ambassadress*, and backgrounding the flagship was the largest—and by far the loveliest—ornament of all: *Ciel Bleu*.

It wasn't difficult to figure out what had happened. After striking him with the wrench, Jeanne Marie had programmed a course on the a.p., climbed out of the escape boat, and launched the craft into space.
But why? And how had a simple peasant girl managed to carry out such a sophisticated operation?

His head ached fiercely and his thoughts kept tripping over one another's feet; nevertheless, he found an answer to the first question. Jeanne Marie had wanted to get him out of the way so that she could allow herself to be recaptured . . . and burned.

He now had another "why" to contend with—a rather large and horrible one.

Like all escape boats, the one in which he had been jettisoned was equipped with a radio-television unit. The receiver was already tuned to the Ambassadress's channel; it remained but for him to activate the screen. With trembling fingers he did so.

He recoiled. The burning was already in progress.

Frenziedly he halted the headlong flight of the escape boat and turned the craft around, all the while aware that he was acting out of blind instinct and that Jeanne Marie was beyond earthly aid.

Abruptly the screen went blank.

He fumbled with the tuning mechanism, not because he wanted to bring the hideous scene back to life but because he felt somehow that he had to. But the screen refused to co-operate and he picked up nothing but snow.

Presently he became aware of a strange brightness. It was all around him in the cockpit, but the cockpit was not its source. Raising his eyes, he looked through the transparent nacelle . . . and turned his gaze quickly away.

Where the Ambassadress had been, a nova was in the process of being born.

Shocked, he changed the escape boat's course. The shock had a cleansing effect on his mind, and after it passed he found himself possessed of a clarity of thought he had never known before. He took the two skeletons he had stumbled upon in Le Bois Féerique and tied them in with the voices in Jeanne Marie's mind. Then, for the sake of deduction, he assumed not only that the Psycho-Phenomenalist hierarchs had really developed psycho-telluricism but that they had used it as a stepping stone to yet another mental milestone: the ability to concentrate awareness and will in the intellect and achieve a sort of transcendant existence, or ens; and to separate the ens from the flesh.

It was common knowledge that when O'Riordan had overthrown the terrestrial Psycho-Phenomenalist Church he had employed radiation guns to destroy its hierarchs. It was also common knowledge that a few of the hierarchs, although fatally burned, had managed to escape to the outlying planets of the pre-reorganization empire where Psycho-Phenomenalism had obtained a firm, if primitive, foothold. O'Riordan had never
pursued them for the simple reason that to all intents and purposes they were already dead.

Having proceeded thus far, it was now a simple matter for D'Arcy to remember who Alexander Kane was—or rather, who he had been. He was one of the hierarchs who had escaped—and his wife, Priscilla Kane, had escaped with him.

It was now possible to piece together what must have happened. Arriving on Ciel Bleu, Alexander and Priscilla had known that they had but a few days to live and that consequently their only means of thwarting O'Riordan and bringing about his eventual defeat was through their entia. This meant that they would have to find a host, because their entia were capable of moving only a limited distance through space, and even though capable of telepathy, incapable of functioning effectively without eyes and ears. Either Alexander or Priscilla had remembered the Joan of Arc legend, and the plan had been born. Jeanne Marie had represented an ideal host and after transforming themselves into entia, Alexander and Priscilla had abandoned their decaying bodies in Le Bois Féerique and taken up residence in her mind. Masquerading as her protectors, they put their plan into action. The bow and arrows they had helped Jeanne Marie make had been a decoy designed to distract O'Riordan's att-

tention from the real Trojan Horse—Jeanne Marie—and once on board the Ambassadress, Alexander and Priscilla had waited till the psychological moment, transformed their entia into pure energy, and blown the Ambassadress—and themselves and Jeanne Marie—to Kingdom Come.

D'Arcy leaned forward and rested his head on the control panel. He remained in that position for a long time. At sporadic intervals, shudder after shudder racked his body. When at last the reaction passed, he straightened, and punched out the co-ordinates of Le Bois Féerique on the a.p. Finally he deflected the lever marked “Full Speed.”

Why did D'Arcy return to Le Bois Féerique?

Who can say? Perhaps because he was still curious about the bow and arrows and not altogether certain that “Joseph Eleemosynary” and “Rachel de Feu” had caused the cloudburst that had washed the 97th into Le Fleuve d'Abondance. Perhaps because he wanted to visit Jeanne Marie’s cave-house and put her things in order.

He would have had to return to Ciel Bleu in any event, for mere moments after the destruction of the Ambassadress, the remainder of the demoralized fleet had departed for Earth.

He dug up the bow and the arrows first. Then, leaving the es-
cape boat in the little clearing where he had brought it down, he walked through the woods to the cave-house. Before going inside, he glanced into St. Hermann O'Shaughnessy's stable. It was empty.

The cave-house was empty too. He had expected it to be, of course, but just the same he experienced a tightness in his chest as he walked through the quaint little rooms.

He stepped softly into the bedroom. He looked at the empty bed. "Forgive me, Jeanne Marie," he whispered.

Suddenly he noticed that the door he had tried in vain to open a week ago was no longer closed. But it did not lead to a closet. It led to another room.

Wonderingly, he stepped through the doorway. The room was almost identical to the one he had just left. There was a bed, a vanity, a chest of drawers; a little throwrug upon the floor . . . Had Jeanne Marie had a twin sister perhaps?

No, not a twin sister . . .

D'Arcy already knew the truth when he stepped out of the cave-house into the morning sunlight and saw the girl on horseback emerging from the woods on the opposite side of the brook. When she got her eyes on him her face lit up like a little sun and she sent the black stallion plunging through the stream and slid from his back the moment he reached the bank. St. Hermann O'Shaughnessy nickered a happy hello and Jeanne Marie cried, "Raymond, you came back! Be—before Joseph and Rachel went away with you they said you probably would, but I was afraid you might not, and oh, Raymond, I'm so glad to see you again!"

D'Arcy's voice wasn't quite as steady as he would have liked it to be. "Then you're not mad at me for—for—"

"For stealing my doll? Of course I'm not. Joseph and Rachel said that it was all part of the plan—that was why they had me put it in my bed that night and hide in the other room. I didn't know then what the doll really was, or what they were going to do. Will—will they be back, do you think?"

D'Arcy shook his head. "No, Jeanne Marie."

Tears trembled in the corners of her eyes and one of them escaped and twinkled down her cheek. "I am sorry. They were very nice."

"Yes," D'Arcy said, "and very brave."

Brave, yes—but not quite as omnipotent as he had thought. The doll that they had brought to life had been the bomb—not they themselves. They had merely been the detonator.

"Before they left my mind," Jeanne Marie said, "they made me promise them something." She selected an arrow from the quiver and placed it in D'Arcy's right
"They told me that if you came back I should have you shoot this arrow into the air. They said that that was part of the plan, too, only they didn't say 'plan' then—they said 'plot.'"

"All right," D'Arcy said, "I will."

And he did. The arrow went up and up and up . . . and then it turned around and came streaking straight back toward him. He leaped to one side, but it merely made the necessary adjustments in its course to reach its predetermined target. He felt nothing as it entered his chest and penetrated his heart.

Abruptly the bow disintegrated and disappeared. So did the arrow transfixed in his heart. So did the rest of the arrows.

When next D'Arcy looked at Jeanne Marie, he saw a beautiful woman instead of a pretty girl—the very woman for whom he had been searching all his life and had never been able to find. Before he knew what had happened, she was in his arms and he was kissing her.

"Joseph Eleemosynary" and "Rachel de Feu" had believed in happy endings.

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**MERCURY PUBLICATIONS**

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“It’s a grand little ice breaker I picked up in London.”
The operation on Monday would be the first of many for Denton—if he were lucky. This was one good reason to accompany the strange blond girl who hummed Wagner and promised to lead him to Beaulieu—the place where everything goes right.

BEAULIEU

by Margaret St. Clair

The color of her hair, Denton thought, could only be described as indignant, an indignant gold; and the gold at her throat and wrists, too, had an indignant gleam as she leaned across to open the door of the green sports car for him.

"Get in," she said. She wasn't smiling at all.

Denton obeyed. Was this to be the start of that favorite male fantasy, the hot blonde in the green convertible? Despite the fact that his doctor had scheduled the exploratory operation for Monday, Denton was, he knew, young and well enough looking. The signs of his illness—a certain waxiness and yellowing of the skin—would only have been perceptible to a physician's eye. The hikes he had been taking through the valley and its foothills, all summer long, had kept him healthily brown. So it could be the start of the fantasy.

Once he was in the car, she did not look at him. She kept her eyes on the road, and the car—an Austin-Healey, he thought—unrolled highway 29 smoothly behind it as it slid up the Napa valley toward St. Helena. This wasn't much like the fantasy. She should have been saying something.

He studied her obliquely. Her gold hair was caught back from her face by a kerchief of very heavy dark green silk shot with threads of metallic gold. Her dress, close-
fitting, made of the same heavy stuff, was cut low at the neck to show a full breast and a dazzlingly white skin. He had already remarked the pair of gold bracelets and the heavy twisted gold necklace she wore. It didn’t look like costume jewelry. It was odd, though, that the over-all impression she made on him was not so much one of wealth, or even of beauty, as it was of power. The green stuff of her bodice glinted in the sun like armor.

She began to hum. That was better, more like the fantasy. But the music? Despite the intense scarlet her lips had been painted, it wasn’t a popular tune; and when she began to sing the words, he recognized it. Wagner, Die Walküre, in act two, where Brünnhilde appears to the doomed Siegmund to take him to Valhall. Was that what the girl had got herself up for? A Valkyr, a chooser of men? A chooser of men for what? She had a good voice, though a little low for Brunnhilde’s part.

At any rate, he had been picked up by an extraordinary woman. When she halted in her singing, Denton, who had a fair tenor, sang Siegmund’s next line.

For the first time, the girl took her eyes from the road and looked at him. She was smiling. “You know it!” she said, pleased.

“Uh-hunh. I used to have it on records. Old beat-up seventy-eights.

“And then you sing about how you only appear on the field of battle to doomed heroes, to the ones you’ve chosen to go with you. And Siegmund asks where you take the ones you’ve chosen. And you say—”

“And I say—” the girl threw back her head a little and sang, full-throatedly, “’Zur Walvater, der dich gewahlt, führ ich dich. Nach Walhall folgst du mir!”

She really had a good voice, with an exultant, thrilling quality that was highly suitable to the music. “In other words,” Denton translated, “You take heroes to Walfather—Wotan. Valhall is the place where you’re taking Siegmund.”

“Yes. Or in other other words—” she was laughing—“to Beaulieu. That’s where we’re going now.”

Denton felt the hair stir on the back of his neck. He stared at her averted profile. Did she—how could she—it was impossible.

Carefully and slowly he said, “Beaulieu is back the other way. In Rutherford.”

“Oh, I don’t mean Beaulieu vineyard! I’m talking about the other Beaulieu, your Beaulieu, the one you’ve been hunting all summer. It’s an old fantasy of yours.

“You go along the road, and suddenly the road is just a little bit different. You know that at the end of it you’ll find Beaulieu. It’s a big house with shady verandas,
and people are waiting for you. They know your name, they say, ‘Welcome home.’

“Beaulieu is the place where everything goes right, where there’s never anything to be afraid of. It’s like James’ Great Good Place. And you’ve been hunting it all summer in the valley and the hills.”

“How on earth can you know about that?” Denton demanded.

“It’s true, yes. But how do you know?”

For a moment the girl’s air of self-confidence seemed to desert her. The car slowed a little. “Why—I’ve always been able to tell what people were thinking,” she said in a flat, thin voice. “I mean, I’ve always been able to tell sometimes. I knew about Beaulieu when I picked you up.” She touched her forehead with the back of her hand.

“But isn’t there some particular reason why you’re hunting Beaulieu?” she went on more confidently. “More than just looking for a place you don’t quite believe in, even if you have had dreams and fantasies about it. There’s some urgent reason why you want to find it.”

“Yes. There is.” Denton told her about the operation that was scheduled for Monday, avoiding the word he had found people so much disliked, avoiding even the expression “malignant disease,” but making clear to her that the operation on Monday would probably be the first of many operations. If he were lucky. “They weren’t sure about the diagnosis until yesterday,” he said.

“So you’ve got to get to Beaulieu today.” She nodded. “All right.”

The car shot ahead. They passed through St. Helena, pleasant and quiet in the midst of its vineyards, turned left, and began to climb.

Denton, lulled by the warmth of the sun and the motion, thought, why not? If this girl knew about Beaulieu before ever she spoke to him, she might know where to find it. She might know just where the road gave the little twist and the shake that made everything different. If one were possible, why not the other? Why not?

Dust began to settle on the green gloss of the Austin-Healey. They turned, climbed, went into second, went into low. Then they were on top of the hill, and Denton had an instant’s wide view of the valley before they began to go down.

She drove always with an air of perfect self-confidence. Time and again Denton was convinced, as the afternoon wore on and the soft air of the hills blew about them, that the road gave—was just about to give—its little shake, and that around the next curve he would see the broad verandas of Beaulieu.

How many hills did they climb,
how many times did they start down again? The needle on the gas gauge sank from full to three-quarters to half. Once or twice his valkyr turned to him and gave him a little smile. She never spoke.

At last they turned left from the winding gravelled or unpaved roads they had been following and were back on highway 29 again. There was a fair amount of traffic, with a big blue Chrysler four or five hundred feet in front of them.

Denton, looking about him, saw that they had come back almost to the very spot where the girl in the green convertible had picked him up hours ago. They had made a wide ranging circuit of the Napa valley through its hills. This was how the afternoon had ended, with her bringing him back almost to the very spot where she had picked him up.

Well. He hadn't really thought it could happen, had he? For the last hour or so he had been increasingly sure. And certainly this had been a more pleasant way of passing the time than thinking about Monday by himself would have been.

The Austin-Healey had slowed a little, as if the girl recognized the spot too. "Thank you very much for the ride," Denton said politely. "I guess you'd better stop and let me out here."—Monday was something he'd have to deal with by himself.

The girl's hands shook on the wheel. She turned on him a face crisscrossed with distress. "No, wait!" she said urgently. "There are short cuts! I'll show you—watch!"

The Austin-Healey was only a few feet behind the big Chrysler now. The other lane of the narrow highway was occupied by an approaching Ford.

The girl jerked the green convertible out almost into the path of the on-coming car, missed it by a hair, swung wildly around the Chrysler, and was almost into the ditch. The sports car swayed dementedly. Denton was sure they were going over. The horns of both other cars honked furiously. At the last instant the car's low center of gravity saved it, and the Austin-Healey stayed upright.

The girl turned toward him, laughing. "You see!" she said in her exultant voice. "I told you I would take you! We were almost there that time!"

Denton's tongue stuck to the roof of his mouth. "Where?" he asked finally. "Where were we almost?"

"Why, at Beaulieu!"

Hadn't he known it all along? Why, of course; she was too extraordinary, and the fact that she'd been able to read his mind was only another proof of abnormality. Yes, he knew.

For a moment he was silent. He could still ask her to let him out;
she wasn't so far gone that he couldn't, if he spoke to her softly and plainly, get her to obey him. She would be distressed, she might weep. But she would let him out. And the operation that was scheduled for next Monday would take place.

He was silent a little longer, weighing in his mind the operation—the operations—and the few years of life they might buy for him, against the certain wreck. She would certainly wreck the car, she was certainly mad. And Beau-

lieu? She would keep her promise honorably. She would kill them both to take him there.

He had to swallow. His throat was dry. "Go ahead," he said at last. "Go ahead, my darling. Take me to Beaulieu."

The look she turned on him was so radiant that he felt his heart shake with a sort of anguished delight. Her eyes, her whole face, seemed to dazzle him. "Yes!" she cried in her exultant voice.

She stepped down hard on the gas.

COMING NEXT MONTH

Joe Gadge had a System. It was really all very obvious—spelled out in each and every issue of Slithery Jungle Stories. Not too many people used the System any more—except in the stories. But Joe didn’t worry too much about that. He figured once he got to Burma and found a ruby eye from an idol, he’d be rich and have no trouble marrying Daisy when he got back to Scranton.

R. Bretnor returns next month with THE GADGE SYSTEM, a story which takes your editors back to the nostalgic days of the pulps, when Slithery Jungle Stories came out every month with ragged edged pages that shed newsprint confetti every time we thumbed an issue.

The System worked for Joe Gadge. Do you suppose . . . ?
LONDON, SEPTEMBER, 1965—
The climate is different here. It rains more. The houses are colder. Everyone seems to drink a great deal more, and fewer people seem to get drunk. Nothing ever gets done the same day. No one eats lunch before one o’clock, or dinner before eight. The tea is insidious: I no longer drink coffee all day; at four or five in the afternoon, I make a pot of tea.

Rock-'n-'roll sounds better; it has a beat. Publishers discuss books as often as markets. Small children do talk in the clear high sweet voices suggested by Milne and Carroll and Nesbit. Everyone looks younger: rainwashed complexions perhaps? There is much less newness for newness’ sake—and rather less sentimentality about oldness too. And the writers I’ve talked to seem to feel they have some purpose in their work. It is not considered impolite to indulge in serious discussion in public, whether about literature, world politics, the arts and sciences—even one’s own work or that of one’s colleagues.

Education for its own sake is widely approved, and in intellectual circles at least, the enquiring mind is quite socially acceptable.

Intensity of spirit, or conviction, or both, is not necessarily considered a sign of emotional imbalance.

S-f here still suffers somewhat from the same sort of ghetto-consciousness that has afflicted American publishing and reviewing; but its effect here is more on the ingroup of writer-reviewers than on the publishers or the reading public. Most important, there is a feeling of excitement, a ferment of interest and creative activity, both within the field and surrounding it, such as has not been felt on the American scene for almost fifteen years.

(1949-52: The first years of F&SF, under Boucher and McComas; the beginning of Gold’s Galaxy; Howard Browne’s Amazing; new magazines springing up every month; Colliers and the Post publishing s-f! The new writers: Anderson, Beaumont, Budrys, Clifton, Clingerman, Cogswell, Dick, Dickson, Finney, Henderson, Knight, Maclean, (Merril), Walter Miller, Pohl, Cordwainer Smith, Tenn, Vonnegut, Bernard Wolfe. The return of Blish, del Rey, Kornbluth, Leiber, Sturgeon. The first serious reviews in main-
stream sources; the building up of the Big Book Boom.)

The British scene today is different in many respects. There are only two English magazines; book publication is almost more sure than magazine; reviews are widespread and mostly serious—certainly not supercilious when half of them are being written by Aldiss, Amis, Ballard, and Phillips.

The three biggest differences are the existence of the American field as a second (and often first) market; the comparative absence of an active Old Guard (either of authors or editors); and fifteen years during which it has become unnecessary to prove that science fiction can be good—and vital to determine how and where and when it is.

The result is—the climate is very different indeed. A feature article on the recent World Science Fiction Convention here, by Spectator writer Bill Butler, began:

"Burroughs would have been lost . . . Edgar Rice Burroughs that is. Since the days of his novel, THE WARLORD OF MARS, things have changed in outer space. Yet William Burroughs, he of NAKED LUNCH and NOVA EXPRESS fame, would have loved nearly every minute of it."

Another piece, in the Times Magazine, described John W. Campbell, Jr., as the field's "acknowledged father-figure. . . . He provides the continuity, he shaped much of the thought, he made many reputations. SF narrowed from the vastness of space to the greater complexity of 'sociological' SF with him presiding. But now it is narrowing toward the highly-focused, upside-down detail of 'inner space.' The tone is personal and subjective, the quality of expression important. The prophet is J. G. Ballard, author of THE DROWNED WORLD, the bright star William Burroughs. . . ."

Actually, Burroughs is not much more popular with s-f fans here than at home, but he has exercised a significant influence on British writers, both directly and through the much more widely read work of J. G. Ballard.

The three names most in evidence here are Ballard, Brian W. Aldiss, and John Brunner. This is not to say that the older generation of British writers (Clarke, Wyndham, Christopher, Russell, et al.) has lost its following—but that Aldiss, Brunner, and Ballard, as much as they differ in style, technique, and philosophy, are all peculiarly British, and current, in their work; it is these three who constitute the stimulus center for the rather more subjective, perhaps more thoughtful, certainly more literary, direction of British s-f in the mid-sixties.

All three are comparatively
young authors; each of them entered s-f less than ten years ago, through the pages of *New Worlds* and *Science Fantasy*, when E. J. Carnell was editing both magazines. Of the three, Brunner is probably the most conservative in terms of literary technique and adherence to the “science fiction conventions” (Ballard’s fulminating phrase, which in his usage appears to be a portmanteau containing almost all conventional literary techniques, some social conventions, and all Science Fiction Conventions). Starting in the mid-fifties in America, Brunner might have become a Silverberg, a Garrett, an Anvil—but I do not think he would have written, ten years later, a book like his recent *TELEPATHIST* (THE WHOLE MAN, in the American edition).

Aldiss might conceivably have developed much as he did here; certainly he is the most versatile of the three, and his work relies more on emotional content, imagery, and style, than on plot or idea content. Yet he is stylistically, literally, the most typically British one, particularly in his role of critic (literary editor of the *Oxford Mail*; co-editor of the new *S. F. Horizons*).

Ballard, starting in the American market, would probably have left s-f before he entered it; not one in ten of his early stories would have sold in the States in the late fifties. I have heard Ballard’s work compared here to Bradbury’s and to Burroughs’, and I feel it is a measure of Ballard’s accomplishment that no such comparisons are meaningful in his case—unless in the sense that he needed an enclave such as the Nova magazines to start in, just as Bradbury needed *Weird Tales* and Burroughs, Olympia Press. The only thing they have in common is uncommonness. (The only established writers active on the American s-f scene today whose work is in any similar way unique to themselves are Kurt Vonnegut and Cordwainer Smith—both of whom have been from the start in, but not of, science-fiction.)

In this respect, Ballard is again unique: he reviles the inadequacies of science fiction endlessly; but he directs his criticism primarily at other writers, reviewers, and editors inside the field. Stylistically, he allies himself with the *avant garde*, with experimental techniques, and surrealism. But his subject matter, his preoccupation with the metaphysics and biophysics of time and space-time conformations, his “ontological” explorations of psychic and sur-realities, his deep awareness of the inextricable relationship between mind and matter, organism and environment, are directly on the main line of speculation in serious science fiction—and particularly current throughout the British field.
Ballard is fond of defining science fiction as "that area where inner space and outer space meet and merge"; it might be as valid to say that his own work represents that area where s-f thinking and surrealist writing meet and marry. That marriage seems to me to be the Big Event of the contemporary literary scene, and its impact on other writers, in both camps, is increasingly evident.

Whether it is more true to say that the vitality and excitement one feels in s-f publishing circles here owes its existence in part to Ballard's influence, or that his literary existence was made possible by the climate here, I should not care to guess. Certainly, the climate is different; and in many ways, British s-f writers today can enjoy the best of two worlds.

To begin with, there has been an eager magazine market continually open to new writers here for almost fifteen years, because as soon as a British s-f writer begins to make a name for himself, a sizable proportion of his work starts going to the higher-paying American magazines. There are still only two magazines, now published by Roberts and Vintner, in a new format, and under two new editors with radically different approaches from Carnell's, or each other's. Kyriel Bonfiglioli edits Science Fantasy from the office of his art gallery in Oxford—where he also lectures in antiques and mediaeval art. Mike Moorcock, of New Worlds, holds virtual open house for his contributors in the living-room-office of his London flat, a stone's throw from Notting Hill in one direction, and Hyde Park in another—and sometimes still picks up the guitar with which he earned his way around the Continent a few years back, and wails a wild stomping blues. What the two men have in common is a great impatience with the artificial limitations of genre or "category"; if one set of standards is based on the body of English literature, and the other on the advance front of contemporary writing, still they are standards, and both editors expect at least the best of s-f to meet them. In any case, both magazines remain vehicles for the more literary and experimental efforts of the established writers, as well as for the work of the proliferating crop of young potentials.

Again, when the budding writer reaches the level of book publication, the chances are his first one or two efforts will be placed fairly readily with an English publisher in search of original work on which American rights have not been previously sold. Or he may bypass this step, and find his books appearing from the beginning in the U.S. first, with a British edition following.
This is the usual pattern, in any case, for the established writers. The basic money comes from the mass-distribution American market—but the basic edition, from the writer's viewpoint, is the English one—and when the time gap between American and British editions is a bit longer than usual, it is not uncommon to find that the text varies considerably.

A number of factors enter into the differences between editions on either side of the ocean, and most of them are rooted in the different marketing and production problems of the two countries. An American paperback publisher, for instance, expects to sell—indeed, must sell—anywhere from two to ten times as many copies as a British firm. The mass production and distribution setup in the States makes it vital for the publisher to be able to forecast his sales accurately—and mass sales methods provide him with the techniques for prediction.

The end result is that the sales department tends to dominate the editorial; you cannot determine from the quality of the prose how many copies a book will sell on the newsstands; it is the "package" which has some predictability. Hence, the phenomenon of the "category" book, the importance of the "name" author, and the increasing tendency for the editor to become a sort of liaison man between sales-and-production and the author—functioning primarily as a judge of whether the product is suitable for the predetermined package and production schedule.

At the same time, mass production methods make production schedules less flexible. Companies are larger; print orders must be scheduled well ahead of time; red tape accrues in all directions; everything slows down.

It is hardly surprising, then, that the book editor in the States sometimes sacrifices literary standards in favor of length, content, and date of delivery. He may take a sloppily written book if he can have it in time to fill the hole in his schedule for next September; he may insist on editing out of a book material considered offensive or unsalable to the market for which the book is destined; he may ask for additions to justify a certain kind of cover.

British editors I have talked to, not subject to the same pressures, react with what might seem on Mad Ave, quaint old-fashioned horror, at the notion of unauthorized editing of a writer's work; they find it not at all strange for a writer to delay delivery of a book in order to do a last revision; they assume it is basically the quality of the work that will determine the eventual sales of the book.

As a result of all this, it is not uncommon to find considerable variation in British and American...
editions of the same book. Sometimes the writer submits his first complete draft to American publishers, while working at comparative leisure on a more satisfactory final draft for publication at home. Sometimes it is the American publisher’s rush-completion date which demands an unfinished job, from the writer’s viewpoint—but he consoles himself with the American advance, which, again, provides the time to do the polishing job. Sometimes, the differences are due entirely to editorial changes in the publishing house.

The British author’s literary standing, in his own mind, rests on British critical reaction, and British sales. It is easy for him to forget—even while he collects the royalties—that three or four times as many copies of his book (or even more) are being sold and read across the ocean in a form unsatisfactory to him. It is his version his friends and local critics are reading. And of course, regardless of how many people read which one, his own version is at least on the record in print.

Brian Aldiss’ GREYBEARD (see F&SF Books, Dec. 1964) is a case in point. The Harcourt Brace edition published in the U.S. last year received a much less enthusiastic reception than the Faber edition published in England shortly afterwards. I understand the forthcoming Signet paperback will contain the full British version; and I suggest that American readers who were disappointed in the novel try the paperback again.

Ballard’s latest book* (THE DROUGHT in England, THE BURNING WORLD in the U.S.) is perhaps a more typical instance; the differences between the two versions are less drastic and, I suspect, more representative of the whole range of ‘climatic’ variation between the two countries.

I have read the British version, and skimmed through the American. The apparent great difference in length is due primarily to the smaller print and longer page of the Berkley edition, and to the breaking up of the narrative into many short chapters; there is little actual expansion. Yet with work as stylized and intense as Ballard’s, even the white-space breaks between chapters are significant, as are the results of a last prose revision.

It is becoming almost impossible to review a new book of Ballard’s all by itself. The author is building from book to book, and from story to story, in such a way that although each unit is meaningful on its own terms, it as-

*THE DROUGHT, J. G. Ballard; Jonathan Cape (London), 1965; 252 pp; 21/0 ($2.94); first published as THE BURNING WORLD; Berkley, 1964; 160 pp; 50¢.
sumes full dimensions only in the context of the whole body of work. 

The Drought might be regarded as a companion piece to The Drowned World (F&SF Books, July 1965), this time exploring the effects of dryness, instead of deluge, on the human psyche. Once again, the book is populated with exotic, evocative, archetypal characters, moving in curiously intersecting patterns through the dust and flame, salt, soot, and shadows of the desert landscape. Time seems to slow almost to a stop—and in this time-desert, the action and dramatic momentum of the book appear to gather speed.

Some of the concepts here were prefigured in earlier short stories—The Delta at Sunset, The Reptile Enclosure, The Cage of Sand—but in the novel, the elements and ideas merge into a surprisingly exciting piece of storytelling, even while they fall into perspective in the larger landscape of Ballard's ontological explorations.

I think this is a more easily readable book than The Drowned World, and almost certainly a better novel. Whether it is a better book—because Ballard does not really write novels anyhow—will take time to determine; the significance seems to keep seeping up to the surface of the mind for a long time after the book is closed.

There are a number of other British books, including Brunner's Telepathist, mentioned earlier, and a handful of volumes which have not appeared in the U.S. and are not (so far) scheduled to, that I hoped to report on here; but space does not permit it this month. A brief rundown on other books, with information on ordering British volumes, will be included with next month's column—which will, of course, also, start catching up on the American books.

—Judith Merril
Bill Herriman of the Mult/Op Detective Agency had his troubles with machines. He was not at all the sort of guy who could get away with tossing electric heaters into bathtubs. Yet there is more than one way to burn an adversary, as Herriman demonstrates in the Marj Outbanner caper.

TO THE RESCUE

by Ron Goulart

The opcruiser rocked down gently onto the sand and then skittered into a protecting scatter of brush. The controller’s chair tilted Bill Herriman ahead so that the view tube that was lowering from the ceiling would just meet his eyes.

“Which cottage?” Bill asked the cruiser. Across the small calm bay was the town of Artesian, one of the several similar beach towns on the planet Tarragon.

“The blue one with red shingles,” said the cruiser. “That was in Report 540-46, you know.”

“I forgot,” said Bill, studying the house where the client’s daughter was supposed to be staying.

The cruiser flicked on one of the canned pep talks. “Mult/Op is the largest private investigating service in any known universe,” said the speaker grid under Bill’s chair, “because it employs the best equipment and the best men.” A Mult/Op march was played.

“Down on the volume,” said Bill. Mult/Op’s Mechanical Wing had tracked Maxwell Outbanner’s runaway daughter to this town on Tarragon. It was Bill’s job, aided by his opcruiser, to keep an eye on the synthetics heiress and to subtly extricate her from whatever situation she was in and get her back to her home planet of Barnum.

“Have a drink,” said the cruiser.

The bottom drawer of Bill’s real-wood desk slid out and a fifth of bourbon stood up.

“Not at eleven in the morning.”
The cruiser poured him a shot in a tumbler. "Have a drink."

Bill let the bourbon sit on the file cabinet next to him. A rangy blonde had come out on the sun area of the watched cottage. She had long tan legs and was wearing a yellow shift. "That's Marj Outbanner, huh?"

"Have a drink," said the cruiser. It poured another.

"Come on," said Bill. "Don't go on the fritz again."

A brown wide man with considerable body hair had joined the runaway heiress on the sundeck.

"He's pretty tough looking for a ceramicist," said Bill.

"Have a drink," said the cruiser.

Four shots of bourbon were lined up on the cabinet.

"Damn it," said Bill. He stood up and went to the file cabinet which held the opcruiser repair manual. The damn cruiser had broken down once already since he'd arrived on Tarragon. That was why he'd been a day late getting here to watch Marj Outbanner.

"Here's looking at you," said the cruiser, pouring bourbon into the view tube.

"Stop it," said Bill. The drawer with the manual in it was stuck shut. Bill kicked the cabinet.

"Oof," said the cruiser.

The bottle fell into the dicta-desk and all the lights in the cabin went out.

"May day," said the cruiser in a gay falsetto.

The emergency exit popped open and smoke began to come out of the R&I machine.

"Hellsfire," said Bill. He dived out onto the yellow beach. While he stood looking at the smoking cruiser a motorboat jumped out of the water and shot across the sand. It slammed into the cruiser's rear end, scattering silver paint flakes and taillight shards.

"Darn," said the boatman, a curly blond man. "Boat went out of control. My fault. I'll get you a repair man on my com. My fault."

"Have a drink," said the cruiser.

The cruiser repair shop was in the town of Artesian, about five blocks from the ceramicist's cottage where Marj Outbanner was going astray.

"This is a real honor," said Ernest Piute, the head mechanic. He was small and round, dotted with blue grey grease spots.

"I was hoping you'd fix it right on the beach there," Bill said.

Piute shook his head. "Have to tow these exceptional ones in," he said. "I don't dare tamper with a machine of the caliber of a Multi Op cruiser right out on a dirty beach."

The cruiser sat on a rack in the middle of the cool shadowy repair shop. Next to it a man with mismatched socks was lying under an ice cream cruiser.

"What do you think's wrong?" Bill asked Piute.
"Can't tell yet," said the mechanic. "But I'd guess it was your Central Diagramming Center."
"Can you fix it?"
"Sure," nodded Piute. "But these opcruisers use an eccentric CD Center and I'd have to get a new one teleported from Barnum."
"How long?"
"I know you're probably in the midst of a caper," said Piute. "Tomorrow morning?"
Bill grunted. "Not sooner?"
"I have to relocate your whole Control Housing, not to mention taking up the rug and moving floor lamps. And the rear fender has to be replaced. You don't want to go around looking crumpled."
"I hide a lot," said Bill. "It really doesn't matter."
Piute smiled. "Don't worry. I'll mend that while we're waiting for the CD Center to get here. I'll put your job on top priority, stick two crack men on it. Eric and Manfred. That's Manfred under the ice cream wagon."
"Can I get some gear out of the storage compartment?" Bill's portable listening equipment was in there.
"Nope. That storage door froze when the motor boat hit you."
"Well, okay. I'll check with you this afternoon."
"I'll have you mobile again by tomorrow early," Piute called as Bill hurried away on foot.

The palm tree next to the cot-

"Let's," said Marj Outbanner from the sundeck.
The burly ceramicist chuckled. "Let's at once, Marj."
"We won't have to pack much. It'll be a quick honeymoon."
Bill groaned internally.
"Right," said the ceramicist. "Really little more than a weekend at Calamari and then back here."
"Wonderful."
"Overwhelming."
"Love."
"Darling."
"Oh boy," thought Bill. They were eloping to Calamari, the big gambling and marrying resort town 500 miles across the desert. "Get started packing," Marj said.
"You, too, sweet."
Bill knew their client would want this marriage stopped. He jumped up and vaulted the blue wall around the sun deck.
"Who are you?" asked the rangy blonde as he landed.
"Herriman of Mult/Op Detective Agency," Bill told her. "I suggest you reconsider, Miss Outbanner. Your father, who has hired us, would not approve of this rash move of yours."
Actually the ceramicist didn't look like such a bad guy. However in this job, which Bill had held for over two years, it was best to follow orders. Thinking didn't pay.
"Like hell," said Marj.
The big ceramicist picked up a ceramic owl and hit Bill over the head with it. "Here's for you, shamus."

When Bill awoke it was twilight and the cottage was long empty.

Back at the repair Ernest Piute announced, "It wasn't so bad as we thought. It's all fixed and ready to fly."

That meant the eloping Marj Outbanner would only have a two or three hour lead. He should be able to overtake them in the fast opcruiser. "Great," said Bill, heading for the cruiser.

"Wait," said Piute. "You've got to sign the credit forms."

Just at nightfall Bill took off and headed across the desert for Calamari.

The cruiser said, "Oh oh."
"What?" mumbled Bill. He'd been dozing in his swivel chair.

"Mechanical Scrutiny reports that a man named Norman L. Vision is tailing Marj Outbanner and Culligan, the ceramicist."
"Who's Vision?"
"It's in R&I."
"Save time and tell me."
"He's believed the head of a gang of kidnappers."
"That's just great," said Bill. "Where does Scutiny make Marj and that Culligan?"
"Their rental cruiser is just arriving in Calamari."
"We're how far?"

"It's on the log."
"Tell me."
"100 miles. A half hour."
"Good," said Bill. He caught his elbows and closed his eyes.

"Flecker, Nathan, five foot three, asterisk shaped scar over left knee," said the cruiser, bouncing oddly. "Also known as Nathan Faith, Nat Flecker and Lightfoot Riley. Specializes in greenhouse robberies."

"What's all this?" asked Bill.
"Flennoy, Walter R., alias Little Wally, five foot eleven, color blind in the left eye. Oops." The cruiser turned a somersault and began gliding down toward the desert.

"Hey," said Bill, trying to untangle himself from the contents of his In box.

"Flerrings, Fleswinger, Flettsman, Flocker, Floodstein," said the cruiser. It became silent and then there was a great thumping sound.

"Blast," said Bill. They'd crashed on the dark desert. The repair manual was accessible this time and he began checking out the ship.

A rough half hour later someone knocked on his door.

Keeping his place Bill went over and looked out.

"Are you in trouble?" It was a slender redheaded girl, and behind her a short square man.

"Who are you?" Bill asked through the door.

"I'm Priscilla Lincross, assistant to Dr. Ralph Deeping."
"Hi," said Dr. Deeping.  
"We've been conducting a motivational research study in the village over there," explained Priscilla. "As we were returning to our cruiser we noticed your fallen craft. Are you in trouble?"

Bill got the door open. "I can't seem to get my cruiser functioning. Everything checks out. It won't work, though." He looked past the girl and said to Dr. Deeping, "Are you good with machines?"

"I'm the leading machine psychologist on Tarragon," said Deeping. "I'm an ace motivational research man, too, and not bad at analyzing people. You, for instance, seem anxiety ridden."

Bill told them about the case he was on, about Marj Outbanners' elopement with Culligan and about the possibility of a kidnap attempt by a man named Norman L. Vision.

"I'll check out your ship and see what's wrong," said the doctor. 
Priscilla climbed in and Dr. Deeping followed.

"Would anybody like a drink?" asked the cruiser.

"Don't intrude," said Bill.

The compact Dr. Deeping prowled the cruiser, poking it and asking it questions. After fifteen minutes he said, "An interesting case, Mr. Herriman."

"Oh, so?"

"Do you have a pair of dice?"

"In the drawer with the bourbon."

Deeping fetched the dice, handed them to Bill, said, "Do you think you could control these?"

"No."

"Try for a seven."

Bill threw them on the desk top. "Seven," he said.

"Exactly," said Dr. Deeping. 
Priscilla had put on a pair of large round rimmed glasses. She cocked them slightly on her nose and said, "You're not really happy with the Mult/Op detective people, Bill."

"Sure, I am."

"He majored in psych in college," said the cruiser. "His uncle got him into Mult/Op."

"Shut up," said Bill. "I like detective work. It keeps me in the open, moving around, meeting people."

"Mr. Herriman," said Dr. Deeping, "ours has been a fortunate, though chance, meeting."

"He's diagnosed your problem," explained the redhead.

"Oh yeah? In fifteen minutes?"

"It's not difficult," said Deeping. "This ship of yours is the obvious victim of telekinetic reprisal."

"Meaning?"

"You have extrasensory abilities," Dr. Deeping said. "You basically resent your job and your cruiser. It is you, Mr. Herriman, who have been putting it on the blink. This is not the first failure of the ship, is it?"

"No, I've had trouble with it the past few months."

FANTASY AND SCIENCE FICTION
"Increasing trouble?"
"Well, yes. In fact, yesterday a motor boat came up out of the water and hit us."
"Exactly," said Deeping.
"I did that, too?"
"Of course."
Bill shook his head. "I don't believe it. Anyway, whatever caused the trouble. How can we fix it?"
"It's your Central Diagramming Center. You've bolixed it," said Deeping as he patted the cruiser wall. "Ship will have to be towed in."
"Hell. That Vision guy will kidnap Marj Outbanner before we catch up."
"We're," said Priscilla, "leaving for Calamari in a few minutes. You're welcome to a ride."
"Let me get my portable equipment so I can stay in contact with Mechanical Scrutiny."
Dr. Deeping stroked the cruiser wall.

Wiping grease from his face Dr. Deeping said, "It's not as bad as your cruiser."

Bill was standing next to the doctor's fallen black cruiser, not looking at Priscilla in the doorway. "You think I did this to your cruiser, too?"
"Beyond a doubt," said Deeping. "There's strong evidence of telekinetic energy expenditures."
"Can you fix it?"
"It'll take two hours but yes."
It was bright mid morning when the Deeping cruiser sailed across the outskirts of the vastly neon Calamari.

"Mechanical Scrutiny reports the Outbanner girl and Culligan have just entered a chapel in the tower of the Lucky Mojo Hotel on Sheridan Street," said Bill. "Can you drop me there?"
"Certainly," said Dr. Deeping.
"What about your kidnapper, Vision?" asked Priscilla.
"Actually," said Bill. "Actually, the scrutinizer that was watching him is sort of haywire and I'm not getting reports at the moment."
"You'll be careful?" said the red-haired girl.

Dr. Deeping dropped the cruiser down in front of the Lucky Mojo. "Priscilla works with me at my home. Visit us when you've wound up this assignment."

Bill ran from the cruiser and into the hotel. "Marriage chapel?" he asked an android bellhop.
"Elevators 22-26, sir. Floor 40."
"Thanks."
"Welcome to the Lucky Mojo Hotel," said his elevator.
"Floor 40," said Bill.
He and a bearded man with a plaid yamalka were alone in the car.

The elevator closed and rose.
"I notice," said the bearded man, "grease spots on your tunic. Are you mechanically inclined?"
"No," replied Bill.
After a moment the elevator said, "Mojo, Mojo, Mojo." It
stopped just after the number panel flashed 39.

"Damn," said Bill. "Let's ring the emergency bell."

"No need," said the bearded man. "We'll pry the roof off and climb the cable to 40."

"Yeah?"

"Here, give me a boost." With agile swiftness, though he dropped his yamalka once, the bearded man got the roof slot open and himself and Bill out on top of the elevator.

"Now what?" asked Bill.

"Rudy, Sky?" called the man, cupping his hands. "Are you there?"

"Huh, chief?"

"I'm down here in the elevator shaft. Get those doors up there pried open."

"Okay, chief."

"Are you bound for the wedding?" asked the bearded man as they shinnied up the cable.

"I'm trying to stop the wedding and a possible kidnapping. I'm with Mult/Op," said Bill. "Are you here for the wedding?"

"No," said the man as he stepped through the sprung doors of the shaft. "I'm Norman L. Vision. I'm here for the kidnapping."

He helped Bill into the corridor and then knocked him unconscious with a sockful of coins.

The getaway cruiser had green tinted windows. When Bill awoke they were over the middle of downtown Calamari.

Sitting next to him on the broad rear seat was Marj Outbanner, bound and gagged. Next to her a trussed up Culligan.

Norman L. Vision, beardless now, sat in a lounging chair with a stun rod on his lap. "My finest hour," he said to Bill. "An exceptional kidnapping, with a bonus hostage."

Bill wondered if Dr. Deeping was right about his ability to fritz machines. Now was a good time to try it. He gritted his teeth and closed his eyes.

The cruiser continued its flight. Bill kept trying.

The cruiser's radio began playing organ music. "Hey now," said the pilot. The ship somersaulted and descended. The radio stopped and the cruiser crashed in City Hall Plaza, some seven yards from an office building marked Police.

Bill hesitated on the curb in front of the hotel he was staying at. Finally he flagged an automatic taxi. The ground car stopped in front of him and he got in, giving Dr. Deeping's address.

He sat stiffly during the trip.

But the taxi arrived without any trouble.
To praise a story as being full of “local color” is often to chase away all but the most adventuresome of readers. Simply because too many writers are so taken with the folklore of Southeast Poland or Madison Avenue or downtown London that it becomes impossible to see the story through the foggy atmosphere. This said, there is nothing more satisfying than some genuine local color surrounding a good story with universal appeal. Len Guttridge (AUNT MILLICENT AT THE RACES, April 1965) gives us an excellent example with this poignant story set in South Wales.

THE MOST WONDERFUL NEWS

by Len Guttridge

Rain had scoured the Vale of Cyfartha all night and left it green and glistening for the sun’s inspection. Out of a miner’s cottage and up the brown path encircling Cerrig Ddu trudged Sam Dando.

He was dressed in chapel best except for the corduroy cap and the bright blue muffler which swathed his throat in case the spring breathed a late frost on him coming home tonight. It wouldn’t do to catch ’flu or worse. Not while Jenny so depended on his visits.

It no longer made him shiver to recall that this was her fifth year in the hospital.

The visits had become important to Sam as well. In the depths of sleepless nights he knew them to be the most important things in his life. Hospital visits can be little ordeals of awkward silences broken by hushed and anxious enquiries, and maybe yet another addition to a bedside library of unread books.

It was Sam’s pride and ineffable joy to turn his calls on Jenny into epics.

In the old days when she was home, at the end of each shift he would bring up from the black bowels of earth a heartful of cheery or scandalous news with which to amuse her over supper. Much of it he gathered from his chattering companions ascending to daylight in the pitcage, and it had to be refined for his good wife’s ears. Sometimes he’d mine a
few jolly accounts from the lode of his own memory and imagination, though this had run thin as will any mineral vein.

Anyway, the need for lively news was never greater now that Jenny was trapped for only God knew how long in a hospital bed, and since the roof fall which liberated him from the pit with a permanent stoop and a pittance for a pension, Sam Dando had found his sources increasingly scarce. The *South Wales Clarion* was no help either, for mostly it sounded only discords from far-off and unpronounceable parts. Besides, the Vale of Cyfartha alone was Jenny's world. And so long as Sam could tell her something of its continuing cycle of marvels, of another case of speaking in tongues at chapel, of the recurrent child-birth of the Anchor's unmarried barmaid, the newest installation of pithead shower-baths eternally campaigned for, or of the seasonal miracle march of bluebells up Cerrig Ddu, why then, Jenny still lived in it.

It was Sam's practise to try and stock up on a rich crop of items, keeping some in reserve while he moulded, polished and elaborated the day's choice selections for unfolding in all their sensation before an awed and smiling Jenny. He even adopted the news-gathering tactic of going to the Anchor twice a week for a half-pint instead of his usual single one-pint visit. He would sit close to the bar, his mind absorbing the flood of colliers' palaver like a sponge. He didn't tell Jenny he had doubled his visits to the Anchor.

In spite of all his efforts, more and more often now he set out for the hospital with the turmoil in his stomach of a soldier about to shirk a battlefield duty. For all he had would be a scattering of tattle, crumbs in a pauper's foodbox, and it forced him to rely upon chance incidents and talkative wanderers met along the four-mile journey.

His spirits matched the peaks and hollows his footsteps took him over. He would approach each road bend and hill crest taut with hope, and out of his sickening dejection when it yielded nothing, hope would rise again as he advanced to the next feature.

Well, this morning held promise. The sun had cleared Cerrig Ddu with no clouds to ambush it, and it was market day in Cyfartha. There were sure to be people abroad. People with gossip. People with rumors. People with dreams and revelations. People with news.

Buoyant as a ball on a fountain, Sam Dando crossed the valley slopes.

And Tom Pant came tumbling downhill at him like a baby spilled from its carriage.

Sam's buoyancy immediately faltered, but only for an instant.
Tom Pant was a heartless liar and an amorous thief. Some day they would hang Tom Pant. But Sam couldn’t afford to be particular any more. So he halted in the middle of a daisy field and waited for Pant to fetch up in front of him.

“Well, Dando,” Pant flung at him. He stopped tumbling and pranced about Sam like a prize-fighter seeking an opening. “Stare at me long enough and I’ll sprout bloody horns, won’t I?”

Sam winced and struggled to be sociable. “Saw you in the Anchor Wednesday,” he said. “With a nice bit of fluff you was too.”

His heart thumped anxiously. Tom Pant was a braggart too, give him half a chance. Sam had given him a whole one, and now would come the saucy account of Tom Pant’s Wednesday night conquest, to be discreetly sifted but not censored of all its outrageous content and stuffed into the newsbag of Sam Dando’s memory.

Only Tom Pant gave a cocky skip, put a thumb to his nose, and said, “And it’s nobody’s business but mine, is it?”

And he was off.

Sam’s shoulders slumped a bit. He was walking into the sun now and the blue muffler became a thick damp lump against his Adam’s apple. He loosened the knot and blinked at the countryside spread before him. Green and rolling, it reminded him of counterpanes at the hospital. The sun winked blindingly off distant River Tewi and from the other side of Cerrig Ddu the schoolbell tolled as if summoning mourners instead of children.

Sam blew his nose and plodded on. Soon he had covered a quarter of the journey with still no news for Jenny, and worry began to gnaw at his heart like a slag-heap rat.

Then he mumbled a quick Welsh prayer of thanks. Coming towards him was Mrs. Pritchard, his old foreman’s wife. She was a long way off but he couldn’t mistake her. She kicked up her skirts as if they bothered her and the artificial pansies danced merrily on her stovepipe hat.

Mrs. Pritchard had never let him down yet. She always had news. Mrs. Pritchard in fact had news even when you were not looking for any. Sam remembered days long ago when his darling Jenny and he were just wed and still able to savor the magic of hand-in-hand walks up Cerrig Ddu on autumn evenings of trembling silence. Mrs. Pritchard would loom before them like a good-natured apparition and shatter it with news.

It might be of the fight she’d had with her Wat over which of them should have the lion’s share of five eggs and how it ended with the eggs hurtling between them as splashing ammunition. Or it might
be yet another of the bulletins she relayed from her nephew Arthur, nine years in America and forever teetering on the brink of fortune. Whatever the theme, it was Mrs. Pritchard's news and there were times when Sam had dearly loved to tell her what she could do with it.

But not any more.

"Good morning, Mrs. Pritchard," he shouted when she was still twenty yards off, and he waved her to slow down. She yelped several times like a puppy and her face was a pink penny of woe. She didn't slow down.

Sam Dando braced himself squarely in her path.

"Out of my way, Sam," she gasped. "There's a hurry I'm in."

Then she ran out of wind and collapsed in the grass and thumbed her hat back on a great bun of coarse hair and rested the package she carried, wrapped in yesterday's Clarion, on her wide lap.

"Wat's lunch," she panted. "First time in eleven years my Wat forgot his lunch. Getting old, he is." She rolled her eyes to blue heaven and the pansies on her hat bobbed sympathetically. "And won't he give me the cokes of hell if I don't fetch it to him in time."

"My oath he will, if I know Wat!" Sam clenched a fist and punched one palm eagerly. Then Mrs. Pritchard, refreshed, sprang to her feet and he added at once, "Some funny things do happen to you, Mrs. Pritchard, don't they?"

"Nothing to what'll happen if my Wat don't get his veal pie and onion, ducky."

She was trying to pick up Wat's lunch and adjust her hat at the same time. Sam thrust out a hand, more to restrain than assist her. "You remember the row you two once had?" he prompted. "Eggs flying?"

A grunt, a fleeting smile, and she got past him.

"Your Arthur," he called and strode behind her. "Heard from him lately?"

The invitation foundered. Mrs. Pritchard was gathering momentum. Sam trotted grimly after her, one arm outstretched. "Wat's sciatica been bothering him?"

But Mrs. Pritchard was in full flight. Sam swallowed fiercely. His hands fluttered like stricken birds, then thudded to his sides, and he stopped running.

"Mrs. Pritchard!"

Her head didn't turn. He stared at her dwindling hopping figure. With a writhe he swung and resumed his journey. His knees were suddenly uncomfortably damp against his velveteen breeches and perspiration itched his coal-pitted face too. He tried to salvage something from the brief encounter with Mrs. Pritchard but all it amounted to was that Wat Pritchard ate veal pie and onion for lunch, and was growing old and forgetful.
Sam walked half a mile further without meeting a soul and by then the sweat and his accelerated heartbeats were less from effort than apprehension.

Jenny would be sitting up now, letting the nurse bathe her face and brush her hair and tie the russet ribbon that she wore in it once a week special. And they would gently tease her about her Sam, pretty you must look for him, he always bucks you up indeed with his endless wonderful talk. And she would smile back shyly and not say anything and the nurses would understand because they knew she was counting the final minutes to Sam's arrival, just as she had been counting the week's ten thousand hours since his last visit.

What images would he evoke this time, what characters would he parade, with what fresh sparkling pageant would he banish her imprisonment for sixty precious minutes?

But Sam Dando's mind and memory were emptier than all the tankards of the Anchor on Sunday morning. His pace became labored. Never in a lifetime did he dream that emptiness could weigh so heavily.

Another mile. Mountainsides rippling with gorse. Above them circling rooks, and higher still the slow twist of some lone aircraft. At their foot, meadows so full of daisy and snowdrop they seemed from a distance flooded in butter-milk. Glens choked with ash groves and pine. The Tewi flashing between them. And God help me, groaned Sam Dando, all of it might as well be the Sahara.

Close to noon. The sky wouldn't stay bright all day. In the western distance behind the hills, raincloud spread like ink. Sam Dando's path descended now into a shadowed gorge full of the thunder of the Cauldron where a mad-cap tributary, after cascading down three falls, threshed with the dominant Tewi.

The path wound along the river bank to ancient Madoc Bridge. A figure crouched against the parapet gazing upstream towards the Cauldron. Sam felt a flicker of revived hope which wasn't entirely quenched when he identified the man as Shacki Spit and saw that as usual Shacki was talking with the Devil.

You couldn't see the Devil of course. You never could, and Sam Dando for one was inclined to agree with the chapel minister that there was nothing wrong with Shacki Spit's speech a nerve specialist up from Cardiff couldn't have cured. But the Vale population preferred their own theory of the remarkable contrast between Shacki's stammer in discourse with other men and his muttered fluency when alone. He just was not alone. Unseen, the Devil was with him and only to the Devil could
Shacki spoke without impediment.

For there were other things also. Like the Sabbath Mine. Ninety-five colliers had strangled on the Black Damp, and since nobody could reach them the pit was sealed and abandoned. Shacki often climbed lonely Sabbath Mountain and pressed one misshapen ear to the ground and would afterwards tell how he heard the entombed miners singing. And you found yourself believing Shacki although the miners had been under Sabbath Mountain now eighteen years.

And there was young Tom Pryce, never the same after the love of his life ran off to Cardiff with a football player. Poor Tom finally drowned himself in the Tewi and it was Shacki Spit, no other, who saw Tom's corpse candle hovering over the very spot the night before.

Sam Dando reached the bridge. Now if Shacki could be persuaded to quit talking with Old Nick for a few minutes he might have something Sam could trim, knead and shape into a bit of news for Jenny. Shacki kept staring up the Tewi, lips racing.

"Waiting for your ship to come in, then?" bellowed Sam above the roar of the Cauldron, and he slapped Shacki on the shoulders. Shacki whirled, still in soft and fervid conversation. Again Sam cut into it. "Nice day if it don't rain, Shacki."

Shacki's lips froze then and strain darkened his face. That's it, Shacki, thought Sam, get a grip on yourself and out with it, man. Shacki's cheeks bulged. And then he got it out. "I saw a corpse candle last night, Sam."

Dismay walloped Sam behind the knees and almost dropped him. His hands groped along the stone bridge wall for support. He took a deep breath and said, "You're a proper packet for seeing and hearing things. Honest to God, Shacki, I don't know." He shook his head. Then he said brightly, "Worked a week on Cefn Mabli railway, didn't you, Shacki? Nice job, I hope?"

And his mind screamed, now come on Shacki, late it is, you may be my last chance, for God's sake. Didn't anything interesting happen at Cefn Mabli?

Bristled as a witch's broom, Shacki's chin worked. "I saw a corpse candle last night," he repeated. "Plain as I see you, boyo."

Sam stalked off the bridge. On the bank he turned and shook a fist. "You and your bloody corpse candles," he bawled. "The Devil with you, Shacki!"

After a while his rage ebbed. Not Shacki's fault if indeed he possessed unholy vision. A burden no less to him. Sam was treading among thickets when he abruptly turned to shout an apology. But by then Madoc Bridge was deserted.

Sam had a little under a mile to
go. He was walking among dense trees now and the bits of sky he could see floating over their swaying tops were mostly an ominous gray. The trees deadened the echoes from the Cauldron.

And Sam Dando met one more. Tomato ripe and languid as a lily pond, spiring the air about her with perfume and glances, walking slowly towards him and exaggerating her side to side movements because he was a man. Beth Bloomer. Cut dead by all Cyfartha’s respectably wed womenfolk, condemned by the chapel deacons, and careless.

She stopped unnecessarily close to Sam and said softly, “How’s Jenny?”

“Fine, let’s hope,” he answered with nostrils full of cosmetic smell. “Going to hospital now, I am.” He retreated a step and tried to outflank her. She moved as fast as he did and still faced him.

She murmured, “Peaceful here, isn’t it, Sam?” High stays pushed her bosom almost to her chin.

“Yes.”

The reason he didn’t right then try harder to flee was for Jenny’s sake. All he had to do was hold his ground and not react as the likes of Tom Pant would have, and perhaps Beth would give over her wanton pantomime enough to utter a few sensible words, a phrase, a figment, something he could build on for Jenny.

And that was the only reason.

It had nothing to do with Beth Bloomer’s peroxide proximity, or the faint kindling within him of a forgotten warmth, or the little sad shock of reminder that before the cave-in bowed his back and Jenny’s ill-health lined his face, he could make a woman look twice at him, by God if he couldn’t.

Beth said huskily, “Sam?”

“Got to be getting along, I have,” he blurted, and was past her in a jiffy. She laughed at him. But he wouldn’t be taunted into defeat, and as he edged away he said firmly, “Jenny will be waiting for me.”

He made one last try. “There’s a nice red shawl, Beth. Cost a pretty penny, hey?”

Her soft laugh set fire to his cheeks.

He turned from her quickly and stumbled on through the trees. Suddenly it was hard to see. He swept a sleeve across his face and lifted blurred eyes to the aloof branches. “Jenny, my old gel,” he burst out. “Oh, Jenny, if only you was home again!”

He broke from the thicket and stared about him. To the east the sky was rhythmically flushing above the Foundry and the sloping meadows there were scarred by the scorch marks of dross from the forges. The sizzle and snap of cinders mingled with the receding roar of the Cauldron.

Sam’s mind was a terrible emptiness. Emptier even than the des-
late sky where clouds were closing in on the still vibrating aircraft speck. He had nothing to tell Jenny.

Caradoc’s Glen came into view. Only half a mile beyond it stood the hospital. He would meet no one now. His fellow creatures had let him down. He pounded his heels in the spring-softened turf and lifted his gaze to the sky, and in tones of despair and supplication which rose above the fiery crackle from the east and the watery fury back of him, he cried out for a sign, a phenomenon, credible or not, anything worth relating to his patiently anticipating Jenny.

He glared east. The Foundry refused to turn upside down. To the west, no Welsh Mauna Loa suddenly belched flaming lava. From behind him the confluence of waters still rumbled and he knew they hadn’t reversed course and gone leaping up the mountain crags.

Sam Dando plunged into Caradoc’s Glen, which is a verdant saucer containing copses of hazel and ash. Here, it is said, the old bard Caradoc would sit for days on end in communion with the infinite. More recently, here a frustrated lover axed his rival to death, and the tragedy has produced its inevitable aftermath of rumored hauntings. There is a beauty about Caradoc’s Glen all right, from a distance. Within it the melancholy can suffocate you.

Sam approached the middle of the Glen. Trudging among the trees he had been turning out the pockets of his mind in vain search for scraps of interest, and hadn’t noticed that the singing of birds had ceased. He had barely raised his eyes since leaving Beth Bloomer and was thus unaware that the object occupying remote altitudes for some time past had started to descend—and simultaneously disappear, or rather merge chameleon fashion into its cloudy background. For several minutes nothing of it could be seen.

It reappeared humming and hovering forty feet above the center of Caradoc’s Glen.

Sam looked up. “Jesu in heaven!” he exclaimed and fell to his knees.

It was like no airplane Sam had ever seen winging lustily above the Vale of Cyfartha or stopped in midflight within the pages of the fish-and-chip-wrapping South Wales Clarion. It was oval-shaped, pale blue, and with irregularly spaced protuberances. Like an over-sized duck egg with knobs on, Sam thought, and he was relieved to feel no paralyzing terror. He was just scared enough to hobble still on his knees for the cover of an elderberry shrub.

The humming stepped up to a shrill whine and the thing dropped gingerly to a clearing. A circular door slid wide, a ramp quietly extended, but no mortal
man came forth. Sam Dando couldn’t exactly tell what it was that seeped rather than strode down the ramp. It was enveloped in a kind of heliotrope glare, some sort of self-radiation for concealment or defense perhaps, and it burned Sam’s eyes and he snapped them shut. Then cautiously opened them, to glimpse behind the glare busy limbs attached to the wrong places. And Sam hurriedly closed them again.

He heard their voices. Uncannily light and pleasant but speaking no tongue Sam Dando knew, certainly not Welsh. Again he ventured to look. Four dazzling shapes were moving with purpose about the clearing. One seemed to be examining the ground, two were inspecting trees and pointing here and there with those dislocated limbs. The other operated an instrument resembling nothing Sam had ever seen in Evan Evans’s Camera Shop though it was mounted on a comfortingly familiar tripod.

They gave no sign that they were being watched. They went about their business steadily. They were doing no harm, as far as Sam could see. The notion that they were not of his planet leaped soon enough into Sam’s consciousness but inspired no particular fear.

Sam Dando, considering he lived in the Vale of Cyfartha, was not unduly superstitious. Of course he believed in angels, in the Holy Ghost, and maybe a few unholy ones. But he also accepted the fact that other tangible worlds than this one existed, and knew from the Clarion, and from his wireless before its thumpity non-Welsh music made him forego its repair when something inside melted and silenced it, that men in rockets were trying to get to them. He had never given the subject much thought. There had been Jenny to care for and his pension to fight for, and before that his preoccupation was the bituminous recesses of Earth, never the clean and starry domains of outer space. Now, as he crouched behind the elderberry, it seemed only natural for whoever was out there to repay us the compliment of a visit. Sam Dando therefore was awed and respectful and just a little scared, but certainly not shuddering with shocked disbelief. Sam was, after all, Welsh.

Whether they had dropped in by accident or were on a brief mission to study the terrain and collect samples, Sam could not decide. He suspected the latter. There were more important places on Earth where they might have landed, Sam thought. But, give Wales its due, few prettier. Indeed, he would not have been surprised if they had been irresistibly drawn to Caradoc’s Glen by the very power of its pensive enchantment.

One thing was certain. In all
the wondrous history of the Vale of Cyfartha, nothing more important had ever happened. And he, Sam Dando, was chosen to witness it. Not Mrs. Pritchard, who would have rushed out to baffle the strangers with Arthur's latest letter from America, assuming Wat had remembered his lunch. Not Tom Pant who would have greeted them with a rude wink and a salesman's story. Not Shacki Spit who might have mistaken their glowing forms for monstrous corpse candles. Not Beth Bloomer, whose reaction to them—and theirs to her—Sam hardly dare visualize. No indeed, the honor of seeing it went to Sam Dando alone.

And it meant only one thing to him. Here was his news for Jenny, straight up, nothing conjured, no prettified gossip, everything gospel. The most wonderful news of all.

Only a well-bred reluctance to alarm the visitors kept Sam from shrieking with sheer delight.

Controlling himself, he inched backwards, then crept off through trees to his left, crawling on his belly as he once did to the coalface. It was late, he would have to hurry, silly he would feel if he reached the hospital with the news bubbling at his lips and he barged full-tilt into closing gates.

Now he was running out of Caradoc's Glen and with each footfall pain stabbed his dam- aged back but he moved as fast as ever Sam Dando, center-forward for the Cyfartha Hotspurs, had dribbled the soccer ball to the rival goalposts thirty years ago. Halfway across the field alongside the hospital road a sudden concussion pitched him on his face, a huge shadow swept over him, and when he looked up the big duck egg with blisters was camouflageing itself again for the passage to high levels, and then by God was gone. Sam stood up and shouted thanks in Welsh and prayed them a safe journey to their home.

And ran like the winds of hell again.

It began to rain as Sam reached the road. He didn't care. His boots struck the cobbles as fast as the pattering drops. His heart raced even faster, and just as frenzied were the tidings whirling in Sam's brain like a bird beating its wings around a cage. And all for you, Jenny, my gel, for no one but you. Because there's no one in all this lopsided world for me but you, and that's a fact . . .

It took a final spurt to clear the hospital gates as they were swinging to meet. He dashed, soaked, mudstained and shining, into the reception hall which always smelt of chloroform and was not much bigger than a medicine chest. The head nurse, starched and white as a bandage, intercepted him. "Sam," she said. "Please come with me."
"No time now, is there, nurse?" He wiped his face and showered raindrops on the tiled floor. "I got to see my Jenny now before your old bell rings and you throw me out."

"There's something I must tell you, Sam—"

"Let it wait till I come out then," he panted. His face swam with rain and happy tears. "Me for Ward Three now with the most wonderful news of all to buck up my gel."

The nurse closed her eyes briefly. She grasped his wet shoulder. "Jenny is no longer in Ward Three," she said.

And then she had news for Sam.

It was three months after the funeral before Sam Dando came back to the Anchor. He is back on his old once-weekly routine now. He sits as usual by the bar but rarely joins the conversation or even pays it attention. For he no longer needs news. Locked forever within Sam Dando's coal-scarred body is the greatest news ever made in the Vale of Cyfartha and maybe the whole weary world. But it will never come out now. For where is the joy of telling if you have no one to tell it to?
About 20 years ago the word smog was a private joke in the city of Los Angeles. Nowadays, the word is known the world over, but it is no longer a joke.

The smog problem starts primarily in the cylinders of automobiles. A hydrocarbon fuel mixes with air, a spark sets it afire, and the products of combustion pour out into the air. Only about 200 compounds have so far been identified in an automobile exhaust, but there are more. The most disastrous among these are the nitrogen oxides and the remaining hydrocarbons. Coal- and oil-burning factories contribute sulfur compounds.

The nitrogen in the nitrogen oxides comes from the air. The hydrocarbons come from completely burned fuel. Some of these hydrocarbons are pretty messy. One of them, known as 3, 4-benzpyrene, readily causes cancer in laboratory animals.

Once these combustion products get into the air, even in amounts as small as 1-5 parts per million, things begin to happen. Ultraviolet radiation from the sun breaks up the nitrogen dioxide, and eventually allows the formation of ozone. The ozone and other forms of oxygen raise havoc with the hydrocarbons and other organic substances. A vicious broth comes into being. The broth can be deadly to people, particularly the very young or the very old.

The chemistry is difficult to duplicate in the laboratory due to the great dilution of the compounds in the air; reaction rates are slow. Yet for all their slowness, it is easy to follow the rise of the disastrous compounds after a few hours of sunlight over a city. In fact, the change can often be detected easily by the human eyes and the human nose.

To eliminate these contaminants, research has dictated the use of exhaust filters or oxidizers on car exhausts. The only answer so far in sight to solve this major problem is to somehow prevent the discharge of the harmful compounds.

But an often overlooked maxim of problem-solving is: if you can’t lick them, join them. Why not seek
the proper additives to put in all fuels? These additives would completely react with the fuels or would exhaust with the harmful compounds. Under the caress of the ultraviolet they would render everything harmless. More, the additives could be such that they produced compounds useful for us to breathe. Perhaps we could get our vitamins this way, or a part of our nourishment. We would have to be careful, though. We would not want a genial national government forcing us to inhale compounds that would place us in a euphoric state, willing to believe anything we were told.

SPECIAL BRADBURY COVER

We have on hand a limited supply of full color proofs without overprinting of F&SF’s May 1963 cover—the special Ray Bradbury issue. Here is a description of Joe Mugnaini’s fine painting, as published in that issue:

“Dominating the cover is The Illustrated Man from the book of the same title. Next is the planet Mars hanging full in the sky to symbolize The Martian Chronicles. Also in the sky is a man with green wings who is Uncle Einer from Bradbury’s story of the same name. Under him is the legendary figure of Icarus. To the left of the Illustrated Man we see the paper-costumed figure of the burning man in Fahrenheit 451. In the lower left corner we find the central most evil character in Bradbury’s story “Skeleton,” M. Munigant, playing on a thighbone fife. In the far background lies a Martian city, and in the right foreground a centaur, representing a Picasso sand-drawing in Bradbury’s Medicine for Melancholy tale ‘A Season of Calm Weather’.”

While they last, these cover proofs in full color, without overprinting, are available at $1.00 each. Send order and remittance to Mercury Press, Inc., 347 East 53rd Street, New York, N.Y. 10022.
Victory does not always go to the combatant with the largest spears or cannon or bombs. Battles and wars are often won by intangibles—the sort of intangibles suggested in the cliches of the sports pages—“desire,” “aggressiveness,” “killer instinct.” So, when alien cultures meet on the battlefield, as in this story, there is no need to throw away the rule book. It doesn’t exist. And, truly, anything can happen.

SURVEY OF THE THIRD PLANET

by Keith Roberts

Superradio to Hy Caslon, somewhere in Sector twelve three-five oh-seven:

Hy, Best Pal and Dealer,

For once I’ve beaten you! I’ve warped three vessels into observation orbits round the third planet of System Ninety, which I think fulfills Galactic Regs: the pickings are mine! Instrument checks indicate a type seven oxy-nitrogen atmosphere, good humidity, mean equatorial temp very reasonable etc., etc., and as you know the chlorophyll absorption bands showed up from way out in the heavens so I think this could be a nice little world. Inhabited almost certainly, hominids for a bet, I’d say from the setup Class IV or V Primitives. Very nice indeed, too bad I’m not in the mood for sharing. Though any time you want to, just look in on me; you’ll find me cooling my feet in one of those blue oceans I can see right from where I sit. Only one thing wrong in my little old life right now, I don’t like the primary; I never could stand the emission from these dingy yellow brutes. But as ever, I’m prepared to suffer for the sake of Trade. Wire my coordinates in to our people will you, there’s a dear good chap, and tell them I’m going down. I’ll keep you posted on developments.

Raf Trigg, Dealer.

On board ship, somewhere at sea.

Dear Uncle Mark,
Excuse the air of secrecy but you know what military regs. are like; one can’t be too careful, especially when there’s a bit of a flap on! As a matter of fact I couldn’t be much more explicit as to my whereabouts if I tried. I’m taking passage back in a troopship, and so far the only thing I’ve found out for sure is that I hate troopships. Not that I didn’t know that before! We hug the coast, stop here, drop men off there; I was bored the first day out and the succeeding five or six haven’t made things any better. No space, gear piled all over the decks, characters being sick from time to time on your feet, food bad and next to non-existent; but you didn’t want to hear a catalogue of complaints I’m quite sure and anyway it’s pretty good to be coming home at all, particularly under the circumstances.

You asked me to give you an off-the-cuff report on the so-called Mystery War. I’ll do my best, though that probably won’t satisfy your thirst for knowledge; I know you of old! I can’t deny I was pretty intimately involved, though that doesn’t mean I’m in a position to be too definite about anything.

You know the God-forsaken hole I was drafted to a couple of years back so there’s no point going into details. Enough to say that I rapidly got as fed-up as the rest of the blokes on camp, and being ADC to the Old Man didn’t exactly help my state of mind. Things weren’t too bad while I was settling in but I soon got into the sort of deadly routine I expect you know only too well. Mornings I’d take a stroll round camp, sign the duty rosters, inspect the guardhouse; supervise punishment parade if there was one. Most of the time our people were too bone idle to get into much in the way of scrapes. Then I’d have a look at the Old Man’s flower beds and whistle up a fatigue party to water them if the damn plants looked too dry. And that was virtually that for the day. Lunch in the mess, siesta till about four, an hour for bathing and changing and down to one of the local hovels for a few stoups of mead. Then to bed, with the whole ghastly cycle starting again in a few hours’ time.

There were odd excitements of course; we had a desertion once and there was a solitary court-martial. Rather low type got involved with one of the local popsis, the details are horribly sordid and anyway I’ve forgotten half of them. And all the time the rain, the fog, the drizzle; doesn’t that blasted country ever get any sun?

But I’ve already wandered well off the point. Sticking to facts, the first intimation of trouble came just about two months ago. It was late at night. I’d been nursing a toothache for a couple of hours and I could see I wasn’t going to
get much in the way of sleep. I gave it up as a bad job, dressed, and had a walk round camp. It was lousy weather as usual, cold and with a spitting rain; things were dead quiet and looked like staying that way. As it happened, they didn't. I was standing in the guardroom yarning with the duty officer when Hell's delight broke out just beyond the perimeter, yells, howls, shrieks fit to wake the dead. At the outset there wasn't much doubt in my mind as to what was going on. As you know, the temper of the locals could hardly be called Jovial at the best of times and there aren't many of them that can resist taking a sly poke at the occupying forces when they think they see half a chance. For what it's worth, my own opinion is that the rain sends them all more or less permanently crackers...

I stepped outside fairly smartly expecting we were in for some sort of night attack. They didn't happen all that often and when they did they never amounted to much; one or two of our people might get slightly knocked about but we usually managed to bowl over half a dozen locals before they gave it best. In fact we more or less looked forward to the odd dust-up; it all helped break the monotony.

For once though I was wrong. I'd hardly taken a dozen steps before I was bowled over by a rush of natives, all rolling their eyes and waving their arms and yelling blue murder. Torches were showing here and there; by their light I saw a mass of humanity struggling with the guards at the main gate. Our chaps were being shoved back from the perimeter already and if the din was anything to go by there were plenty more wogs still out on the heath. I ordered a general turnout. That was fatal of course; within minutes the Old Man was yelling for his boots and the war had started with a vengeance.

By the time we'd secured the perimeter and got things more or less under control a couple of dozen of the invaders had been rounded up and shoved in the guardhouse. You could have heard them a mile away all yelling and jabbering in that infernal language of theirs. The Old Man didn't waste any time arguing; he simply marched in, ploughed his way to the orderly table, bellowed like a bull and brought his hand down flat on the wood with a smack that nearly lifted the roof off the place. That means shut up in anybody's dialect. The locals shut up, abruptly, and we started trying to get some sense out of them.

That wasn't easy. The only chap we had who was really fluent in the lingo was away on some damn fool course or other, and I'd never bothered to learn more than
the few words I needed to haggle in the local markets. The Old Man of course had a system with foreigners; it consisted of yelling at the top of his voice, waving his arms and sticking a few extra 'oes' on the ends of words. Sometimes it worked better than others; this was one of the times it didn't work at all. I think the wogs were all too badly scared to start with.

It was obvious they weren't a war party. The men weren't armed, a good proportion of them were only half clothed and they had women and children with them. Some of the faces looked familiar; it seemed they came from a biggish village some four or five miles from camp. I saw one chap I'd had odd dealings with. He'd struck me before as being a little brighter than average; I managed to get the Old Man to quieten down long enough to try to talk to him. He told me some sort of story, mostly by sign language; the others backed him up, wailing and howling by turns. I gathered finally there'd been an attack on the village. Who'd done the attacking and how many of them there had been I couldn't find out. I don't think the people knew themselves. They'd scattered in all directions apparently, though a good proportion of them seemed to have run our way. That struck me as typical; they'd call us everything they could lay their tongues to until there was a bit of bother then they'd come scuttling for protection. I asked the chap exactly how the attack had been mounted, how the enemy had been armed. I didn't get very far with that either. He started yelling and quivering all over again; he seemed to be talking about some sort of light but when I repeated the word to him in his own dialect he shook his head and jabbered worse than ever, using the sounds for 'fire' and 'burning.' Had there been a light or a fire or both? Both he said, yes, both. Light. Fire. The same. So that left me with a phrase. A fiery light. The light that burned. I shook my head; I'd never heard of such a thing.

To support their argument one of the refugees produced a little pouch or sack, shook its contents out on the table. The Old Man's eyes dilated; somebody screamed and there was a general surging backward movement. On the table lay a human hand, severed at the wrist. Yet not severed in any normal fashion. There was no blood; the end of the stump was blackened, as though it had been cauterized with a hot iron. Whatever had lopped it off had seared the veins in the same instant, sealing them shut. I felt an odd sensation in the pit of my stomach. This strange thing had been done by the 'light that burned.'

We stood to until dawn, watching the orange reflection on the skyline where the village still
burned. Just before first light the rain became heavier, extinguishing the flames. We organised a scouting detail; the men tramped off into the downpour stolidly enough but it was fairly obvious they didn’t care for the job overmuch. I didn’t blame them; I’d seen something myself of the guerrilla tactics the locals used. Pretty effective even against a well-armed column. At that time of course we still thought we were dealing with a normal enemy, some raiding party or other down from the hills.

Our people came back some time later with nothing to report except that for some distance round the village the grass was unaccountably charred and stones and rocks had been split as if by great heat. The natives started to wail again. This had been done by the ‘light that burned.’

By this time of course our c/o was in a rage that I can only describe as ecstatic. To begin with he’d lost a good part of a night’s sleep, and the base was littered with refugees complete with their goods and chattels. Quite a few natives had managed to make their way to us and they were camping anywhere and everywhere inside the perimeter; there were kids and dogs underfoot and things were generally chaotic. The Old Man issued an ultimatum; get these people out of sight by noon, or watch out. It was all very well for him to talk, the bastards wouldn’t go. We tried to convince them there was nothing to be scared of; the raiders, whoever they’d been, had moved on and it wasn’t likely they would return as the village held nothing of much value. In the end we compromised, they said they’d go back if we would send a party along as a safe-conduct. I agreed to that and detailed a couple of dozen men. I went with them myself to see if I could find anything out.

It was all much as the scouts had described. The village was rather scorched but in the main it hadn’t suffered much damage. There had certainly been no looting. One or two fires had restarted themselves; we dealt with them easily enough, and hung round for a couple of hours watching the people trying to sort things out. Then as nothing much seemed to be happening I re-formed the men and headed back toward camp. A mile down the road we met an old boy hobbling along on rheumatically legs and swearing blue fire. He claimed his home had been attacked, his wife and numerous daughters carried off. The aggressors had been armed with peculiar weapons; wherever they were pointed, things had burst into flame. Wood and earth, metal, human bodies, sizzled and vanished.

The pattern sounded horribly familiar. My first impulse was to follow the old chap’s urging and
try to deal with the thing immediately but I had no authority to act on my own like that; I reminded myself our camp was undermanned, we were a holding garrison, not an army. The temptation was pretty strong but in the end I decided to go by the book, report back and leave the decision to the c/o. It was just as well I did; when I got back I found the camp under emergency alert. The invaders had been in sight from the perimeter; they had observed us for a time, well out of reach of anything we could lob at them, then they had retired. Nobody quite knew what was supposed to happen next.

I made my report. The Old Man was pacing up and down in front of a map of the area. Half a dozen more sightings had come in while I had been away; it looked as though we were fairly well surrounded.

The c/o was in an unusually thoughtful mood. It seemed two main facts had emerged: (1) that the attackers, though few in number, were highly mobile and (2) that they were armed with some weapon that made conventional resistance hazardous. I was shown a piece of metal that had been split by one of the rays; the cut faces had boiled and run as though they had been in a furnace. The Old Man had sent messages to Sector H/Q but so far nothing had been heard. Under normal circumstances the procedure would have been fairly clear; take half a dozen sections of men, beat the surrounding terrain, flush out the nuisance and destroy it on the spot. But the reports and the evidence of the heat-weapons had made even the General cautious. This was something outside all our experience.

I shall never forget the night that followed, or its sequel. We could see the enemy lights moving out on the heath; they were glaring and blue, like no lights I had ever seen. Toward dawn I was snatching a few minutes’ rest when the Old Man sent for me. I remember him standing, face lined with tiredness, watching the will-o-the-wisps glowing out there across the grass. “Well, Paul,” he said, “there’s something here I don’t understand. But I know this. If we don’t hit them they’ll hit us . . .”

The plan was simple. We split our infantry into two groups; one was to move out just before dawn and engage the enemy on a close front, the other, by far the larger, would attempt an encircling action. They would start off from camp a couple of hours before so as to be in position when the first party went in. The theory was fine but the results were disastrous.

The invaders had established their camp in a slight hollow overlooked on three sides by rising ground. At first sight they seemed
to be in rather a bad position. Even at night the place was easy to find; there was a constant flaring of light from it and round about the enemy had rigged up a series of towers. Hanging from them were objects that reminded me of gigantic ploughshares. What their purpose might be I couldn’t guess.

I was in charge of the outflanking operation, the Old Man directed the primary attack. We got into position about half an hour before dawn; our people went in at first light and a fairly satisfactory flap started down below. The enemy scuttled about in all directions; I saw many of them shining up the struts of the towers. The time seemed to be right; I gave my chaps the signal and we started downhill in open order, moving briskly with weapons at the ready. Then it happened. Abruptly, the things that looked like ploughshares broke free of their columns and sailed up into the air. They were nearly soundless; the only noise from them was a faint piping mixed with an odd muttering and grumbling. For a few moments they swirled about aimlessly, spinning like leaves; then they swooped at us, and the rest was confusion.

I dropped flat; one of the things passed low over my head, there was a rushing, a sensation of great heat. I heard screaming; a man blundered past me with his clothes on fire, another fell to his knees staring blankly at the stump of an arm. I saw a line of smoke whip across the grass, then another. It missed me by a yard, passed on and hit a knot of our people. More cries, and a smell of scorching cloth and flesh. Flames were already licking up across the hillside and my men were starting to break and run like rabbits.

It was a massacre, and I could do nothing but watch it. The infantry of the first wave were totally wiped out; I saw my c/o cut down with them. The ploughshares swerved and ducked, glinting in the dawn light; and everywhere they moved the ground beneath them caught fire with a hissing and boiling. As the smoke thickened I saw beams of light lancing through it. I realized then too late what I was looking at. This was the ‘light that burned’.

Resistance was impossible. I was half blinded by smoke; round me were nothing but corpses and dying men. I can’t remember what my feelings were at the time; I was possibly too stunned for coherent thought. I know I yelled at our people, trying to get the survivors under some sort of control; I stood up and waved, urging them back over the crest of the hill.

The retreat ended a mile or more away. The flying contraptions followed us for a while, piping and swooping; then they swirled back from where they had
come and we were left to lick our wounds and count our dead.

I had less than two sections left, and some half dozen walking wounded. Several of them had lost fingers, one man a part of his leg. The rest of the chaps were too paralyzed by fright to speak; it was terrifying to see how quickly a disciplined unit had been reduced to a rabble. I did what little I could for the injured then I got the survivors into some sort of marching order and headed back to camp.

We moved carefully, taking advantage of what cover we could find, and of course we were slowed by the injured men so it was mid-day before we came in sight of the place. I had another shock. The first thing I saw, planted menacingly in the middle of the parade ground, was one of the enemy towers. Half a dozen ploughshares hung from it, their sharp noses pointed outward aggressively. There was no movement round about, but there was a litter of bodies. It was hopeless to go on; the invaders had taken our base.

I don't think I've ever felt more inadequate or more alone. I wasn't over the shock of the Old Man's death; I'd cursed him often enough in the past but he was a fine soldier and the whole affair had hit me very hard. And there I was with a handful of men, half of them unfit for combat, cut off from my arms and supplies and facing something I'd never experienced before. I sat on the grass and stared at the distant tower and wondered what in Hell I was going to do.

While I was still trying to make my mind up a couple of the machines rose and began quartering the ground between us and the camp, burning any clumps of bushes that might afford cover. We, the hunters, were being hunted in our turn. We withdrew from the menace; out of sight of the heat-things I formed the men up again and we started a forced march. It was obvious that in our present condition, lacking transport and weapons, we were in no shape to put up a fight even against a normal enemy; my intention was to reach Sector H/Q and hand over what was left of my command.

We walked till evening with only a couple of breaks. By that time I judged we'd put a safe distance between us and the strangers but I was wrong. As night fell I saw the horizon glowing in a dozen places, ahead and behind. The enemy had extended their operations, encircling us.

A couple of hours after dark we suffered another attack. One of the ploughshares passed almost directly over us. We heard the piping and grumbling in the sky and scattered but we weren't quick enough; the thing wheeled back and the ray from it claimed another victim, the chap with the dam-
aged leg. I came close to dying myself; the fire passed within inches of me as I lay huddled, scorching my arm from elbow to wrist. Then the machine vanished in the dark.

By the small hours it had become obvious we were not going to reach H/Q. The whole sky ahead was bright with flame reflections. I turned away; both the men and I had had enough, my only desire now was to reach the coast.

It seemed the whole countryside was on the move. Several times we passed columns of refugees, some of them hauling their household possessions with them. I commandeered a cart from one group; I could see my injured men weren't going to get much farther without help. The peasants tagged along behind us, calling down a variety of curses on our heads and generally adding to the confusion.

A little before dawn we reached an isolated farmhouse. It was a fairly large place, and some attempt had been made to put it into a state of defense; windows had been barricaded, and a couple of heavy wagons turned on their sides to form a breastwork in front of the door. All useless of course; one might as well have tried to stop thunderbolts with a sunshade as shield oneself with wood against the 'light that burned.'

We were challenged when we came in sight of the place; I went forward alone and managed to persuade the people inside not to start letting fly at us. I got my men under cover in the outbuildings and saw to it they had water, of which we all stood badly in need. I learned the owner of the spread was away on a business trip; what little had been done had been at the instigation of his wife and twenty-year-old daughter.

The mother was too panicky to talk sense. I had a word with the daughter. She was a pretty thing with big eyes and long dark-brown hair; she was badly scared herself but at least, thank God, she spoke my language. Not only spoke it; the very sight of my uniform brought a flood of accusation. We were the occupying forces, she said. We oppressed the country, kept the people poor; but as soon as trouble started we were the first to run. And there was a lot more in the same vein.

I was filthy and stinking of sweat, I'd been on my feet continuously for twenty-four hours and the burn was throbbing mercilessly. I shut her up; from what I could see her family hadn't done badly out of the occupation and I told her so. I described something of what I'd seen on the heath, and the destruction of our troops. Then I pulled away the remnants of my sleeve and held up my glistering arm, "Take your folk out," I said, "and fight them with pitchforks if you wish. For we can do no more."
She changed her tune at that, and brought dressings and ointment. I was still furious; I refused to let her touch me until her people had seen to my men. Before they were through word was brought that the enemy were in sight. I ran outside. Three of the flying devices were visible a mile or so away; they bobbed and dipped, and as they moved the ground beneath them volleyed smoke.

There was no time for argument, the girl at least appreciated that. On her orders the farm animals were turned loose and people started to scuttle about grabbing up what valuables they could take with them. We carried the old lady out squawking and clucking, her hands full of trinkets. We were barely half a mile away when one of the ploughshares appeared over the roof of the farm. It hung purring, tile and brick exploded from beneath it and flames licked up brightly. The girl stood watching the place burn. “I was born there,” she said to me. “I never lived anywhere else. It was everything we owned.” Then she turned away and started to walk again. That was all; there were no tears.

The column headed for the sea, my men marching in front and to the rear. The farm folk shambled along, bunched round the wagon that carried the injured. If anything the second day was a worse nightmare than the first. Our wounded were in a bad way, we had little water and less food. Night found us some dozen miles from the coast, at the foot of a low range of hills. Before us the sky burned red again and the enemy were close behind. I took a couple of men and went forward to see what the situation was. Our road climbed into the hills; a couple of miles on we came in sight of a line of towers. They stretched right and left as far as we could see over the crests of the downs. Each one was topped by the gaunt shape of a ploughshare.

Immediately ahead and almost beside the road was an enemy camp, the biggest I’d seen so far. We worked our way close up to it and I counted some score of invaders. They were strolling and talking, or sitting round what I would have taken for braziers had not the light from them been an odd pale blue. The men were small for the most part and looked normal except for their dress; some of them were carrying queer-looking devices that I took to be weapons, but the majority seemed to be unarmed.

I suppose the sight and the knowledge that we were now completely cut off should have made me afraid. Under normal circumstances it probably would have done but I’d been retreating for two days and I was sick of the whole business. I got very angry; it seemed to me better to end the
affair positively one way or anoth-
er than to crawl about on our bell-
lies any longer being hunted like
animals. I went back to our camp
and got my men round me; and a
sorry-looking crowd of ruffians
they were!

I didn't waste time getting to
the point. I told them briefly what
was ahead and that we were
trapped. “Now look here,” I said.
“You all know me; I'm not going
to give you a load of bull about the
glory of the Empire, I'm just going
to tell you the way I see things.
We can't go back, and God knows
how far those towers reach. I don't
fancy trying to outflank them; we
can't move fast, and if we're not
clear by first light the little people
behind will pick us off rather
easily. So it looks as if we've got to
go through. Now what I propose
is this. We'll close up the transport
and the injured as near as we
dare; then the rest of us, all those
that can walk, will nip in and
start beating the bastards up.
Obviously if they get those damned
flying devices of theirs airborne
we'll have had it; but I don't think
they can do that as long as we
keep them away from the towers.
I expect some of us will get
knocked over but while the shindy
is going on the rest will have a
chance of slipping through. And
just beyond is the sea; there'll be
boats of some sort, we can get out
of this for good. Now what do you
say?”

I could have ordered them of
course, but I don't think in that
case they would have gone. As it
was they talked things over among
themselves then agreed to a man
to play it the way I wanted. All in
all, they were a damn fine crowd
of blokes.

I don't remember much about
the actual attack except that I was
scared as Hell. We achieved total
surprise; the enemy hadn't even
bothered to post sentries, I can
only assume they thought they'd
got us well beaten. There weren't
very many of us but when we
went in we were making enough
noise for an army. Things started
to fly almost at once; I took a
swing at one of the strangers, odd-
looking little chap with a face like
an elderly ape, and he ducked and
brought up the tube he was hold-
ing. The weapon in my hand
seemed to catch fire; molten
splashes flew from it and I
dropped it cursing. I seemed
momentarily to see red; I got hold of
him round the waist, heaved him
up and tossed him at one of the
braziers. The thing went out with
a roar and I headed for the nearest
of the towers, picked off a couple
of wogs who were shinning up the
struts. I saw a ploughshare diving,
than there was a flash that hurt my
eyes and a series of concussions
that knocked me flat. I got up in
darkness; fighting was still going
on all round me, there were
crashes and shrieks. I heard the
noise as the wagons started through the pass; then—and this is going to be the most difficult part to believe—the entire sky began to glow with a milky sheen that got brighter and brighter.

I covered my eyes. I was nearly deafened by the racket; a roaring, a sighing, I can’t describe it. I didn’t see what happened next with any clarity but I had an impression of a...shape, something huge, monstrous, settling down onto the camp. All the underside of it seethed with light; some force came from it that blew men sideways, rolling them across the ground. I tried to stand against it but it was like fighting a hurricane. There was an endless time of bellowing and brilliance; I’d given myself up for dead, it seemed the sun had settled on my back and I was witnessing the end of the world. Then I became aware that the din was lessening. I got up blindly; when I could see again there was nothing overhead but a tiny disc that wobbled and diminished, sailed up and up till it seemed to vanish among the very stars.

And there was a cool breeze, blowing against my face.

Well, sir, that’s about all there was to it. When we’d sorted ourselves out we found miraculously that none of us had been damaged. It took us longer to realize the fantastic thing that had happened. The camp was deserted; the strangers had gone and their towers and ploughshares and the braziers that had glowed. Nothing remained but shards of twisted metal, tents of some strange fabric that flapped slowly in the night wind. The whole mass of men and equipment had been evacuated in seconds by that...sky engine. I don’t know another phrase that describes so well what I saw.

Or thought I saw. I’ve wondered since whether we were all the victims of some hallucination. I’d be prepared to believe I dreamed the whole thing except that there’s a scar on my arm that I don’t suppose I shall ever lose; and of course there’s Martha, the girl I took from the farmhouse. But I don’t have the space to talk about her here!

And there was a cool breeze, blowing against my face.

Well, sir, that’s about all there was to it. When we’d sorted ourselves out we found miraculously that none of us had been damaged. It took us longer to realize the fantastic thing that had happened. The camp was deserted;
manner of bits and pieces attached to the broader end. Whether or not it's a weapon I can't say but please handle it carefully, Uncle, I do want to meet you again in this world!

Oh and while I think of it; the chap who hands you this letter is my batman. He's an excellent type but he does have a frightful thirst and his pay is sadly in arrears. If you could stake him for beer money I'd be much obliged; I'll square up with you when I see you. I should say he's earned all he can drink; I've got a feeling maybe we all have!

Your Affectionate Nephew, Paul.

Superradio to Hy Caslon, Sector twelve three-oh five-eight:

Dearest Pal,

By the Seven Holders of the Key of Truth, but I'm glad to be talking to you again! We're clear of that accursed planet now, heading for rendezvous nine, repeat nine, oh-five-eight. Your Escorters are in station, God bless 'em, all fields are working and the ship is in order; but Hy, the ground gear! The wreckage, and the expense! And even now I'm wondering how it all happened . . .

I can tell you one thing though; nothing, repeat nothing, would get me near that Hell-hole again; never in a lifetime's Dealing have I come across a cultural mess like that! As I said, the natives were hominids and they were low-level, barely Class Fours. We landed with no trouble at all and started standard Occupation procedure, set up the laserplanes, collected a few study specimens; everything was going fine and according to the book until that night! There I was sitting peacefully, not a care in the cosmos; initial geosurveys were complete, the Analysers were giving us the paws-up, everything was set for a fine fat haul and crash . . . into our midst erupts a crowd of smelly, dirty, brainless barbarians, and for a few minutes I was sure I'd never see a blue sun again!

In a way of course it's lucky I did panic and it's a good thing the Synchronous Orbiter detected me and roboed in as fast as she did; but of course her decision packs had flipped the switch before I was even aboard and my entire groundgear set was atomized; Hy, I lost the lot!

I'm putting in a report to the Grand Dealer himself; I'm recommending the planet be closed to Trade from here on in, because what those creatures would be like after a few generations of cultural diffusion is more than I can imagine. Hy, just think of it; Class Fours with a military organisation tough enough and flexible enough to retaliate like that! We'd already beaten them once and they counterattacked . . . and that with no weapons, no technology, noth-
All I can say is, give them a few years to soak up our brand of know-how and they'd be out here with us and we should be through, Dear Brother, through. Savages, with a military organisation... it's outside the Principles of Trade!

I'm quite convinced the Master will second my ban but until he does there's a fine rich planet that's yours for the taking. Only if you go down you're a maniac, a positive maniac! Maybe I shouldn't be tipping you off like this; with ninety thrallworlds you must already be the richest Dealer in Galaxy and my mirth-pits would expand to see you lose a magnum but I wouldn't do it, not even to you! As it is, GalacTax are already hanging round my venerable neck for a cool billion credits, I've got to replace a complete laserset and how the Trigg empire is going to stand up to an intensive program of thulium-mining I just don't know!

Goodbye for now, see you (figuratively speaking) in the Warp,

Yours in Misery,
Trigg.

P.S. Have just heard of a sweet little world in System Ninety-Seven; have laser barrels and chambers but no spare host-lattices, can you help me out, please...
THE PROTON-RECKONER

by Isaac Asimov

There is, in my heart, a very warm niche for the mathematician Archimedes. In fact, if transmigrations of souls were something I believed in, I could only wish that my soul had once inhabited the body of Archimedes, because I feel it would have had a congenial home there. I'll explain why.

Archimedes was a Greek who lived in Syracuse, Sicily. He was born about 287 B.C. and he died in 212 B.C. His lifetime covered a period during which the great days of Greece (speaking militarily and politically) were long since over, and when Rome was passing through its meteoric rise to world power. In fact, Archimedes died during the looting of Syracuse by the conquering Roman army. The period, however, represents the century during which Greek science reached its height—and Archimedes stands at the pinnacle of Greek science.

But that's not why I feel the particular kinship with him (after all, I stand at no pinnacle of any science). It is rather because of a single work of his; one called “Psammites” in Greek, “Arenarius” in Latin, and “The Sand-Reckoner” in English.

It is addressed to Gelon, the eldest son of the Syracusan king, and it begins as follows:

“There are some, king Gelon, who think that the number of the sand is infinite in multitude; and I mean by the sand not only that which exists about Syracuse and the rest of Sicily but also that which is found in every region whether inhabited or uninhabited. Again there are some who, without regarding it as infinite, yet think that no number has been named which is great enough to exceed its multitude. And it is clear that they who hold this view, if they imagined a mass made
up of sand in other respects as large as the mass of the earth, including in it all the seas and the hollows of the earth filled up to a height equal to that of the highest of the mountains, would be many times further still from recognizing that any number could be expressed which exceeded the multitude of the sand so taken. But I will try to show you by means of geometrical proofs, which you will be able to follow, that, of the numbers named by men and given in the work which I sent to Zeuxippus, some exceed not only the number of the mass of sand equal in magnitude to the earth filled up in the way described but also that of a mass equal in magnitude to the universe.”

Archimedes then goes on to invent a system for expressing large numbers and follows that system clear up to a number which we would express as $10^{80,000,000,000,000,000}$, or nearly $10^{10^{17}}$.

After that, he sets about estimating the size of the universe according to the best knowledge of his day. He also sets about defining the size of a grain of sand. Ten thousand grains of sand, he says, would be contained in a poppy seed, where the poppy seed is $1/40$ of a finger-breadth in diameter.

Given the size of the universe and the size of a grain of sand, he easily determines how many grains of sand would be required to fill the universe. It works out to a certain figure in his system of numbers, which in our system of numbers is equal to $10^{63}$.

It’s obvious to me (and I say this with all possible respect) that Archimedes was writing one of my F & SF articles for me, and that is why he has wormed his way into my heart.

But let’s see what can be done to advance his article further, in as close an approach as possible to the original spirit.

The diameter of a poppy seed, says Archimedes, is $1/40$ of a finger-breadth. My own fingers seem to be about 20 millimeters in diameter and so the diameter of a poppy seed would be, by Archimedes’ definition, 0.5 millimeters.

If a sphere 0.5 millimeters in diameter will hold 10,000 ($10^4$) grains of sand and if Archimedes’ universe will hold $10^{63}$ grains of sand, then the volume of Archimedes’ universe is $10^{59}$ times as great as that of a poppy seed. The diameter of the universe would then be $8\sqrt{10^{60}}$ times as great as that of a poppy seed. The cube root of $10^{59}$ is equal to $4.65 \times 10^{19}$ and if that is multiplied by 0.5 millimeters, it turns out that Archimedes’ universe is $2.3 \times 10^{19}$ millimeters in diameter, or, taking half that value, $1.15 \times 10^{19}$ millimeters in radius.

This radius comes out to 1.2 light years. In those days, the stars
were assumed to be fixed to a large sphere with the earth at the center, so that Archimedes was saying that the sphere of the fixed stars was about 1.2 light years from the Earth in every direction.

This is a very respectable figure for an ancient mathematician to arrive at, at a time when the true distance of the very nearest heavenly body—the moon—was just in the process of being worked out and when all other distances were completely unknown.

Nevertheless, it falls far short of the truth and even the nearest star, as we now know, is nearly four times the distance from us that Archimedes conceived all the stars to be.

What, then, is the real size of the Universe?

The objects in the Universe which are farthest from us are the galaxies; and some of them are much farther than others. Early in the 20th Century, it was determined that the galaxies (with a very few exceptions among those closest to us) were all receding from us. Furthermore, the dimmer the galaxy and therefore the farther (presumably), the greater the rate of recession.

In 1929, the American astronomer, Edwin Powell Hubble, decided that, from the data available, it would seem that there was a linear relationship between speed of recession and distance. In other words, if galaxy 1 were twice as far as galaxy 2, then galaxy 1 would be receding from us at twice the velocity that galaxy 2 would be.

This relationship (usually called Hubble's Law) can be expressed as follows:

\[ R = kD \]  
(Equation 1)

where \( R \) is the speed of recession of a galaxy, \( D \) its distance, and \( k \) a constant, which we may call "Hubble's constant."

This is not one of the great basic laws of the universe in which scientists can feel complete confidence. However, in the nearly forty years since Hubble's Law was propounded, it does not seem to have misled astronomers and no observational evidence as to its falsity has been advanced. Therefore, it continues to be accepted.

One of the strengths of Hubble's Law is that it is the sort of thing that would indeed be expected if the Universe as a whole (but not the matter that made it up) were expanding. In that case, every galaxy would be moving away from every other galaxy and from the vantage point of any one galaxy, the speed of recession of the other galaxies would indeed increase linearly with distance. Since the equations of Einstein's General Theory of Relativity can be made to fit the expanding universe (indeed the Dutch astronomer, Willem de Sitter, sug-
gested an expanding universe years before Hubble’s Law was proposed) astronomers are reasonably happy.

But what is the value of Hubble’s Constant? The first suggestion was that it was equal to 500 kilometers per second per million-parsecs. That would mean that an object a million parsecs away would be receding from us at a speed of 500 kilometers per second; an object two million parsecs away at a speed of 1000 kilometers per second; an object three million parsecs away at a speed of 1500 kilometers per second and so on.

This value of the constant, it turned out, was too high by a considerable amount. Current thinking apparently would make its value somewhere between 75 and 175 kilometers per second per million-parsecs. Since the size of the constant has been shrinking as astronomers gain more and more information, I suspect that the lower limit of the current estimate is the most nearly valid value and I will take 75 kilometers per second per million-parsecs as the value of Hubble’s Constant.

In that case, how far distant can galaxies exist? If, with every million parsecs, the speed of recession increases by 75 kilometers per second, then, eventually, a recession equal to the speed of light (300,000 kilometers per second) will be reached.

And what about galaxies still more distant? If Hubble’s Law holds firmly at all distances and if we ignore the laws of relativity, then galaxies still farther than those already receding at the speed of light must be viewed as receding at speeds greater than that of light.

We needn’t pause here to take up the question as to whether speeds greater than that of light are possible or not, and whether such beyond-the-limit galaxies can exist or not. It doesn’t matter. Light from a galaxy receding from us at a speed greater than light cannot reach us; nor can neutrinos nor gravitational influence nor electromagnetic fields nor anything. Such galaxies cannot be observed in any way and therefore, as far as we are concerned, do not exist, whether we argue according to the Gospel of Einstein or the Gospel of Newton.

We have, then, what we call an Observable Universe. This is not merely that portion of the universe which happens to be observable with our best and most powerful instruments; but that portion of the universe which is all that can be observed even with perfect instruments of infinite power.

The Observable Universe, then, is finite in volume and its radius is equal to that distance at which the speed of recession of a galaxy is 300,000 kilometers per second.
Suppose we express Equation 1 as
\[ D = \frac{R}{k} \quad \text{(Equation 2)} \]
set \( R \) equal to 300,000 kilometers per second and \( k \) equal to 75 kilometers per second per million-parsecs. We can then solve for \( D \) and the answer will come out in units of million-parsecs.

It turns out, then, that
\[ D = 300,000 \div 75 = 4,000 \quad \text{(Equation 3)} \]

The farthest possible distance from us; or, what amounts to the same thing, the radius of the Observable Universe; is 4,000 million-parsecs, or 4,000,000,000 parsecs. A parsec is equal to 3.25 light years, which means that the radius of the Observable Universe is 13,000,000,000 light years. This can be called the Hubble Radius.

Astronomers have not yet penetrated the full distance of the Hubble Radius, but they are approaching it. From Mt. Palomar comes word that the astronomer, Maarten Schmidt, has determined that an object identified as 3C9 is receding at a speed of 240,000 kilometers per second, 4\% the speed of light. That object is, therefore, a little more than 10,000,000,000 light years distant, and is the most distant object known.

As you see, the radius of the Observable Universe is immensely greater than the radius of Archimedes' Universe: 13,000,000,000 as compared to 1.2. The ratio is just about ten billion. If the volume of two spheres are compared, they vary with the cube of the radius. If, then, the radius of the Observable Universe is \( 10^{10} \) times that of Archimedes' universe, the volume of the former is \( (10^{10})^3 \) or \( 10^{30} \) times that of the latter.

If the number of sand particles that filled Archimedes' universe is \( 10^{68} \), then the number required to fill the immensely larger volume of the Observable Universe is \( 10^{98} \).

But, after all, why cling to sand grains? Archimedes simply used them in order to fill the greatest possible volume with the smallest possible objects. Indeed, he stretched things a little. If a poppy seed 0.5 millimeters in diameter will hold 10,000 grains of sand, then each grain of sand must be 0.025 millimeters in diameter. These are pretty fine grains of sand, individually invisible to the eye.

Even so, we can do better. We know of atoms, which Archimedes did not, and of subatomic particles, too. Suppose we try to search among such objects for the smallest possible volume; not merely a volume, the Smallest Possible Volume.

If it were the smallest possible mass we were searching for, there
would be no problem; it would be the rest mass of the electron which is \(9.1 \times 10^{-28}\) grams. No object that has any mass at all has a smaller mass than the electron. (The positron has a mass that is as small, but the positron is merely the electron's anti-particle, the looking-glass version of the electron, in other words.)

There are particles less massive than the electron. Examples are the photon and the various neutrinoes (see THE LAND OF MU, F & SF, October 1965) but these all have zero rest-mass, and do not qualify as an "object that has any mass at all."

Why is this? Well, the electron has one other item of uniqueness. It is the least massive object which can carry an electric charge. Particles with zero rest-mass are invariably electrically-uncharged, so that the existence of electric charge seems to require the presence of mass—and of mass no smaller than that associated with the electron.

Perhaps electric charge is mass, and the electron is nothing but electric charge—whatever that is.

Yet it is possible to have a particle such as the proton which is 1836 times as massive as the electron, with an electric charge no greater. Or we can have a particle such as a neutron which is 1838 times as massive as an electron and has no charge at all.

We might look to such massive, under-charged particles as consisting of numerous charges of both types, positive and negative, most or all of which cancel one another, leaving one positive charge in excess in the case of the proton, and no uncanceled charge at all in the case of the neutron.

But, then, how can charges cancel each other without, at the same time, canceling the associated mass? No one knows. The answer to such questions may not come before considerably more is learned about the internal structure of protons and neutrons. We will have to wait.

Now what about volume?

We can talk about the mass of subatomic particles with confidence, but volume is another matter. All particles exhibit wave properties, and associated with all chunks of matter are "matter-waves" of wavelength varying inversely with the momentum of the particles (that is, with the product of their mass and velocity).

The matter-waves associated with electrons have wavelengths of the order of \(10^{-8}\) centimeters which is about the diameter of an atom. It is therefore unrealistic to talk about the electron as a particle, or to view it as a hard, shiny sphere with a definite volume. Thanks to its wave nature, the electron "smears out" to fill the atom of which it forms a part. Sometimes it is "smeared out" over a whole group of atoms.
Massless particles such as photons and neutrinoes are even more noticeably wave-forms in nature and can even less be spoken of as having a volume.

If we move on to a proton, however, (or a neutron) we find an object with a mass nearly two thousand times that of an electron. This means that all other things being equal the wavelength of the matter-wave associated with the proton ought to be about a two-thousandth that associated with the electron.

The matter-waves are drawn in tightly about the proton and its particulate nature is correspondingly enhanced. The proton can be thought of as a particle and one can speak of it as having a definite volume, one that is much less than the wavelength of the smeared out electron. (To be sure, if a proton could be magnified sufficiently to look at we would find it had a hazy surface with no clear boundary so that its volume would be only approximately “definite.”)

Suppose we pass on to objects even more massive than the proton. Would the matter-waves be drawn in still farther and the volume be even less? There are, indeed, subatomic particles more massive than the proton. All are extremely short-lived, however, and I have come across no estimates of their volumes.

Still, we can build up conglomerations of many protons and neutrons which are stable enough to be studied. These are the various atomic nuclei. An atomic nucleus built up of, say, 10 protons and 10 neutrons would be 20 times as massive as a single proton and the matter waves associated with the nucleus as a whole would have a wavelength correspondingly shorter. Would this contract the volume of the 20 protons and neutrons to less than that of a single proton?

Apparently not. By the time you reach a body as massive as the proton, its particulate nature is so prominent that it can be treated almost as a tiny billiard ball. No matter how many protons and neutrons are lumped together in an atomic nucleus each individual proton and neutron retains about its original volume.

This means that the volume of a proton may well be considered as the smallest volume that has any meaning. That is, you can speak of a volume “half that of a proton” but you will never find anything that will fill that volume without lapping over, either as a particle or a wave.

The size of various atomic nuclei have been calculated. The radius of a carbon nucleus, for instance, has been worked out as $3.8 \times 10^{-18}$ centimeters and that of a bismuth nucleus as about $8 \times 10^{-13}$ centimeters.
If a nucleus is made up of a closely packed sphere of incompressible neutrons or protons then the volume of two such spheres ought to be related as the cube roots of the number of particles. The number of particles in a carbon nucleus is 12 (6 protons and 6 neutrons) and the number in a bismuth nucleus is 209 (83 protons and 126 neutrons). The ratio of the number of particles is 209/12 or 17.4 and the cube root of 17.4 is 2.58. Therefore, the radius of the bismuth nucleus should be 2.58 times that of the carbon nucleus and the actual ratio is 2.1. In view of the uncertainties of measurement, this isn’t bad.

Let’s next compare the carbon nucleus to a single proton (or neutron). The carbon nucleus has 12 particles and the proton but 1. The ratio is 12 and the cube root of that is just about 2.3. Therefore, the radius of the carbon nucleus ought to be about 2.3 times as great as the radius of a proton. We find, then, that the radius of a proton is about $1.6 \times 10^{-13}$ centimeters.

Now we can line up protons side by side and see how many will stretch clear across the Observable Universe. If we divide the radius of the Observable Universe by the radius of a proton, we will get the answer.

The radius of the observable universe is 13,000,000,000 light years or $1.3 \times 10^{10}$ light years, and each light year is $9.5 \times 10^{17}$ centimeters long. In centimeters then, the radius of the Observable Universe is $1.23 \times 10^{28}$. Divide that by the radius of the proton, which is $1.6 \times 10^{-13}$ centimeters and you have the answer: $7.7 \times 10^{40}$.

In other words, if anyone ever asks you: “How many protons can you line up side by side?” you can answer “$77,000,000,000,000,000,-000,000,000,000,000,000,000,000,000,000,000,000$!” because there is no room to line up any more.

Now for volume. If the proton has a radius of $1.6 \times 10^{-13}$ centimeters, and it is assumed to be spherical, it has a volume of $1.7 \times 10^{-40}$ cubic centimeters, and that is the Smallest Possible Volume.

Again, given a radius of $1.23 \times 10^{28}$ centimeters for the Observable Universe, its volume is $7.8 \times 10^{84}$ cubic centimeters, and that is the Greatest Possible Volume.

We next suppose that the Greatest Possible Volume is packed perfectly tightly (leaving no empty spaces) with objects of the Smallest Possible Volume. If we divide $7.8 \times 10^{84}$ by $1.7 \times 10^{-40}$, we find that the number of protons it takes to fill the Observable Universe is $4.6 \times 10^{124}$.

That is the solution (by modern standards) of the problem that Archimedes proposed for himself in “The Sand-Reckoner” and, oddly
enough, the modern solution is almost exactly the square of Archimedes' solution since \((10^{63})^2 = 10^{126}\).

However, Archimedes need not be abashed at this, wherever he may be along the Great Blackboard in the Sky. He was doing more than merely chopping figures to come up with a large one. He was engaged in demonstrating an important point in mathematics; that a number system can be devised capable of expressing any finite number however large; and this he succeeded perfectly in doing.

Ah, but I'm not quite done. How many protons are there really in the Observable Universe?

The "cosmic density"—that is, the quantity of matter in the universe, if all of it were spread out perfectly evenly—has been estimated at figures ranging from \(10^{-30}\) to \(10^{-29}\) grams per cubic centimeter. This represents a very high-grade vacuum which shows that there is practically no matter in the universe. Nevertheless, there are an enormous number of cubic centimeters in the universe and even "practically no matter" mounts up.

The volume of the Observable Universe, as I said, is \(7.8 \times 10^{84}\) cubic centimeters and if the cosmic density is equal throughout the universe and not merely in the few billion light years nearest ourselves, then the total mass contained in the Observable Universe is from \(7.8 \times 10^{64}\) grams to \(7.8 \times 10^{66}\) grams. Let's hit that in between and say that the mass of the Observable Universe is \(3 \times 10^{65}\) grams. Since the mass of our own Milky Way Galaxy is about \(3 \times 10^{44}\) grams, there is enough mass in the Observable Universe to make up a hundred billion \((10^{11})\) galaxies like our own.

Virtually all this mass is resident in the nucleons of the Universe, i.e. the protons and neutrons. The mass of the individual proton or neutron is about \(1.67 \times 10^{-24}\) which means that there are something like \(1.8 \times 10^{78}\) nucleons in the Observable Universe.

As a first approximation we can suppose the universe to be made up of hydrogen and helium only, with 10 atoms of the former for each atom of the latter. The nucleus of the hydrogen atom consists of a single proton while that of the helium atom consists of two protons and two neutrons. In every eleven atoms, then, there are a total of 12 protons and 2 neutrons. The ratio of protons to neutrons in the universe is therefore 6 to 1. This means that there are roughly \(1.6 \times 10^{79}\) protons and \(0.2 \times 10^{79}\) neutrons in the universe. (There are thus ten quadrillion times as many protons in the nearly empty Observable Universe as there are sand grains in Archimedes' fully-packed universe.)
In addition, each proton is associated with an electron, so that the total number of particles in the Observable Universe (assuming that only protons, neutrons and electrons exist in significant numbers) is \(3.4 \times 10^{79}\).

This proton-reckoning in the Observable Universe ignores relativistic effects. The farther away a galaxy is and the more rapidly it recedes from us, the greater the foreshortening it endures because of the Fitzgerald contraction (at least to our own observing eyes).

Suppose a galaxy were at a distance of ten billion light years and was receding from us at \(4/5\) the speed of light. Suppose, further, we saw it edge-on so that ordinarily its extreme length in the line of sight would be 100,000 light years. Because of foreshortening, we would observe that length (assuming we could observe it) to be only 60,000 light-years.

Galaxies still farther away would seem even more foreshortened and as we approached the Hubble radius of 13 billion light years, where the speed of recession approaches the speed of light, that foreshortening would make the thickness of the galaxies in the line of sight approach zero. We have the picture, then, of the neighborhood of the Hubble radius occupied by paper-thin and paper-thinner galaxies. There would be room for an infinite number of them, all crowded up against the Hubble radius.

Inhabitants of those galaxies would see nothing wrong, of course. They and their neighbors would be normal galaxies and space about them would be nearly empty. But at their Hubble radius there would be an infinite number of paper-thinner galaxies, including our own!

It is possible, then, that within the finite volume of a nearly-empty universe, there is—paradoxical though it may sound—an infinite universe after all, with an infinite number of galaxies, an infinite mass, and, to get back to the central point of this article, an infinite number of protons.

Such a picture of an infinite universe in a finite volume does not square with the "big bang" theory of the universe, which presupposes a finite quantity of mass to begin with; but it fits the "continuous creation" universe which needs an infinite universe, however finite the volume.

The weight of observation is inclining astronomers more and more to the "big bang" but I find myself emotionally attracted to the lovely and optimistic picture of "continuous creation."

So far we can only penetrate ten billion years into space, but I wait
eagerly. Perhaps in my lifetime, we can make the final three billion light years to the edge of the Observable Universe and get some indication, somehow, of the presence of an infinite number of galaxies there.

But perhaps not. The faster the galaxies recede, the less energy reaches us from them and the harder they are to detect. The paper-thin galaxies may be there—but may be undetectable.

If the results are inconclusive, I will be left with nothing but faith. And my faith is this—that the universe is boundless and without limit and that never, never, never will mankind lack for a frontier to face and conquer.

**COMING NEXT MONTH**

*The Dying Earth* . . . In the twilight of Earth, humanity festers rich as rotting fruit . . . The moon has fallen and the sun is red and shrunk, while the Earth itself is falling into decay. And the people—what of the people? Science has died and in its place has come the revival of ancient sorceries. The ages of rationality have passed, and ignorance, fear, and magic have crept across the greying lands.

In 1950, Jack Vance first published his classic novel of science fantasy, *The Dying Earth*. In a few short years it was both out of print and a sought-after rarity. In 1962, the book was brought back into print, and a new generation of readers found and marveled over it.

Now, in the epic saga of Cugel the Clever, Jack Vance has brought to these pages the sequel to *The Dying Earth*.

The first novelette in this series, *The Overworld*, was published in our December, 1965 issue.* Next month we bring you the second, *The Mountains of Magnatz*. For, while Cugel has obtained the magic cusp, he must still return with it to Iucounu, the Laughing Magician, and this is no mean task, as he discovers in *The Mountains of Magnatz*.

* A few copies of this issue are still available at 50¢ from Mercury Press, 347 E. 53 Street, New York, 10022.
Grag Benford was a prize winner in last year’s F&SF short story contest (STAND-IN, June 1965). The crisp writing and dead-pan humor of this, his second story here, leads us to believe that we will be seeing a good deal more of his work.

REPRESENTATIVE FROM EARTH

by Greg Benford

John Bradley was uncomfortable. He inched further up the side of the spherical bowl, fingers slipping on the smooth concave surface, and looked around for a glimmer of light.

Nothing. Dark as the inside of the Coal Sack. Maybe darker. He shook his head to clear it.

The glide wings had been tilting back a fraction of a degree, trying to ride a cooler current down into a jet of warmer gas boiling up from the Jovian surface. He had been watching it closely, one hand preparing the instruments to measure density, temperature, collect possible life forms and do a dozen other things to the rising wind the small rocket plane would intersect within a few more seconds.

It was on the last dip into the fringes of the atmosphere before soaring out into the rest of the long orbit for Ganymede. Almost the last orbit itself, because the third expedition to the planet was nearing its return deadline.

He had just felt that tug of acceleration as the ship contacted the outer sheath of the jet, just begun to feel that he was nearly home.

And now he was here.

Wherever it was, it was cold. Bradley shivered, lost his grip on the side and slid back down to the bottom. There was an electronic click above him.

“Attention,” a thin little voice wheezed. “Thar iss leemetd tim fer thus annuncmeent.”

There was another click and this time the voice was a baritone. “You have been chosen as the best sample of your race easily obtained by diplomatic agents. The tests that follow will determine your suitability for the high company of galactic civilization. The importance of these examinations
cannot be exaggerated in am\textit{to dios}
peggio lui . . .".

The voice strangled off into Italian. Evidently their background work on Earth hadn’t turned up the fact that there was more than one language. But he caught enough English words—“challenge” and “great honor”—to know that they were giving him a pep talk.

Who were they? Not Jovians. Nothing but extremes of temperature and some remarkably vicious lichen had ever been noted on the planet. Not from the rest of the system, either. A ship had set down on Pluto just last month, and found it as dull as the rest of the solar system.

They were from the stars, then. They had picked him up for study, catching his ship when it was out of contact with its base.

“Galactic civilization.” Curious phrase. Evidently if he passed their tests Earth would be admitted.

The voice doned on like a boor at a cocktail party and slowly sputtered out. Another click and then a perfect Cambridge accent said, “May the World-Spirit or Guardian of your Respective Religion be with you in these times.”

Everyone for himself and God for us all, as the elephant said when it danced among the chickens. There was a pause, then a dull metallic clank and a rectangle of light appeared further up the curved wall. Water began to seep into the bottom of the cell and Bradley moved to higher ground to keep his feet dry. Whoever it was, they didn’t depend on his sportsmanship to get him out.

He pulled himself up through the doorway. There was a ramp leading down and a passageway further on, lit by a diffuse gray glow. He stepped slowly down the incline, ready for anything. Perhaps there were written examinations, followed by interviews. How did you test a member of a completely alien race?

He looked around and was just in time to see the floor slide away underneath his feet. He fell through, landed with a jolt and sprawled full length.

Groggily he examined the object he had fallen on. It was a plastic rod about eight feet long and smooth at the ends. Bradley climbed to his feet, holding the pole. Abruptly the small circle of light he had been standing in expanded into the same phosphorescent glow and he noticed movement behind him.

A creature with four arms and legs stood facing him, armed with a rod of the same kind. Both of them were standing on the ends of a rectangular platform, divided in half by a vertical transparent sheet. The sheet spread out at its base for a foot on each side like the leg of a twentieth-century coffee table. The platform seemed to be
balanced on a cylinder about three feet in diameter.

Over the edge of the slab he was standing on, Bradley could hear the liquid sound of water rushing swiftly by in the dark depths below. He looked over at the creature. Heavy-lidded eyes studied him calmly, not bothering to even be concerned. It flicked the pole from one six-fingered hand to another with amazing dexterity, bunched muscles moving smoothly under its green scales. No, this wasn’t a written exam.

The transparent shield between them began to move slowly upward. Already the platform shifted a little. It was like standing on a see-saw.

Bradley could see immediately that he was outclassed in hands, legs and agility by this repulsive reptile. If he moved toward the center of the platform the balance would shift, but then he would be within range of the other’s pole.

He caught a trace of the smell that came from the alien and stepped back automatically. The sheet was rising faster and was almost level with his eyes now.

Well, it was worth a try.

Bradley cocked his arm back, setting his foot firmly and balancing the rod like a lance. He whipped it forward in a straight throw and before the rod struck he was running toward his opponent.

He heard the dull thud of impact at the same moment he leaped for the edge of the rising shield. Fingers slipped, then caught hold. Below he glimpsed the reptile grab for air in a remarkably human gesture and then vanish into the blackness, the platform falling after it.

He had time to begin wondering how long he could hold on to the smooth edge before something picked him lightly off. A portal opened in the wall before him and he felt the gentle tug of the mesh around him as it thrust him through.

For a moment he was again in darkness. He relaxed in his flexible cage and caught his breath; the first trial was passed, and in good form. But why test races for Galactic citizenship by having them kill each other? And how many more tests would there be?

Lights went on again and the net dropped him unceremoniously on a sandy dune, getting grit down the back of his coverall. The only thing around was barren rock and dried up bush that looked like a sketchy imitation of tumbleweed. The bleak scene stretched away into the distance, punctuated by large boulders and an occasional steam bed.

Air clean, gravity normal. So this was the planet where they were keeping him. Or a set. He couldn’t tell a stereoprojection from the real thing even back on earth, and that was beginning to look like the bush leagues.
Maybe that was the point. If he banged on the wall they might let him out. He picked up a stone and threw it as far as he could. It landed a hundred yards away with a solid, rock-like thunk. The next one, in the opposite direction, did the same.

That was that. Bradley brushed off his hands and stood listening to the slight breeze rustle past. Maybe they were going to bring out the three walnut shells and the rubber pea.

Then he noticed the brown spot in the distance. It was only a blur now, but it moved steadily toward him. It certainly wasn't a cloud, because it changed direction twice to avoid outcroppings of rock as he watched it.

The question changed suddenly from abstract speculation when he heard the low growl behind him. Turning quickly, he saw a sleek brown form dart behind a rock and reappear again as it circled around him. It looked somewhat like a wolf, but lacked the tail and had gained another pair of legs. A sizable set of teeth grinned at him, anticipating the meal to come.

The brown spot was getting closer. He could almost pick out individual forms now, bearing straight toward him. The pack must have been called in some way by its local representative, although he had heard no sound.

Bradley was as exposed as a black widow on a bridal gown. The rocks weren't adequate cover and he had no weapon. He quickly picked up a few of the round stones nearby and tried to sharpen them down to finer points. All he could produce was a shower of sparks and an even more blunted edge.

He looked around, but nothing like a spear was in sight. And the pack seemed to be picking up speed.

He dropped the stones, producing another series of sparks. He froze for a second.

It wasn't flint, but it worked. Keeping his eye on the approaching brown swarm, Bradley rapidly collected a pile of the dry brush around him. By the time it was assembled he could hear the low cry of the pack and the animal he had seen before was creeping in closer.

He picked up a bush and practiced lighting it. The solitary animal was quite near now. He took aim and dropped the flaming ball neatly behind the rock where the creature was hiding.

There was a pause, then a savage bark and the animal bolted from cover, twisting to get at the spot where his fur had caught fire. He writhed on the ground, groaning. His brothers slowed their pace, though they were only yards away from their prey. They cringed back at the sight and whimpered.

Bradley saw his opportunity. The fire would go out in seconds. He rapidly lit more of the brush
and threw it at the pack, which had completely forgotten about him.

It landed among them and immediately another's fur began to smoulder. The others took this rather badly. They backed off, then turned and trotted away. Bradley went in the opposite direction.

Still, if they were anything like earthly wolves they would be back when they got hungry. Best to put as much distance between them and him while he had the chance.

He had just begun to set out in a dog trot when the scene suddenly went black and he felt himself in the confines of the net again.

He rested for a while and a mechanical arm gave him a thin liquid to drink, but otherwise he remained in darkness. After what seemed like a few hours of waiting he was deposited in a room filled to a depth of two feet with a slimy liquid that reeked.

He shared it with a vaguely fish-like creature. It wagged its tail at him like an imitation of a clumsy dog, swam leisurely over and tried to add him to its trophy room with a quick slash from its fins. It seemed accustomed to the climate. Unfortunately it was not accustomed to a swift kick in the mid-section from a steel-tipped boot. Bradley managed to keep one foot above water by balancing on the other and hopping out of range of the knife-like fins until he saw an opening. A few kicks and the fish lost interest.

It was a tough act to follow but the dragon made a good try. The first flaming breath almost caught Bradley in the shoulder. He angled off to the right, picked up a bamboo rod and got under its guard.

He didn't like it there, especially—the dragon had a perspiration problem that wasn't helped at all by his apparent love of wallowing in swamps. But it was safer than staying out where the claws could get at him.

They thrust clumsily at each other until the dragon began to get bored. It took a break to breathe, yawned, and Bradley rammed the rod down its blackened throat. He was swinging on the end with all his weight and trying to avoid breathing when the net came for him. He felt a little disappointed at not being able to finish it off. Maybe dragons were hard to replace.

More darkness, and then he was lying on the grass in the middle of a clearing. Test or no test, it was comfortable. A quiet forest all to his own. Bradley hadn't had a chance to sun himself for a long time. He went to sleep.

It was mid-afternoon before the elk found him. Or it would have been an elk, minus the four-inch teeth and menacing growl. He sprinted for the nearest tree and
heard teeth snap somewhere around his right foot as he made the lower branch. He knew things like this were going to give him insomnia ten years from now.

But an impasse wasn’t what they wanted; no net arrived, and Bradley had the uncomfortable feeling that the snakes he saw in the other trees nearby were going to find out about their new neighbor by nightfall.

He pulled down some vines, first checking to be sure they weren’t snakes being clever. It was but the work of a moment to make a crude trap and go after the pseudo-elk. Evidently the animal didn’t learn from experience, because it took Bradley three tries to catch it, and by that time the father of all boa constrictors was on the same limb with him. The elk was thrashing wildly and glaring at him when the net shoved the boa aside and wrapped Bradley up like a cocoon.

He landed flat on his back when they dumped him into the gray-paneled room. An ordinary household robot was sitting across a chess board from him, toying with a set of lethal-looking needles. It gave him a maniacal grin and said, “All shapes. All sizes. Take your pick awk skree.” Evidently it meant the needles. Bradley picked the smallest one and the robot fitted it on the end of its left arm and made the first move of the game with its right.

Things looked bad. Bradley couldn’t even win at checkers, playing old maids with bad eyes who were running a fever. And the robot was good. Five moves into the game he was already checked.

So he cheated. The robot froze like an Englishman who’s just found someone stacking the cards in his private club. Bradley got around him and ripped out some of the wiring in the back. The machine began giving all the chess pieces injections through the needle he’d selected and then the lights went out again.

After a rest he was delivered to an ordinary apartment. There was a woman in it.

“Welcome,” she said, and gestured to a chair. “I thought you might like to talk.”

Considering the reception he’d been getting, Bradley would talk until his mouth fell off. But it might be another test. He kept his place.

“Are you the emissary for the rest of the galaxy?” he asked, looking at her diamonds. They stood out sharply against the dark velvet of her gown.

They almost, but not quite, distracted the view from her rather worn face. She had an uncomfortable resemblance to a puff adder he had once seen at the zoo, without the reassurance of the glass between them.

“What?” she frowned and reached for a bowl of fruit next to the couch.
"I assumed if I completed the tests I would be able to speak to someone in authority," he persisted.

"Well, I am in authority. By the way, aren't you a little surprised that I speak your language so well?"

"Oh, of course not. I would assume any civilization which spanned the stars would have vocal translators."

"True," she frowned again, fingering the small box in her hand she had been speaking into. "Then you aren't mystified by the recent experiences you've gone through?"

"Not especially," he said. He was getting a little irritated at all this small talk. "I would like to know, though, about the results of your examination, and whether you think my race is fit for membership in your society."

"Your race? Who cares about your race? A backward bunch of grubs on a dirty little planet, I'm told. Hardly suitable for any of my caste to associate with except on the basis of master and slave."

He could hardly speak. "Master and slave?"

"Of course. I am Queen of the Fifteen Suns. Not the biggest empire in this region, of course, but not the smallest, either."

"But—but you didn't have me fight all those battles to become a slave, did you?"

"Oh no, for you I have something much better in mind. I'm sure you have the same problem on your planet when age begins to catch up with you, and you're just the man to solve it. I even took the time to personally witness part of your competitions. A very commendable performance."

"Oh, I see," Bradley breathed a sigh of relief. A position as Fleet Captain or acting King would probably not be too bad, at that. "You wish me to take control of your government, then?"

The Queen gave a matronly laugh and patted the seat beside her again.

"Don't be silly. You're completely unqualified. But you will do marvelously as my lover."

After a few months the shock had worn off and Bradley had settled down to the routine of the court. The work wasn't hard, but he found that he needed a lot of rest. It was less dangerous than fighting strange aliens, but demanded nothing less in imagination and inventiveness.

Every evening as he set off for the Queen's rooms, he felt a slight tug of homesickness for his old station. The ties of home could not be broken so easily. The green hills of Earth, and all that.

But his step was still brisk and his posture rigid. He carried the dignity of his office well. Chest expanded and shoulders straight, he went out to represent the race of man to all the galaxy.
This story is about Walton Ulster, a musician and critic who is driven by a series of painful recollections to return to his home town. It is a story of time travel, but in a personal and psychological sense. Its scope is as broad, its intricacies as complex, as the mind of Walton Ulster. Mr. Green’s gripping narrative provides support for those who maintain that there are more mysteries between two human temples than there are in the farthest reaches of space. More, he has provided a story that you will not read and forget.

APOLOGY TO INKY

by Robert M. Green, Jr.

Walton Ulster, between sleep and waking, heard a car horn go “ah-ooga,” and thought: that’s a sound that’s getting to be passé. Even the boop-boop-a-doop horn, in spite of the teen-age sports with their roadsters, was getting to be passé, along with the biplane—Walton snapped awake.

It was a wrenching, brain-battering awakening. He had not been deeply asleep, if he had been asleep at all, but he had been more than 30 years back, or down, in time, and to rocket in an instant from 1931 to 1965 was enough to give anyone a case of psychological bends.

Walton looked out the window of the bus and studied the highway traffic. There was not a car in sight older than 1950. Some humorist could have installed an “ah-ooga” horn from a junkyard Model T, but Walton wouldn’t have heard it here in the back of the bus, with the wheels singing directly under his feet, and the cold air jet humming and burbling into his ear.

An “ah-ooga” horn would be charming really. Very much in. Like vintage cars. Walton weighed the idea of buying one and writing a concerto for it. It would have to be one of those gimmicky, show-
off pieces that struts its hour on the stage shouting, "Hey, look at me! What a brash, outrageous piece of affrontery am I!"

Walton remembered the time when he would have sneered at such blatant self-advertisement passing itself off as music, but that was when he was so full of music himself that it vibrated at his very fingertips, when he could say "to hell with the orchestration; let them play it on jew's-harps and frisco slide whistles and it will come out good; set it up for trained seals with bicycle horns; I don't care."

All right. But that was before the dreams—the waking dreams and sleeping dreams—and the shrill rising voices within him that cried out his guilt and left no room for music. His talent was barren now and he knew it, but a man who had been famous for his pride—arrogance, gall, conceit; what you will—could not turn humble all at once and bow meekly to denigrating truth.

If all he had left was a bag of tricks with which to titillate the novelty seekers, the tricks were good tricks—duet for garden hose and bagpipe, sonata for piano with tissue paper over the strings, "Borborygmy in Harmony" with taped sounds of authentic belches and belly rumbles, "Alley Cat Chorale" featuring tapes of honest-to-God alley cats yowling over a percussion base consisting of shoes being thrown against a sheet of galvanized steel—arresting though sterile manipulations of sound that enraged just about everybody and kept Walton's name in the newspapers.

That sort of thing would have to suffice for the present. Somehow someday, soon God willing, he would surely find a way to recharge his talent. Then he would go back to filling the air with glory, and he would damn well sue any conductor who presumed to perform even a part of any single smart-aleck opus from this interlude of bleakness.

The talent-recharging trick, he was certain, was to put his finger on the specific moments of past time into which he seemed to be slipping in his waking dreams—the times which seemed to invoke at least the aura of the guilt for which as yet he could find no name—and then to find a link or common denominator for these fragments of time. The moments he was groping for, he was just about certain by now, were in the Spring of 1931 and the Winter of 1944.

Therefore, of course, Moira Hendricks had to be the common denominator. The more he thought about Moira these days—after 20 years of dogged effort not to think about her at all—the stronger became the pull of his dreams. He would hear a plane overhead and look up wondering whether it was a monoplane or a biplane, or, by a
marvellous stroke of luck, a Ford Trimotor. He would find himself searching magazine racks for Bal­lyhoo, or Judge, or College Humor. He would twiddle the dial on the radio until his exasperated wife asked him what in the world he was looking for, and would realize with an embarrassed start that he was idly hoping to catch Ruth Et­ting singing “Shine on, Harvest Moon.”

Those were the 1931 moments.

Then he would put his hand to his shirt collar and think, oh my God, I've forgotten to put on my collar insignia! He would automatically reach for non-existent crutches before getting up from his chair. He would hear—actually hear—Frank Sinatra singing “I’m gonna buy a paper doll that I can call my own.” He would say to his wife, “Hey, you didn't throw away Dick Tracy, did you? How am I ever going to know whether Flat Top sizzled him with that flame thrower?” He would hear, from far-off juke boxes, the bossy right hand, saucy left hand and mocking voice of Fats Waller, and catch himself thinking, boozily, sentimentally, See? See? He didn't die after all.

Those were the 1944 moments.

But most significantly, the more he thought about Moira, the more he brooded about guilt, and the surer he became that whatever it was he was guilty of, she was the victim of it. If so, she was the one who could tell him. That was why he was making this trip. It wasn't going to be easy. He couldn't come out flatly and ask her if he had done anything to her about which he ought to feel guilty. Old friends, old loves could alter drastically in 20 years, but he doubted that Moira would ever lose her knack for puncturing tension with a gay little crack and making him feel like a self-dramatizing, rather pompous fake. Oddly, though he had had occasion to resent this knack of Moira's, it was part of her charm. It had kept him on his toes, and she had never punctured him except when he deserved puncturing. He had indeed lapsed on occasion into pomposity. It was still a bad habit of his, particularly with no Moira in his life to keep him in check, and he was going to have to guard against it when he met her.

It had been Walton's plan to take the bus clear down into Cin­cinnati; then pick up a Hamilton bus that would take him up to Glendale, some 14 miles north of the city. Now as he looked out the window and saw the gateway to Sharon Park, he realized that his bus was coming into Sharonville, which is also some 14 miles north of Cincinnati, but only about 3 miles east of Glendale. It struck him as ridiculous to ride 28 miles in a bus just to go 3 miles. It was an easy walk from Sharonville to
Glendale. He had done it hundreds of times when he was a kid.

He got off the bus at Sharon Avenue, which leads to Glendale. A few other people were getting off at the same place; so he had time to change his mind and jump back aboard, back to the gentle, phoney zephyrs of the air conditioner, as the 114-degree July heat slapped him in the face. But what the heck; he had no luggage; he'd walked farther than 3 miles on hotter days, back in the 1931 he was seeking to rediscover, and besides he could stand to lose a few pounds around the midriff.

First of all, he went into a drugstore telephone booth to call Moira at her mother's home.

"You didn't answer my letter," he said, "But I came anyway."

"Well, you told me you would if you didn't hear from me." The voice of the beloved, as though 20 years had never been. It was as crisply cool as ever. No nonsense. Walton's hands were shaking. "I was expecting you, Walton."

"I wasn't sure my letter reached you."

"You might have known I'd still be in Mother's clutches."

"But when Aunt Jane told me you were Mrs. Moira Buntline, I sort of wondered—"

"Boy, you really are out of touch. I married Billy 17 years ago. I'm sure you were on the invitation list."

"Not if your mother had any-thing to do with it. Billy Buntline. I'll be damned. I never would have matched you two."

"Neither would Mother. After awhile Billy came to see it her way. It was as simple as that. No children. No settlement. He's married to Gladys Mallon now."

"That I can see."

"You wouldn't recognize her. She's fat and alcoholic."

"No! Well, look Moira, I'd better hang up. I've got a little walk ahead of me."

"Where are you calling from?"

"Sharonville. Nothing like a healthy hike—"

"Walton, you nut. In this heat?"

"I've done it a million times."

"You're not getting any younger. The miles are longer these days."

"I'm in pretty good shape, Moira."

"And the belts are shorter these days too. Your Aunt Jane tells me you're fat as a pig. Look, don't come here. Mother is still Mother, only more so. Call me from Igler's when you get to Glendale, and I'll meet you there."

Her hair was long, her foot was light,

And her eyes were wild.

And her tongue was tart as ever. "Fat as a pig." As he hung up, Walton felt that sweet, long-forgotten throbbing ache within his rib cage that Tin Pan Alley still ascribed to the heart, though it was more likely an endocrine reaction. Moira forever. How liltingly she
put you in your place. How he had ranted at it, how he had hoity-tootied at it, and how he had needed it. He had really brimmed over in those days—the days of Moira. He had brimmed over with music, with love, with inchoate philosophy, with hair-trigger perceptions. That was fine so long as it was on the level; Moira was with him, encouraging him, occasionally pruning the rank overgrowth. He was full of glory in those days, and Moira was involved in the glory. It was only when he was overweening and pretentious that she cut him down to size, but an arrogant young man with notions of being an artist can’t always know when he is pretentious.

That was why 20 years ago he had fled from Moira and all his glory. But he was not so simple-minded as to think that he could flee back and recapture Moira and glory. There was more to it than that. Somehow he must also recapture himself—a scared kid with a dog—no, two dogs—an angry Army captain with crutches and shards of phonograph records. He didn’t know how, or, really, why this was to be accomplished.

Walton wasn’t wearing a summer suit. He didn’t own one, to begin with, and wouldn’t have worn one anyway, since it had been damp and windy in New York when he left there yesterday. He had forgotten about those Southern Ohio summers.

He took off his suit coat, draped it over his arm, and began walking west on Sharon Avenue. Whether or not they really made the miles longer these days, they certainly did make the highways narrower. He remembered Sharon as a fine, wide road, with plenty of room on both sides for boys and dogs to ramble and for cars to park. Cars to park. Right up there on the left, just this side of the railroad tracks and in front of the locomotive roundhouse was where the Model A Ford was parked with a flat tire. The guilty Model A. The murderer of Inky. With a flat tire. Served it right.

No. There was no Model A there now. You couldn’t even park a bicycle there without tying up traffic all the way to Glendale. Traffic was pretty nearly jammed up anyway. The road was wide enough for a comfortable flow of two-way traffic, but it didn’t seem to be. Everything seemed hemmed in, squeezed together by some invisible pressure; Walton was bucking this pressure by sheer physical effort in order to stay out of the way of the laboring, monoxide-fuming cars. The heat pressed him down from above. Claustrophobia qualms fluttered through him, but he soothed himself with the assurance that he would soon be out of Sharonville and in wide open farm country. Maybe if he tried Boy Scout pace—50 steps walking, 50 running, he would be out of this
unseen dungeon before the walls closed in and crushed him.

A silly notion. He was barely past the old Sharonville round-house, and already his shirt was drenched in sweat; his feet, as in a dream, seemed to be dragging through thick gelatin. It was still early in the afternoon, but the mixture of haze, heat waves, exhaust fumes, diesel smoke, and sweat-streaks on the lenses of his glasses distorted and darkened everything around him. Suddenly, above the sounds of automobile tires and motors, he heard the voice of a boy, across the street and behind him, calling:

"Here, Slimmy! Here, Slimmy!"

Walton looked over his shoulder. He couldn't have heard properly, over the highway noises. Possibly, without being fully aware of it, he had seen the liver-colored Chesapeake Bay retriever out of the corner of his eye, and the name "Slimmy" had merely leaped to his mind. The kid in the green sweater, kneeling by the absurdly right-angled high-bottomed Model A Ford, might have been calling "Here, Spot," or "Here, Rover." Besides, there was only one Slimmy, as Walton had found out after a number of experiences with other Chesapeake Bay retrievers.

Or possibly it was the setting, the background, because he had seen it in dream after dream. The old round-house was out of true, just as it was in the dreams, and might easily, as in some of the dreams, turn into a Rhenish castle which you entered to find everything upholstered in green and be waited upon by smiling servants dressed as Pullman porters.

The Model A Ford with the flat front tire was also out of the dreams. The boy in the green sweater, with Slimmy (Spot? Rover?) at his elbow, was squatting by the tire. He was doing something to it, but Walton couldn't see what. Spot-Rover was sniffing at the tire just as Slimmy sniffed it in the dreams, sniffing Inky's blood, still bright red and gleaming in the April sunlight, though Inky had been dead since St. Patrick's Day.

Whatever it was that the boy and dog were doing, it was damned dangerous. They were on the left side, the highway side of the car. With all that hemmed-in traffic.

Walton shouted a warning, then turned to cross the street in order to give the boy some avuncular advice. Just then, a parade of three monster diesel trucks blocked him and cut off his view of boy, dog, and Model A Ford.

Walton shrugged and resumed his walk. It would have been out of character for him to butt in. He was an inveterate minder of his own business; the kid undoubtedly would have suggested to him that he continue as such.

He noticed that he was weaving

That was it! The dream! His motives had not been avuncular after all. He had simply wanted to see what crucial thing the boy was doing to that automobile tire, and the diesel trucks had forbidden him, just as blurring of focus or sudden awakening always forbade him in his dreams to see what was being done to the tire. Good Lord, had it come now to hallucinations in broad daylight?

He looked back toward the round-house. He knew the rule about hallucination. You merely had to utter, or even think “hallucination,” and it would vanish. No. The boy and the dog and the Model A were still there. But from where he stood, the car looked too rounded and sloping to be a Model A, the boy’s sweater looked more brown than green, and the dog looked more like a collie than a Chesapeake Bay. Damned glasses. Walton had nothing to wipe them with, except a dirty, sweat-sopping handkerchief.

He walked on.

Hallucination or not, the thing to do was to present it to Moira as such. He had been wondering how, in the face of her inevitable scorn, he was going to broach the subject of the dreams. One of Moira’s most engaging traits had been the trace of witch in her. Her crisp and merry practicality, her brusque impatience with emotional flatulence had been an acquired camouflage for an occult spirit sensitive to ghosts, bodiless voices in the dark, and nasty, vengeful pre-Olympian demigods. There had been madness in that big, creaky old house of the Hendricks. You saw it staring bleakly out of stiff ancestral portraits.

Walton supposed that she had inherited from her father—certainly not her savage vampire mother—the motherwit that gave her the arms and armor that had saved her and probably would always save her from being drawn wholly into her shadowy interior world—her witch world. She had succeeded in keeping everyone but Walton himself from seeing inside this armor. Maybe she had, through wishful thinking, seen some nonexistent quality in Walton, but inevitably he had failed her in the role of demon lover. He had gradually become enraptured with her voices in long unlit corridors, her deals with black powers. He had become, in fact, hooked.

“I set her on my prancing steed,
And nothing else saw all day long,
For sidelong would she bend,
and sing
A faery’s song.”

But he could come only as far as the gates of her world. No ghosts ever talked to him. He could only deal with her world in a poetic
APOLOGY TO INKY

sense, and Moira's ghosts were not poetry; they were Tom, Dick and Harry. Poetry was dangerous to Walton; it led him to excesses, to the verge of utter sappiness. But only to the verge. At the crucial moment Moira's needle of matter-of-fact would pop the balloon. Damned witch.

Anyway, Inky wasn't in this handily contrived "hallucination," as he so often—implausibly—was, in the dreams. He wouldn't have to mention Inky, which was a blessing. Moira might be venomous about Inky.

No, that was unfair. It wasn't Moira, but Moira's mother who had destroyed Inky with the Model A Ford. Inky, pointless, clumsy black mongrel, always subordinate to Slimmy, had been a member of his inviolate boy's world, had been one of the components of love that glued that world together, and without Inky there had been nothing left for a boy to do but kick his way through the shatterable dome of someone else's world. Not to destroy. Just to get in there and perhaps to find new components of love. But the very entry into another world was and had to be an act of destruction. Moira's mother had been the shatterable dome, and he had shattered this dome by doing some secret thing to a punctured tire with bloodstains still on it. But Moira had been the component of love inside the dome, and he had found her. And what secret thing had he done to her? And why the fingers pointing at him?

Outside of Sharonville, where the open fields had been, Walton found himself more hemmed in than before—by factories and by concrete overpasses and underpasses for highways he remembered as bucolic lovers' lanes. One bridge, once reasonably broad, had now become too narrow to accommodate both foot and vehicular traffic. Maybe it didn't matter. Maybe no one walked any more—not out this way to be sure.

It seemed that the only way for a man on foot to cross this bridge was to wait for a hiatus in the traffic and then run like hell. As Walton was standing there in woozy befuddlement, a slow rattletrap truck approached the bridge, heading in the direction of Glendale. The tailgate was down, and Walton, forgetting the dignity fitting to his age and increasing portliness, leaped aboard. No doubt the driver would see him soon enough through his rear-view mirror, but he surely wouldn't stop on the bridge, and Walton had no intention of staying on the truck after the bridge was crossed. His conscience would be clear. He would still have walked from Sharonville to Glendale; no one would count a tiny ferry trip across an otherwise unfordable obstacle.

He was sitting on the tailgate, facing to the rear, when the cold came. Suddenly he was struggling
to put on his suit jacket and huddle in it, whistling breathily over a shivering jaw. The tune he was whistling was "Mairzy Doats and Doazy Doats and Little Lamzy Divey; a Kiddly Divey too; wouldn't you?" That was a tune he hadn't heard for 20 years or so. He wouldn't have remembered all the words yesterday, but he did at this moment.

Walton knew it wasn't as cold as it seemed to be. These broiling humid days could trick you sometimes. A change of wind, a sudden downdraft of high cool air might lower the temperature no more than five degrees and yet feel positively wintry against your sweat-soaked body.

Right behind the truck was a big black old car. Walton was no good at guessing makes or vintages of cars, but he guessed that this was a pre-World War II model—1939 or 40—and a Packard. In truth, Walton could barely tell a Packard from a jeep. Moreover his eyes, un-pampered by spectacles, watered and blurred in the sudden drop of temperature.

But in the dream—the other dream—it was always a Packard, only he was inside it. The car behind him then was no hallucination, but the Packardness of it surely was, and for the first time Walton began to wonder if his coming back here for the first time after so many years to the scene of his crimes (?) was not going to make things worse instead of better.

Walton could see clearly the flashing black eyes and tight angry lips of the young woman who was driving; he could see her blue-black hair, set in a long, barbaric version of a page-boy bob and spreading out onto her shoulders from under a pale blue babushka to lend splendor to a pathetic old dyed squirrel coat. Next to her he could see the gesticulating Army captain, bundled up in his greatcoat, his crutches propped up beside him against the back of the seat.

Once again the dream was taking the place of objective vision. Walton proved it. He closed his eyes and still saw the Packard, the young woman and the gesticulating captain. He would palm this one off on Moira too as a hallucination. She would take it seriously and perhaps revel in it, but Walton didn't dare take it seriously, and far from reveling in it he steeled himself to fight it. This sort of thing was nothing to him but a cold grey warning—an intimation of creeping psychosis.

He blinked several times and pounded his forehead with the heel of his hand; his objective eyesight gradually got the better of his psychic eyesight, and what he saw in the car back there was the figures of two people only vaguely discernible through the blur of his drenched eyes and the glint of afternoon sunlight on the car's
windshield. The person driving appeared to be a woman all right, but surely not in babushka and dyed squirrel coat, at this time of year, despite the sudden illusion of chill. The man might or might not be a soldier. He seemed to be wearing some kind of visored hat (did they wear those in today’s Army?), but it could be a sport’s cap or boating cap.

The man was indeed gesticulating. Goddamn it, he was breaking phonograph records. Goddamn it, he was nothing of the sort. That was the goddamn dream again. The hell it was. You could see the labels clearly. Harry James, Bunny Berigan, Benny Goodman, Artie Shaw, Count Basie, Jimmy Lunceford, Duke Ellington. That, of course, proved it was all a crock, because even without blurr or glint, even with good glasses or 20-20 vision, you couldn’t read those labels from this distance, and under the present circumstances, Walton couldn’t even have made out the silhouette of an uplifted phonograph record.

The records weren’t all that important. Except for some of the Basies and Ellingtons, they weren’t records he would spend money on today, but there was a time when they had been to him what Chapman’s Homer had been to Keats.

It hadn’t been only the music. Those records had been a bond between him and Moira. They were a background for long summer evenings of chaste necking on moonlit lawns, of spinning moonlit plans for a—then conceivable—wildly romantic and interminable future. Therefore at a certain insane yet perfectly lucid moment in a frosty-windowed Packard which was burning up its OPA gas coupons for a week, it had become necessary for a flaming Army captain to smash some records he had loved in order to break a bond he had loved. But no Waller records. Fats was scarcely cold in his grave. And this was the reason for the grab of an out-of-focus dream that now no longer needed to wait on sleep.

Suddenly the man (?) in the car made some sort of violent gesture. There seemed to be some movement of the crutches, if they were crutches, which they damn well had better not or ding, ding, here comes the wagon. The big car went into a skid and hit the side of the bridge, not hard enough to do more than crumple a fender, but hard enough to stop the car. Since he was now across the bridge, he jumped off the tailgate of the truck and started back to see if anyone was hurt.

The car suddenly backed away from the guard rail and shot ahead so quickly that Walton had to straddle the rail to keep from being grazed. As it passed him he had a quick glimpse of the fortyish woman at the wheel. She was wearing a sleeveless lavender sum-
mer dress. The car had tail fins. It was probably a Cadillac of mid-50s' vintage; certainly not a pre-World War II Packard. The surprise zephyr had passed, and heat waves thrummed again on Walton's temples.

He took his coat off again and tied the sleeves loosely around his waist. Forward march. Hut-two. That was the ticket. Head up, shoulders back, chest out, belly in. Hut-hoo-hreep-hope. My head is bloody but unbowed.

He could still feel the rage of the Army captain who wasn't there. He always woke up still trembling with it after the dream. But what was it all about?

Walton remembered his days of brooding at the Army hospital, while he was waiting for the retirement board to meet and turn him loose.

Before the war he had somehow acquired a Macedonian bagpipe, softer and more sweetly plaintive in tone than the Scottish Highland pipe, and he had seized on the idea of using it as instrumental accompaniment for a choral setting of Keats' "Grecian Urn." Therefore, ye soft pipes, play on. He had worked out a simple ground melody for the bagpipe, but Army life had swallowed him up before he could put down the bagpipe variations or any of the voice parts. In North Africa, a shell fragment in the knee-cap set him free again.

For three months after his first hospitalization he was able to do nothing but torture his original ground melody into labored, wooden variations, and drudge away at the architecture of chord progressions. Finally, in October, when he was about to be retired from an Army general hospital in Texas, the muse began to take grudging pity on him; little by little the melodies started to come back.

Clumping around the hospital ward on his crutches, he pieced together a jig-saw picture of the future that would be thrust upon him if he went with the drift of things. In a few days he would be out of the Army. In a few months he would be free of his crutches, limping up and down the city streets looking for a job. In a year or so he would be married to Moira, and within five years he would have children, pediatricians, mortgages, commutation tickets, crab grass—and no melodies, ever again.

This was unthinkable; this was suicide. The only alternative was to stand up to the dismay and anger of his mother and father and uncles and aunts, and renounce the world for his melodies. Renouncing the world might mean the renunciation of Moira, but this was not up to him; it was up to Moira. He would live in the modern equivalent of a city garret, and he would earn rent and grocery money by teaching harmony
and counterpoint or by playing piano in a cocktail lounge. If Moira loved him enough to live this life with him, wholly with him, undeviatingly on his side, his renunciation would be sweet. If not, it would be agony, at least at first; but a necessary agony.

Moira had gotten out the old puncturing needle just once too often. She had made him look and feel like an over-dramatic egotist. She had laughed gaily at his garret. It was a bright and lilting laugh, that pretended not to be what it really was—a sneer at the melodies that spangled the dome of his world—a sneer, somehow, at Inky.

The shards of the phonograph records were Inky’s broken body. He had picked up a whole disk—Artie Shaw’s “Begin the Beguine,” Moira’s favorite—and seen blood on it, on hub and spokes and tire.

But if this was the way it had really happened, then he, Walton, was in the right, and Moira in the wrong. Why then, the voices and pointing fingers in the dark?

Walton marched bravely up a gradual hill where, at this time of year, fields of corn and wheat once purred with joy in green and gold under the heat, and cottonwood fringes blinked from green to silver at the hint of a breeze. Now, on both sides of Sharon Avenue, there were rows of small homes and desperate lawns clinging to bare survival through the mercy of whirling sprinklers.

At the edge of Glendale, completely obliterating a monstrous field through which he, Caesar, and Inky, Labienus, had once pursued Slimmy, the noble Vercingetorix, in a forest of weeds, was a vast, functional high school.

Ahead of Walton, the land sloped gradually down to Albion Creek, which ran perpendicular to Sharon Avenue, then gradually up. Most of Glendale, including the village center, was on the far slope, though from where Walton stood it looked more like a woods than a village. Home was more than home; it was an oasis, and thank God the skyline was unchanged. Farthest to the left was the pointed spire of the Presbyterian church; next, looking taller because it was at the top of the slope, was the flat-topped, English Gothic steeple of the Episcopal church; then, looming like a mystical druid stronghold, the cone-topped cylinder of the old stone and concrete water tower, all covered with ivy.

Covered with ivy! How in hell could he see, with or without his glasses, ivy more than a mile away? How, for that matter, could he see a water tower that had been torn down more than 30 years ago. He blinked his eyes and punched his temple, and the tower, properly, vanished. Got to keep making these little corrections. Got to ward off the little guys in the white suits.
Up ahead of him to the right, on this side of Albion Creek, was the new (new in 1930) water tower, functional and ivyless: a giant kettle perched on daddy-long-legs. He saw a boy with a green sweater turn off the highway and stroll toward the tower, through the trees. The boy was followed by a liver-colored dog. Possibly a Chesapeake Bay retriever. Slimmy. And a black, ungainly, huge-pawed—Oh no, Oh no. Pound the old temple. Blink the old eyes. Correct every last little detail.

Walton wondered if there was anything nowadays to attract a kid and a dog to the water tower. There used to be a lovely dump, with rusted old auto bodies to climb into and bottles and jugs to throw at rats and sometimes a treasure to take home—a chair, for example, with only one leg broken, which would help furnish that always projected but somehow never built secret clubhouse.

Walton knew that if he followed the boy he would come to no dump at all but to trim lawns, and probably to neat walks or drives, with, no doubt, flowers planted along the borders. He hadn’t been near the new water tower in over thirty years, and he had no intention of going near it now, but there were respectable, landscaped, tree-shadowed homes with two-car garages along this part of Sharon Avenue today, possibly inhabited by some of the same guys with whom he had bottled rats to death in the old days, and it stood to reason that the presence of a lovely dump would be intolerable.

He wondered if anyone was looking out a window at him, saying: “Why that looks like little Walton Ulster.” It was more likely, since he had not been able to shave today and since dust had glued itself to his sweat-drenched shirt, that anyone seeing him out here on the highway would say, “Who is that fat bum waddling along out there?”

Knotty skirted the dump, trying not to make himself conspicuous. Maybe there would be some kids with 22s, shooting at tin cans, or, with luck, rats, and if they didn’t see him they might shoot in his direction. He knew he would be too yellow to stand up in front of a firing squad, but it would be kind of nice to be hit by a stray bullet if you didn’t really expect it but just sort of idly hoped for it.

There just wasn't any other way out of the mess he was in, except maybe a disease like tuberculosis which would get him off to a sanitarium somewhere so he could start all over again. People would be sorry for him, and they would forgive him for some of the things they were bound to find out about pretty soon. They would never find out the whole thing about Mrs.
Hendricks. Maybe she wouldn’t be killed instantly. Maybe she would live long enough to talk, and Moira Hendricks would rat and tell somebody everything she knew, but everybody knew there was insanity in the Hendricks family, and it would be Moira’s word against the word of a poor sick kid wasting away in a sanitarium.

There was a guy he knew in High School in Cincinnati who had TB. His family was too poor to send him to a sanitarium, and he was probably at home or in the General Hospital. Knotty’s freshman class at Walnut Hills, or anyway the kids in Knotty’s home room, had all chipped in to help pay for the guy’s doctor’s bills or medicine or something like that. His sister was a senior, and maybe Knotty could get her to take him to visit her brother. It would look very sweet and thoughtful, and Knotty could make some kind of deal with the guy. Suppose, say, the guy had a bowl by his bed to spit in, and Knotty could take it home and rub the glop all over a lot of needle prickers on the back of his hand. Or he could—ik—drink it.

Aw, but heck, you couldn’t get tuberculosis in two weeks. Or maybe you could get the germ, but you couldn’t get anything that showed enough on the outside so you could get your mother to take you to a doctor for an examination. In two weeks the jig would be up. The April report card would be out, and it wouldn’t be a good idea to forge his father’s signature again. He had done an expert job on the March report card and his father had been too busy to notice what time of month it was, but just the other day he had said, “Isn’t it a pretty long time between marking periods? It seems to me there was snow on the ground the last time I signed one of yours.” Knotty had squeaked through that one by reminding his father of a freak snow storm that had come a few days after St. Patrick’s Day. Naturally, his father hadn’t marked it on his calendar, and it could just as easily have occurred March 31 as March 19 or 20, but he had frowned and shrugged and said, “Well, time can fool you. Particularly when you’re on the road a lot. I’ll have to write something on my memo pad for April 30th.”

Boy, that was really going to be a report card. Knotty was going to have to go some to explain the “incomplete” in Math and Latin. He just couldn’t tell the truth: that he had been cutting those classes for two solid months.

A guy could get into one of these things without meaning any harm, but it was just about impossible to get out. He only meant to cut that one class in Math the day he was supposed to bring in three homework make-up assignments or get sent to the principal’s office. He didn’t know why he was still
afraid to be sent to the principal's office, but he was. Well, it was a simple enough matter to go to the nurse just before class and groan a little. His sinuses were always pretty badly congested at this time of year anyway, and if he didn't really have a headache, he had a perfect right to one; it wasn't hard to persuade the nurse to give him some aspirin and make him lie down for an hour or so. The only trouble was that he had met another guy in the nurse's office—a sophomore Knotty knew in the orchestra—who had a pretty good idea for a hit tune, but just couldn't get anywhere with the verse or the release; so by the time he and Knotty had something worked out that really sounded smoo-ooooth, two hours had gone by, and Knotty had cut Latin class too. The Math teacher was a sour-faced fat woman, all covered with chalk dust. She just looked down her nose at the guys like Knotty who couldn't get Math. But the Latin was a nice old maidly auntie sort of lady who was always being disappointed in Knotty, which was worse than having someone look down her nose at him. Well, naturally, Knotty had planned to catch up on his Latin and Math that night, but, naturally, he had some more work to do on this song, and—well—by the third or fourth day of this sort of thing he was just plain scared to go face his Latin and Math teachers.

What's more, the homework kept piling up until there was more than he could make up in a hundred years. About the middle of March he had thought maybe if he went up to somebody and made a clean breast of everything, he would get yelled at a little and then things would get worked out some way, but he kept putting it off and putting it off, and when he finally forged his father's signature to the report card he was too deep in crime to figure a way out.

Well, there weren't going to be any stray bullets for Knotty today, because there was nobody out shooting in the dump. Knotty picked up an armload of bottles of different sizes: tough blue milk-of-magnesia bottles, elegant green mineral water bottles, brown cod-liver-oil bottles, pop bottles, castor oil bottles. With Slimmy cavorting wildly around him, tail flagrantly up and thrashing, Knotty walked through the line of trees that fringed Albion Creek, into a foliage-vaulted otherworld. He lined up his bottles beside the creek. This time of year there was plenty of water in the creek, and the stink of sewage was not as bad as it would be by July or August. He sat down and began experimenting with various levels of water in his bottles, blowing across the mouths of the bottles, pouring out or adding a little water, then blowing again, until he had, for each bottle, the precise tone he wanted. Slimmy sat...
down beside him and whined each time he produced a tone. It was probably true that the musical notes bothered the dog’s ears, but they didn’t drive him away.

When he was satisfied with the tone of each bottle, Knotty placed them in a row in front of him, the deepest-toned bottle farthest to the left, the next deepest-toned beside it, and so on up, from left to right, to the little shrill medicine bottles.

“Okay, Slimmy,” he said. “This is gonna be an ode for Inky.”

Slim pricked up his ears at the sound of the familiar name.

“That’s right, Slimmer. You were the best, but we always loved old Inker, didn’t we? We used to make fun of him because he was clumsy and couldn’t do half the things you did, but we loved old Inker. Didn’t we, Slimmy boy? This is gonna be an ode to tell old Inker we’re sorry for all the times we teased him, ’cause we never had a chance to tell him when he was alive. Did we, Slimmy boy?”

Slim whimpered and bathed Knotty’s face with his tongue.

The “ode” was in reality a dirge. For mechanical reasons it had to be. In order to go from one note to another, you had to put a different bottle to your lips at the same time you put down the last bottle you had blown and groped for the next one you would need. Knotty was dexterous, but not dexterous enough to produce a trill or a grace note or a liquid arpeggio; however, by over-blowing the deep-toned bottles, he could produce a sudden jump from a solemn moan to a wild shrill wail. All in all, the music he forced from his bottles was majestic, and fitting to the greenwillow, bird-twittering cathedral in which it was played. Assuredly Inky got the message.

After a few minutes the constant blowing made Knotty dizzy, and he stopped for a rest. Once more he went back in his mind to his unsolvable problems, and found himself, to his surprise, chuckling. People were always saying, “Some day you’ll look back on this and laugh,” and now, unaccountably, it was “someday” and he was looking back and laughing, with some scorn, at the pathetic molehills a damfool 13-year-old kid seemed to think were mountains.

Well, what he was doing to Mrs. Hendricks’ flat tire wasn’t any molehill, but the grown-ups who were watching him do it as they drove by in their cars, they didn’t know what he was doing, and they never would. Some things were all right if they were necessary and you didn’t get caught.

He knew what all those grown-ups were thinking. “Golly, what I wouldn’t give to be a boy again and wander along the highway with a good old dog like that.”

And what he, Knotty, was thinking about the grown-ups,
here and now in his greenwillow April cathedral, was “I’ve got something you haven’t got.” This was true, for all of a sudden he knew exactly what new turn of melody to blow on his bottles in memory of Inky.

That was the trick. You had to know exactly what the next note had to be. If you had to force it or puzzle it out, it was no good, and you might as well quit playing till it came to you. It was like the chicken laying the egg; the chicken didn’t plan on it or work at it; when the egg was there to be laid, what else could the chicken do with it but lay it.

Knotty blew a long-drawn-out steamboat whistle hoot on his biggest bottle, a half-gallon jug that had contained something vile-smelling. He wished he had a gallon jug; his melody line was sweetening now, and he felt it needed the seasoning of a really full-bellied bass. But unbroken gallon jugs were almost impossible to find in this dump. They were too tempting as targets for boys with rocks, air rifles or 22s.

After finishing the tune, he smashed each bottle, one at a time, starting with the littlest bottle, going from right to left. He didn’t know why he did this, but it seemed to be a necessary part of the ritual.

He stood up and turned to leave his arcade. Sitting on the stump of a lightning-struck willow tree was an old old man, maybe 80 or even 90—a jowly old man, almost bald, with a writing pad in his lap and a funny-looking pencil in his hand.

“I believe I’ve got every note,” said the old man. “Thank you very much.”

“Golly,” said Knotty. “You mean you were writing down that stuff I was playing?”

“From start to finish. Let’s see. Your title for the tune is—uh—”

“Ode to Inky,” said Knotty.

“Oh yes. Good old Inky. Tell me: does it invoke Inky? I mean, does it bring him back? Do you see him?”

“Oh, heck no. It’s just sort of a memory—well—like an apology to Inky. I mean—well—Slimmy and me—that is, when Inky was alive, we never—”

“I know, I know. Nobody ever does. That’s the guilt that makes the world go round. Don’t wallow in it though. Guilt is really another form of pride, but you won’t understand this until you’re a great deal older, and I won’t try to explain it to you. ‘Apology to Inky.’ Don’t you think that’s a better title than ‘Ode’?”

“Well, golly, I never—. Well, sure, I guess so. I just never thought about it as a real composition—like written down and all that.”

“‘Apology to Inky’ is the title then. ‘Apology to Inky’ by—uh—”

“Retslu Notlaw. That’s my
mom de plume, sort of. We used to have a gang a couple of years ago, and all the guys did their names that way. Mine was the only one that stuck." Knotty looked over the old man's shoulder as he wrote in his pad. "Say, gee, what kind of an Eversharp is that you got there? The writing looks like ink."

"It's called a ball-point pen," said the old man, quickly pocketing it. "I don't think I ought to show it to you. You're getting too far ahead of yourself."

"I don't get it," said Knotty. "Say, how come you found this place? How come Slim my didn't let me know you were here?"

"Slimmy knows me," said the old man. "I think. I would have liked it if he had jumped up and licked my face."

"Huh?"

"In any event, this place is no stranger to me. I can almost see the trees that used to be here. The alameda of willows. The glorious tin cans and rusty axles. And the rats."

"I don't get it."

"For your sake, I hope not. Forgive a moderately insane old man. And accept my humble gratitude for 'Apology to Inky.'"

"Gee, I wish you could stick around. You've got me all mixed up."

"You were worse mixed up before you saw me. Remember that. Now, I really can't stay. I have an engagement with my hair shirt."

"Wait a sec, please. What are you going to do with the music you wrote down?"

The old man had already stepped out of sight through the fringe of willows. Knotty ran after him, out into the open dump, but could see no sign of anyone.

"Oh, shoot," he said. "I did the Inky tune better than ever. I wish I could see it the way he wrote it down. I never told him I just make it up as I go along, and it won't be anywhere's near as good tomorrow."

Walton Ulster gasped with pleasure as the cool air of Igler's Drug Store embraced him and caressed his sopping shirt. He looked around, wondering if he would see a familiar face behind one of the counters, when he heard her voice.

"Walton Ulster: I'd hardly recognize you."

There she was, sitting at one of the tables, sipping Coke through a straw. Beware! Beware! Her flashing eyes, her floating hair! Impossible that she should have aged not a single day in 20 years. It must be a miracle of make-up, he thought, but it was certainly invisible to the naked eye. Witchcraft?

He strode toward her, with both hands outstretched, and she looked up at him with startled hostility.
“Walton! It is you, isn’t it?”

The voice came from behind him.

He spun around. She was sitting at the counter, sipping hot black coffee. She had aged some, but not much. There were little lines at the corners of her eyes and on her neck, her lips were a trifle thinner than they had been, and her hair, still long but not barbarian, was salted attractively with grey. She had made no attempt to hide behind heavy make-up, lipstick or dye. Her figure was youthful, and Walton would have bet she wasn’t wearing a girdle.

“My God, Moira, you’re a damned handsome woman. If I didn’t know better I wouldn’t believe you were over 30.”

“I wish I could say the same for you. Aunt Jane is right. You’re fat as a pig.”

“I guess I could lose a few pounds. The doctor says I’m not dangerously overweight.”

“Oh, shut up, Walton, you sensitive plant. Give me a kiss.”

He put his lips to hers, intending nothing more serious than a kiss or cousin’s peck, but the surprisingly soft responsiveness of her lips, enhanced by a sudden, rather embarrassing vision of the girl with the wild black hair drinking Coke at the table just behind him, made him, momentarily, drunk. He pressed Moira to him.

She threw her head back, laughing gently.

“Decorum’s the word, old boy. Here in Igler’s anyway.”

“I don’t understand myself,” he said. “The years just seemed to blow away.”

“You’d better watch it. You’ll get picked up as a dirty old man. What’s with the hot number at the table back there?”

“You won’t believe it, Moira. She was the first person I saw when I came in here, and I thought she was you. Do you have a dry handkerchief I can clean my glasses with?”

“It’s a good thing you didn’t accost her. She’s jumpy about something. I saw her pour something out of a flask into her Coke. Here, will a Kleenex do?”

Walton began to polish his glasses.

“Join me in a cup of coffee,” said Moira.

“I couldn’t. I’m parboiled. Oh, for a glass of ice cold beer.”

“Mercy. In Igler’s?”

“Let’s go over to Bob Heine’s. I can unbutton a few more buttons on my shirt and put my feet on the table. Or is that too disreputable for you?”

“It isn’t Heine’s any more. It’s very reputable now. Very in. Lots of decor, fine cuisine, waiters with uniforms, early American hitching posts, steel engravings. . . .”

“Beer on tap?”

“The best. It’s called the Iron Horse, if that gives you any kind of a picture.”
"I have a picture of beer."

"Oh, I don't know, Walton. I suppose they'd be too nice to refuse to serve you, but I won't go there with you. Not until you've had a shower and put on a clean shirt with a tie."

"Can Glendale support a place like that?"

"Progress, old boy. Oh, the village itself hasn't changed much. Same old winding roads and trees and lawns. But we're surrounded by industry now, and that means bright young executives putting the best foot forward. If you were a bright young executive, would you take a customer to lunch in a place like Heine's?"

"We had lovely afternoons there. I wish they'd suspend progress long enough for people like me to catch up with ourselves." He put on his glasses and turned to look at the girl at the table.

"She does look remarkably like you, Moira."

"I had a squirrel coat like that once, but I wouldn't have dreamed of wearing it out on the hottest day of summer."

Being a normal male, Walton had not noticed what Moira was wearing until just this moment. Her sleeveless lavender summer dress was just right for her and just right for the weather.

"What kind of a car do you drive, Moira?"

"A '54 Cadillac. It's a souvenir of my pointless liaison with the Buntline money. Billy let me have it after the divorce, which was unnecessary, but sweet."

"That's a picture of Billy Buntline. Unnecessary but sweet."

"I didn't know you had claws under those darling pink paddies of yours, Walton. It really was sweet. I couldn't afford another car, and I can get another five years out of this one with judicious replacement of withering parts here and there."

"What were you doing out on Sharon Avenue this afternoon?"

"Looking for you, you vaunting ass. When you told me you were going to walk all the way from Sharonville in this heat—and at your age too—my first thought was 'let him learn the hard way.' Then I had a picture of you lying lobster-red by the highway; so I told Mother some cock-and-bull story and came out to find you."

"You drove right by me."

"I drove by a portly, sweaty hobo lurching along in the curb. I saw no connection between him and Walton Ulster, distinguished New York music critic and enfant terrible of the concert hall. For heaven's sake, join me in something. Cherry Coke?"

"My favorite used to be vanilla phosphate. On second thought, I think I'll have a lime Coke. Do you suppose that girl would let us look at her flask for a few rapturous seconds."

The boy in the green sweater
came in. The liver-colored dog sat patiently on the sidewalk just outside the door.

"Good heavens, Walton," Moira whispered. "That boy looks just like you when you were 13 or 14."

"I was never that skinny," said Walton.

The boy came up to the counter and ordered a vanilla phosphate. Walton ordered his lime Coke. It suddenly occurred to him that the people behind the counters astonishingly resembled the people of 1931. He knew that if they were still alive, Mr. Igler and Miss Katie would be over 100 now, Miss Tillie and Miss Frances would be in their sixties or seventies, and Wilbur at least in his late fifties. I'm not hallucinating, he thought. I'm only seeing imaginary resemblances my subconscious wants to see. Be Nonchalant. Light a Murad. Were there Murads any more? Just for fun he asked the one who looked like Wilbur to bring him a Murad, and Wilbur did. He took one out and lit it—nonchalantly. It was too strong for a taste long since cravenly conditioned to filter cigarettes.

Moira said. "I'll be darned. The things they can come up with."

"It's stale. Probably been sitting here for 30 years."

Some other boys came in and joined the kid with the green sweater. They ordered phosphates of various flavors and sat down by the window to flip through the movie magazines. There had been a time when Mr. Igler endured this sort of imposition.

"Hey. Here's a picture of Joan Crawford. She's my dream queen."

"Mine's Janet Gaynor. She's like a real kind of a girl."

"Hey. It says maybe Doug Fairbanks is quitting the movies."

"That's a heck of a note. Hey. Did you know Edward G. Robinson is really a nice guy in real life?"

Moira said, "Why so dreamy?"

"I was just listening to the kids. You must have super-ears. I can't hear a word from here. Look, Walton, I really do love seeing you, but I have a tyrannical invalid for a mother, and she expects me home. What is it you wanted to talk to me about?"

"Well, for one thing, your mother. After all these years you had to tell her a cock-and-bull story just to meet me for a few minutes in Igler's?"

"You know she hasn't been rational since the accident. She has always held you to blame. You and that black mutt."

"Moira, I ought to tell you; after more than 30 years, my temples still throb at the sound of the word 'mutt'."

"I apologize, Walton. We don't need to drag that business out into the light of day again."

"Yes we do. That's just it. I'm fouled up, Moira, and I'm trying to grope my way into the past to find
You're the key, Moira. What happened to us?"

"What could be simpler. 'Us' was lovely, but 'us' was out of the question. You were a pretty far-out boy. You were dedicated, determined on poverty, and all in all, a lovable—God, how lovable—sap. I was a bird-brained debu­tante dreaming of an escape from my mother, a Cadillac, and a rich husband—in that order. Well, I got the Cadillac and the rich husband, and I still have the Cadillac. Next question."

Walton frowned. Was Moira making this up to save face?

"That's not the way it was at all," he said. "I was an arrogant, pompous cad. I treated you like dirt. Why? How?"

"You were all of that when you wanted to be. I didn't mind much. You always got over it pretty quickly. So. Now. You've had a successful career. You have a charming wife and lovely children. Aunt Jane keeps me posted. But you say you're fouled up."

"Please don't rush me, Moira. Let me collect my thoughts."

Four girls in their early teens came in, wearing the green and white uniforms of Hillsdale School for young ladies. They walked haughtily past the boys, hiding their secret smiles, and went to the corner where, Walton knew, the Hit-of-the-Week records were on display. The boys ambled over to join them, some swaggering, some slouching, all projecting huge indifference.

Girl: The one I liked best was 'The moon and you appear to be/so near and yet so far from me.'"

Another girl: "I'm through with love; I'll never fall again/said adieu to love; don't ever call again.' That's my theme song."

Another girl: "I am just a lonesome lover.'"  'That's mine."

Boy: "Nerts on Rudy Vallee. He sings like a girl."

Another boy: "Bing Crosby sings okay."

Girl: "Oh, he's divine."

Boy: "What about Maurice Chevalier? He makes me sick."

Girl: "My mother thinks he's divine."

Boy in green sweater: "Ooooogh! So does mine. You wanta know who my favorite is? My favorite is Elmer Zilch."

(Laughter.)

Walton tensed, waiting for the phone of doom to ring. He was almost relieved when it did. The one who looked like Mr. Igler answered it and went to the teen-age girl with the wildest, longest, blackest hair of all to tell her the call was for her. Just then, an Army captain, his greatcoat buttoned to his throat, came in on crutches, looked around almost timidly, then walked over to the young lady with the dyed squirrel fur coat. She glowered at her empty Coke glass,
refusing to look at him, but he sat down anyway.

The young lady spoke through her teeth, still refusing to look at him. "Did you have a good time at Bob Heine's? Did you search your soul, or did you just get loaded?"

"I just had a couple of slow, slo-o-ow beers. Give me a break, Mo. To err is human; to forgive, divine."

Teen-age girl (in background): I have a divine idea. Let's go to my place and play Truth'n'Consequences."

Another girl: "Divine!"

Boy in green sweater: "Swell. Wait till Moira gets off the phone and we'll all go."

First girl: "Divine."

The young lady with the dyed squirrel fur cat deigned now to look at the captain. "I'm not divine," she said. "I'm not the one to do the forgiving anyway. You behaved like a brat, but I might have known you would when the message finally seeped through the rock wall of your ego. You simply can't take a hint unless it's delivered with a baseball bat."

"Hint? What are you talking about?"

"How can an intelligent man be so dense? Even before you went into the Army, I tried to tell you in as nice a way as possible. What did you do with the letters I sent you? Just glance at them and throw them away? Didn't you ever try to read between the lines? I didn't want to hurt you but you've been making it difficult for both of us. You have your plans; fine! Well, I have mine too, and they don't include you. I can't make it any blunter than that. I'm sorry, Wall. I'm really very fond of you."

Walton wished he could stop up his ears without making a spectacle of himself. He hated overhearing this conversation. It was all wrong—cockeyed—out of true.

The man should be the one to strike; not the girl.

The captain said, almost whining, "Oh, Mo. Mo. It can't be like this. I swear to God, I've really got it inside of me now. We could be great together. I've got it."

Walton took another sip of his cherry Coke. "The truth is, Moira," he said, "I just haven't got it. I haven't had it for I don't know how many years. I make a fair living teaching and writing reviews, and I attract attention with my outrageous bag of instrumental tricks, but tap me with a rubber mallet and all you'll get is a hollowboing."

"What about your wife?"

"That's all over, Moira. It's been over for a long time, but now that the kids are in college we're ready to make it legal. Everything will be civilized. I haven't any right to be bitter. My God, it wasn't her fault she was loaded with dough. It wasn't her fault I turned out to be a hollow man, and a damned resent-"
ful, boorish hollow man at that. She's been more than patient."

"You don't have to tell me," said Moira. "I know the combination. So you married money too?"

"More than that. She was—still is—a very sexy broad. She believed in me. We had our moments of romance. But you're right. It was a lousy combination. We should have known it at the start."

"Did you smash phonograph records?"

"Worse."

"Whose side are the children on?"

"It hasn't come to that. I suppose if it does, they'll stand up for their mother. But they're good, level-headed kids. They won't be estranged from either of us. Fact, they'll probably be relieved. Divorce solves a lot of unacknowledged problems. Not that it will really solve mine."

"What will?"

"I told you, Moira. I've got to catch up with myself, recapture my past. I have the feeling I once did something dreadful, too dreadful to be carried in my memory—something having to do with you and me. I've got to work my way back to it. With your help. I've got to find a name for it, and, please God, purge myself of it."

"All right, Walton, I want you to listen to me, and, damn it, take me seriously, or I'll bounce something off your head. To begin with, forget all that jazz about Hell having no fury like a woman scorned. I've had plenty of experience in swallowing my pride. I've even come to find it rather nutritious. For Pete's sake, Walton Ulster, why don't we undo all this silly damn nonsense and get married to each other?"

Walton looked at her in amazement. "You know, it's the funniest darn thing, but I was just about to say the same thing. It hadn't occurred to me till just now. But—hadn't there ought to be a courtship? Flowers? Candy? Serenades?"

There was a commotion among the teen-agers. The girl with the long black hair was weeping and ranting.

"It's all your fault, Knotty. You killed her. You and that—that damn mutt of yours."

"Inky didn't have anything to do with it," said the boy in the green sweater.

"Don't you dare talk to me, you murderer. Don't ever talk to me again."

She fled from the store.

"Golly, Knotty," said a boy. "What did you have to do with it?"

Girl: "She isn't really dead, is she?

Walton strode over to the group of youngsters. He gripped the green-sweatered boy by the upper arms and said through his teeth, "What did you have to do with it?"

"Ow," said the boy with the green sweater.
"You fixed the wheel, didn't you?"

"You can't prove anything," said Knotty.

"Mr. Igler" came up, tapped Walton on the shoulder and beckoned him to a private corner of the store.

"I don't know why you're making this your business, mister, but I'd better set you straight. Something very serious has—"

"I know. Mrs. Hendricks has been in an auto accident. She's not dead."

"How in the deuce could you know that?"

Play it cool.

"I overheard the kids," Walton lied.

"Well, you're right. She's not dead, and Doc Allen thinks she'll probably pull through. The shame of it is, her brain will probably be affected some, and—do you know Mrs. Hendricks?"

"Quite well."

"A handsome woman. But her head went through the windshield."

"God, her face!" said Walton. "That's terrible."

"But it doesn't have a blessed thing to do with Knotty over there. I don't know what little Moira was fussing about. Upset, I guess. Well, it's only natural. But Knotty didn't do anything."

"How in the world could you know that?"

"Well, plenty of people saw the accident. She was in her old Model T, and her brother was driving."

"Ducky Cook?"

"That's right. The soft-headed one. If they had drivers' licenses in Ohio, he wouldn't be allowed to drive. Well, what's done—"

"Wait. You said the Model T. You mean the Model A, don't you?"

"Nope. The tin lizzie. The new Ford had a flat tire out on Sharon Avenue. She came in here and phoned for Ducky to come pick her up in the old Ford and drive out to change the tire. They weren't far from here when it happened. A big black dog ran out in the road and Mrs. Hendricks grabbed the steering wheel to swerve the car away from it. Smashed right into an iron street-light pole. Ducky was killed right away. In some ways, I guess that's a blessing."

Knotty's voice became shrill.

"All right, all right," he shouted. "I fixed the wheel!"

Mr. Igler and Walton hurried over to the cluster of youngsters. Mr. Igler was scolding, "That's enough of that, young man. This is nothing to joke about."

"I'm not joking. I fixed the wheel."

"Aw, go on," said one of the boys. "You wouldn't even know how to fix a wheel. What did you do?"

"All right, I'll tell you," said Knotty. "I don't care. I wrote the Lord's Prayer backwards all around the tire. All of it."
Everyone but Walton roared with laughter.

"All right," said Knotty, his voice trembling, "You wouldn’t like it if I wrote the Lord’s Prayer backwards on something of yours. It’s not funny. ‘Nema. Reve dna reverof, yrolg eht—’"

"Oh boy. Oh wow. You’re nerty."

"You oughta be in a padded cell in Longview."

Knotty turned red. Tears came to his eyes, and he ran out of the store.

Walton wondered if he ought to run after the boy and tell him about the Model T. He couldn’t ask Moira for advice.

He decided against it. Ding, ding; here comes the wagon.

"What was that rumpus about?" asked Moira.

"Automobile accident. Little girl’s mother was badly hurt."

"The poor dear. What was the little boy so excited about?"

"Oh, kid stuff. You never can tell."

"I swear, he looked just like you as a little boy. What moved you to horn in?"

"Kid’s probably one of my second cousins. I had an impulse to go over and introduce myself and find out what he was mixed up in. I’m glad I didn’t, now that I think of it. I love my relatives, but I don’t dare let any one of them know I’m in town. I’d be stuck for the next two days paying duty calls on uncles and aunts and cousins and friends, and I’ve got a deadline to meet in New York."

"Not much time for all that courtship you were talking about."

"Come to New York with me. We’ll do the town. Please, Moira."

"I’d love it, Walton, but there’s always Mother. Damn! For one wild, delirious moment there I actually forgot Mother. We can’t get married, Walton. We can’t even have an affair."

"Moira, look. One of the reasons I married Nancy was that I wasn’t cut out to be a monk. I took the soft, fat way out, and if I wasn’t hollow to begin with, that did the job. I need a hair shirt, Moira—something to beat me down from time to time, to force humility on me. Come to New York with your mother, Moira. All three of us will do the town."

"Isn’t it wonderful, Walton, that we can sit here like this without a drop of dutch courage between us and be honest with each other. It’s a new kick for me. God, how I’ve needed it."

"This isn’t a build-up to one of those histrionic abnegation scenes? Wringing of the hands. ‘No, Walton; I must bear alone the burden of my mother. I cannot allow you to make this sacrifice.’"

"All right, Walton. You needn’t pitch so hard. I’ve had my own share of sacrifice until it’s coming out my ears; so maybe it is your turn. Marriage is still an open
question then. But not New York. That's out of the question. Mother can't leave the house, and I can't leave her alone in it for very long. Oh, she's not so far gone that she doesn't know who she is and where she is—And, by the way, that's the answer to your next question: Why don't I put her in an institution?"

"That wasn't going to be my next question. I don't condone torture. I'll accept your mother as she is. I'll turn the other cheek a hundred times a day. I know it won't be idyllic, but I'm old enough not to believe in idylls, and maybe someday she'll come to accept me, if not as a member of the family, at least as a useful and familiar accessory around the house."

There was a crash behind them. The captain was on his feet, his chair lying on the floor behind him, shouting:

"You don't fool me for a minute. Your damn mother has poisoned your mind against me. You want to know what I think? She's just putting on an act. She was a run-of-the-mill neurotic until she killed my dog, and ever since then she's been hiding behind this phoney brain injury. She's been loading all her guilt onto me! She's got you right where she wants you."

The young lady stiffened. "Well! The very ideal!"

"Don't get on your high horse. If she's really as nutty as everyone says she is, why don't you have her put away?"

"Well, if you're going to have another tantrum, I'm leaving."

"I'll beat you to it. I'm going over to Bob Heine's and really tie one on this time. See you around one of these years."

He marched out, turning up the collar of his greatcoat as the door closed behind him.

"Was that it?" Walton asked.

"Was what it?"

"Now, don't tell me you didn't hear that little interchange."

"I didn't hear the words. I heard an angry voice; that's all. My God, Walton, you've got sharp ears. Does that go with having perfect pitch?"

"It goes with being hollow. Like a little pitcher. Look, Moira, a little while ago I heard the little girl who was over in the corner telling the little boy in the green sweater it was all his fault that his mother was in an accident. Just now, I heard our stiff-necked friend, the captain, telling his lady friend that her mother was unloading her own guilt on him. Do you want to marry a man who hallucinates in broad daylight?"

"Don't be silly, Walton. You're in some kind of a crisis, and you're reading your own memories into everything you hear. Your little dramas aren't unique. Neither are mine."

"Did your mother really feel guilty about Inky?"

"That was your black mongrel, wasn't it. You don't think Mother ran over it on purpose?"
“Of course not.”

“I wish you could make her realize that, but of course it’s too late. She’s not very—uh—reachable. I never knew myself what you really thought, and I didn’t dare ask. You were too young to know what you were doing, and I was too young to understand what the death of one mongrel dog can mean to a little boy. I did forgive you though for standing there that horrible day shouting ‘murderer’ at Mother. I even stopped having dreams about it. But Mother didn’t.”

“But Moira, I never did that.”

“You were beside yourself, Walton. You were standing there looking at the dead dog in the street, and Mother and I were in the car, both of us trying to think of something kind to say. I didn’t realize it then, but Mother had been—well—eccentric ever since Daddy died. She couldn’t stand to be upset. I know she meant to be kind, but any kind of emotional crisis just brought out the poison in her. What she said was true enough, but—”

“She said Inky was a mutt. She said I ought to be grateful I still had a fine thoroughbred like Slimmy, and she hoped I wouldn’t waste time grieving over a no-good mutt.”

“I know. It was terrible. She was beside herself too, and she had no control over her words. She could see how unhappy you were, and it tore her to pieces. All she was trying to say was ‘damn you, child, don’t stand there being unhappy in front of me and making me unhappy. I’ve got enough to be unhappy about.’”

“I know, I know. So I called her a murderer. I didn’t remember that. I do remember thinking it.”

“You have a handy forgettory. I wish Mother did.”

“Why is it that when we’re old enough not to be able to hurt anyone very much, we finally learn how to refrain?”

The young lady behind them stood up and put on her dyed squirrel fur coat. She said to Miss Frances, “Charge it to me,” and walked out. An old man, jowly and almost bald, bowed to her outside on the sidewalk.

“Are you up to facing Mother today, Walton?” asked Moira.

“Might as well be today. I ought to buy a clean shirt somewhere first. Can you sneak me in the back door to shave and change before the ordeal?”

“We’ll work something out. Then afterwards it’s drinks and duck a’l’orange at the Iron Horse. Deal?”

“Deal. If you can get away from Mother that long.”

Outside, the young lady was saying to the jowly old man, “Well, the windshield was frosted, and when I saw you there on the side of the bridge I had an illusion that there was an extra traffic lane on
the right side of the bridge. It’s the
funniest thing, I had this idea you
were someone I knew, someone
who had something to tell me.
Something important. I pulled
over to the right, and then—
bang!”

“Did the captain see me too?”

“Maybe. I don’t know. I can’t
imagine what I thought you had
to tell me.”

The old man chuckled. “I can’t
either. A man my age gives out a
lot of advice, but it’s hardly ever
solicited and it never does any
good. Well, it’s been a pleasure,
ma’am.”

As the young lady was getting
into her car, Walton said to the
old man, “I know a piece of advice
you could have given her. You
could have told her to march right
over to Bob Heine’s and join a cer-
tain captain in about 20 salubrious
belts of bourbon.”

“Good Lord, Walton. Bob
Heine’s?” said Moira. “And what
an old buttinsky you’ve turned
into.”

“Perfectly all right, ma’am,” said
the old man. “Mr. Ulster and I are
acquainted.”

Walton peered at the old man.
freemasonry of the mad.”

_Ding, ding!_

The old man looked reflectively
in the direction of the Iron Horse,
cat-cornered across the village
square.

“Bob Heine’s,” he said. “Oh yes,
of course. You’d hardly recognize
the village now.”

“Oh, I don’t know,” said Wal-
ton. “The outskirts have changed a
lot, but once you’re in the village
everything looks pretty much the
same. A little remodeling here
and there, but—”

“Of course. I wasn’t thinking.
It wasn’t till 1983 they tore down
the—”

“Easy does it,” Walton hissed.
“Ding, ding.”

“That’s right,” said the old man.
“Pardon the senility of an octoge-
narian. ‘Play it cool.’ That’s the ex-
pression, isn’t it?”

“Not too easy in weather like
this,” said Walton, wiping his
forehead with the sleeve of his
shirt.

“As for the advice you were talk-
ing about,” said the old man. “It
would be an act of cruelty. Those
young people would destroy each
other in about two years.”

Walton glanced nervously at
Moira.

“Oh, not you two. Not you two,”
said the old man. “You’ve both
been through the purifier’s flame.
If benedictions are in order, please
accept mine.”

A gun-metal blue sports car that
looked like a water bug pulled up
to the curb and a hollow-cheeked,
deep-eyed, but still strangely beau-
tiful old lady put her head out the
window.

“I’ve been looking all over for
you, Wally. Mother is worried
about you. Where on earth have you been?"

"Oh, alone and palely loitering," said the old man. "The sedge is withered from the lake, and no birds sing."

The old lady laughed.

"Don't mind him," she said. "He would like me to be the Belle Dame Sans Merci. There's a bit of witch in me, but I'm not that."

"Okay, okay," said the old man, opening the car door on her side. "Take me to your elfin grot."

"You're a dirty old man," said the old lady.

"Move over," said the old man. "You're too decrepit to drive."

The old man climbed in the bug car beside his wife, and took her hand.

"Can you imagine?" he said to Walton. "Here I am 85 years old and ought to be lounging in slipered ease, but I've got a mother-in-law 105 years old and I spend my days pushing her around in a wheel chair like a dutiful son."

"Oh, you know you and Mother get along beautifully."

"Of course," said the old man, winking at Walton. "It's the freemasonry of the mad. She fusses at me and pampers me and depends upon me. I fuss at her and pamper her and depend upon her. We're both of us making something up to each other, something that happened so long ago we ought to have made it up by now. But you see, every day is yesterday all over again. By the way, you didn't happen to see a boy in a green sweater trailed by a liver-colored dog?"

"He was in Igler's a little while ago, but he's not there now."

"Oh well," said the old man, "I know where he lives. Maybe I can catch him before he reaches home."

"You and that boy," said the old lady. "One of these days I'm going to turn you in for child molestation. That is, if you ever find him."

"Oh, I found him. This afternoon." The old man laughed, put the palm of his hand on the old lady's face and gave it a gentle shove.

"Wife beater," she said.

"Be happy, you two," the old man called to Walton and Moira. "Be patient. You'll find it. You'll find it."

He drove away.

"Good Lord, what was that all about?" asked Moira.

Knotty dragged his feet along the sidewalk leading to home. He started to worry a little stone with his foot, intending half-heartedly to see if he could kick it all the way home, but he lost interest after the fourth kick. Well, he knew what Mom was going to say. "Where have you been and what did you do, darling?" "Well, Mom, I just happened to hike to Sharonville and I just happened to see Mrs. Hendricks' car by the side of the road with a flat tire and I just happened to—"
Oboyoboyoboy.
Aw, to heck with everybody.
This screwy little car that looked just like a waterbug came to a stop beside him, and there was this same old old man he had seen earlier by the dump. There was an old old woman with him.

"Oh, hi," he said listlessly.

"Look, Knotty," said the old man. "I've done a lot of thinking about this score. Does the instrumentation really matter? I mean, does it have to be bottles?"

"Well, it doesn't have to, I guess, but you'd have to make it different if you played it on an accordion or a piano, say. I mean, you'd want to put in some fast notes and stuff. And on a harmonica, you'd want to blow in some chords."

"I'm glad you called my attention to that," said the old man. "Stupid of me not to have thought of it myself. All right. Bottles it is. I did think though that some kind of bass harmony—"

"Yeh, yeah," said Knotty, enthusiastic now. "Cellos would be swell, don't you think? Just a bunch of cellos."

"Cellos would be swell," said the old man.

"Will I get to hear it?"

"You'll get to hear it, Knotty. Be patient. Don't hold your breath. And, say, Knotty—"

"Yeah?"

"I kind of think Inky will like it."

"Shucks. Dogs don't like music. It hurts their ears."

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