# Fantasy and Science Fiction

**MAY**

Including Venture Science Fiction

## NOVELET

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>And Madly Teach</td>
<td>Lloyd Biggle, Jr.</td>
<td>4</td>
</tr>
</tbody>
</table>

## SHORT STORIES

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three For Carnival</td>
<td>John Shepley</td>
<td>32</td>
</tr>
<tr>
<td>The Colony</td>
<td>Miriam Allen deFord</td>
<td>48</td>
</tr>
<tr>
<td>Breakaway House</td>
<td>Ron Goulart</td>
<td>61</td>
</tr>
<tr>
<td>Flattop</td>
<td>Greg Benford</td>
<td>71</td>
</tr>
<tr>
<td>The Third Dragon</td>
<td>Ed M. Clinton</td>
<td>100</td>
</tr>
<tr>
<td>Man of Parts</td>
<td>H. L. Gold</td>
<td>117</td>
</tr>
</tbody>
</table>

## ARTICLE

- **H. P. Lovecraft: The House and the Shadows**
  - J. Vernon Shea
  - Page 82

## FEATURES

- **Cartoon**
  - Gahan Wilson
  - Page 39
- **Books**
  - Judith Merrill and Fritz Leiber
  - Page 40
- **Beamed Power**
  - Theodore L. Thomas
  - Page 70
- **Science: Time and Tide**
  - Isaac Asimov
  - Page 106
- **F&SF Marketplace**
  - Page 129

**Cover by Mel Hunter (see page 116)**
A college sophomore, applying for a summer job, was asked to give the names of two professors as references. She couldn't think of anybody whose names she could put down. Nobody knew her! This comes to us second hand, but in a day when an educational tool is likely to be pictured as a hunk of machinery, we find it both credible and disturbing. Whether or not you agree with the point of view expressed in this story by Lloyd Biggle, Jr., you are certain to find it an absorbing and, more than likely, frightening extrapolation of the impact of technology on education.

AND MADLY TEACH

by Lloyd Biggle, Jr.

Miss Mildred Boltz clasped her hands and exclaimed, "What a lovely school!"

It shimmered delightfully in the bright morning sunlight, a pale, delicate blue-white oasis of color that lay gem-like amidst the nondescript towers and domes and spires of the sprawling metropitan complex.

But even as she spoke she qualified her opinion. The building's form was box-like, utilitarian, ugly. Only its color made it beautiful.

The aircab driver had been muttering to himself because he'd gotten into the wrong lane and missed his turn. He turned quickly, and said, "I beg your pardon?"

"The school," Miss Boltz said. "It has a lovely color."

They threaded their way through an interchange, circled, and maneuvered into the proper lane. Then the driver turned to her again. "I've heard of schools. They used to have some out west. But that isn't a school."

Miss Boltz met his serious gaze confusedly, and hoped she wasn't blushing. It just wasn't proper for a woman of her age to blush. She said, "I must have misunderstood you. I thought that was—"

"Yes, Ma'am. That's the address you gave me."

"Then—of course it's a school! I'm a teacher. I'm going to teach there."
He shook his head. "No, Ma’am. We don’t have any schools."

The descent was so unsettlingly abrupt that Miss Boltz had to swallow her protests and clutch at her safety belt. Then they were in the ground level parking area, and he had the door open. She paid him, and stepped out with the dignity demanded of a middle-aged school teacher. She would have liked to investigate this queer notion of his about schools, but she didn’t want to be late for her appointment. And anyway—the idea! If it wasn’t a school, what was it?

In the maze of lettered and double-lettered corridors, each turning she took seemed to be the wrong one, and she was breathing heavily and fighting off a mild seizure of panic when she reached her destination. A receptionist took her name and said severely, “Mr. Wilbings is expecting you. Go right in.”

The office door bore a bristling label. ROGER A. WILBINGS. DEPUTY SUPERINTENDENT OF EDUCATION (SECONDARY). NORTHEASTERN UNITED STATES SCHOOL DISTRICT. PRIVATE. Miss Boltz hesitated, and the receptionist said again, “Go right in.”

“Thank you,” Miss Boltz said and opened the door.

The gentleman behind the desk at the distant center of the room was awaiting her with a fiercely blank expression which resolved into the hair-framed oval of a bald head as she moved forward. She blinked her eyes nervously and wished she’d worn her contact lenses. Mr. Wilbings’s attention was fixed upon the papers that littered the top of his desk, and he indicated a chair for her without bothering to look up. She walked tightrope-fashion across the room and seated herself.

“One moment, please,” he said. She ordered herself to relax. She was not a young lass just out of college, hoping desperately for a first job. She had a contract and twenty-five years of tenure, and she was merely reporting for reassignment.

Her nerves disregarded the order.

Mr. Wilbings gathered up his papers, tapped them together, and returned them to a folder. “Miss—ah—Boltz,” he said. His curiously affected appearance fascinated her. He was wearing spectacles, a contrivance which she hadn’t seen for years; and he had a trim little patch of hair on his upper lip, the like of which she had never seen outside of films and theatricals. He held his head thrust forward and tilted back, and he sighted at her distastefully along the high arc of his nose.

He nodded suddenly, and turned back to his desk. “I’ve gone through your file, Miss—ah—Boltz.” He pushed the folder aside
impatiently. "My recommenda-
tion is that you retire. My secre-
tary will give you the necessary
papers to fill out. Good morning."

The suddenness of the attack
startled her out of her nervousness.
She said calmly, "I appreciate
your interest, Mr. Wilbings, but I
have no intention of retiring. Now
—about my new assignment."

"My dear Miss Boltz!" He had
decided to be nice to her. His ex-
pression altered perceptibly,
and hovered midway between a
smile and a sneer. "It is your own
welfare that concerns me. I un-
derstand that your retirement
might occasion some financial
sacrifice, and under the circum-
stances I feel that we could obtain
an appropriate adjustment in your
pension. It would leave you secure
and free to do what you like, and I
can assure you that you are not—"

He paused, and tapped his desk
with one finger. "—not suited for
teaching. Painful as the idea may
be for you, it is the blunt truth,
and the sooner you realize it—"

For one helpless moment she
could not control her laughter. He
broke off angrily and stared at her.
"I'm sorry," she said, dabbing at
her eyes. "I've been a teacher for
twenty-five years—a good teacher,
as you know if you've checked
over my efficiency reports. Teach-
ing is my whole life, and I love it,
and it's a little late to be telling
me that I'm not suited for it."

"Teaching is a young peo-
ple's profession, and you are near-
ly fifty. And then—we must con-
sider your health."

"Which is perfectly good," she
said. "Of course I had cancer of the
lung. It isn't uncommon on Mars.
It's caused by the dust, you know,
and it's easily cured."

"You had it four times, accord-
ing to your records."

"I had it four times and I was
cured four times. I returned to
Earth only because the doctors felt
that I was unusually susceptible
to Martian cancer."

"Teaching on Mars—" He ges-
tured disdainfully. "You've never
taught anywhere else, and at the
time you were in training your
college was specializing in train-
ing teachers for Mars. There's
been a revolution in education,
Miss Boltz, and it has completely
passed you by." He tapped his
desk again, sternly. "You are not
suited for teaching. Certainly not
in this district."

She said stubbornly, "Will you
honor my contract, or do I have to
resort to legal action?"

He shrugged, and picked up her
file. "Written and spoken English.
Tenth grade. I assume you think
you can handle that."

"I can handle it."

"Your class meets from ten-fif-
teen to eleven-fifteen, Monday
through Friday."

"I am not interested in part-
time teaching."

"This is a full-time assignment."
"Five hours a week?"
"The position assumes forty hours of class preparation. You'll probably need much more than that."

"I see," she said. She had never felt more bewildered.

"Classes begin next Monday. I'll assign you to a studio and arrange an engineering conference for you immediately."

"A—studio?"

"Studio." There was a note of malicious satisfaction in his voice. "You will have approximately forty thousand students."

From a drawer he took two books, one a ponderous volume entitled, TECHNIQUES AND PROCEDURES IN TV TEACHING, and the other, mecha-typed and bound with a plastic spiral, a course outline of tenth-grade English, Northeastern United States School District. "These should contain all the information you'll need," he said.

Miss Boltz said falteringly, "TV teaching? Then—my students will attend class by television?"

"Certainly."

"Then I'll never see them."

"They will see you, Miss Boltz. That is quite sufficient."

"I suppose the examinations will be machine-graded, but what about papers? I couldn't get through one assignment in an entire semester."

He scowled at her. "There are no assignments. There are no examinations, either. I suppose the educational system on Mars still uses examinations and assignments to coerce its students into learning, but we have progressed beyond those dark ages of education. If you have some idea of bludgeoning your material into your students with examinations and papers and the like, just forget it. Those things are symptomatic of bad teaching, and we would not permit it if it were possible, which it isn't."

"If there are no examinations or papers, and if I never see my students, how can I evaluate the results of my teaching?"

"We have our own method for that. You receive a Trendex rating every two weeks. Is there anything else?"

"Just one thing." She smiled faintly. "Would you mind telling me why you so obviously resent my presence here?"

"I wouldn't mind," he answered indifferently. "You have an obsolete contract that we have to honor, but we know that you will not last the term out. When you do leave we will have the problem of finding a midyear replacement for you, and forty thousand students will have been subjected to several weeks of bad instruction. You can hardly blame us for taking the position that it would be better for you to retire now. If you change your mind before Monday I will guarantee full retirement..."
benefits for you. If not, remember this: the courts have upheld our right to retire a teacher for incompetence, regardless of tenure."

Mr. Wilbings's secretary gave her a room number. "This will be your office," she said. "Wait there, and I'll send someone."

It was a small room with a desk, book shelves, a filing cabinet, a book-film cabinet, and a film reader. A narrow window looked out onto long rows of narrow windows. On the wall opposite the desk was a four-foot TV screen. It was the first office Miss Boltz had ever had, and she sat at her desk with the drab brown walls frowning down at her and felt lonely, and humble, and not a little frightened.

The telephone rang. After a frantic search she located it under a panel in the desk top, but by then it had stopped ringing. She examined the desk further, and found another panel that concealed the TV controls. There were four dials, each with numbers zero through nine. With almost no calculation she deduced the possible number of channels as 9,999.

She tried various numbers and got a blank screen except for channel 0001, which carried an announcement: CLASSES BEGIN MONDAY, SEPTEMBER 9. REGISTRATION IS NOW IN PROGRESS. YOU MUST BE REGISTERED TO RECEIVE GRADUATION CREDITS.

A knock sounded on her door. It was a kindly-looking, gray-haired man of fifty plus, who introduced himself as Jim Pargrin, chief engineer. He seated himself on the edge of her desk and grinned at her. "I was afraid you'd gotten lost. I telephoned, and no one answered."

"By the time I found the telephone, you'd hung up," Miss Boltz said.

He chuckled and then said seriously, "So you're the Martian. Do you know what you're getting into?"

"Did they send you up here to frighten me?"

"I don't frighten anyone but the new engineers. I just wondered—but never mind. Come over to your studio, and I'll explain the setup."

They quickly left the rows of offices behind them, and each room that they passed featured an enormous glass window facing on the corridor. Miss Boltz was reminded of the aquarium on Mars, where she sometimes took her students to show them the strange marine life on Earth.

Pargrin unlocked a door, and handed her the key. "Six-four-three-nine. A long way from your office, but at least it's on the same floor."

A hideous black desk with stubby metal legs squatted in front of a narrow blackboard. The camera stared down from the opposite wall, and beside it was
pilot screen. Pargrin unlocked a control box, and suddenly lights blinded her. "Because you're an English teacher, they figure you don't need any special equipment," he said. "See these buttons? Number one gives you a shot of the desk and the blackboard and just about the space enclosed by that floor line. Number two is a closeup of the desk. Number three is a closeup of the blackboard. Ready to try it out?"

"I don't understand."
He touched another switch. "There."
The pilot screen flickered to life. Miss Boltz faced it—faced the dumpy-looking, middle-aged woman who stared back at her—and thought she looked cruelly old. The dress she had purchased with such care and for too much money the day before was a blur of repulsive colors. Her face was shockingly pale. She told herself sadly that she really should have spent more time on the sun deck, coming back from Mars.

"Try number two," Pargrin suggested.
She seated herself at the desk and pressed button number two. The camera twitched, and she contemplated the closeup of herself and shuddered. Number three, with herself at the blackboard, was equally bad.
Pargrin switched off the camera and closed the control box. "Here by the door is where you check in," he said. "If you haven't pressed this button by ten-fifteen, your class is automatically cancelled. And then—you must leave immediately when your class is over at eleven-fifteen, so the next teacher can get ready for the eleven-thirty class. Except that it's considered good manners to clean the blackboard and tidy things up. The stuff is in the desk. Everything clear?"

"I suppose," she said. "Unless you can tell me how I'm to teach written and spoken English without ever hearing my students speak or reading anything that they write."
He was silent as they left the studio. "I know what you mean," he said, when they reached her office. "Things were different when I was a kid. TV was something you watched when your folks let you, and you went to school with all the other kids. But it's changed, now, and it seems to work out this way. At least, the big shots say it does. Anyway—the best of luck to you."
She returned to her desk, and thoughtfully opened TECHNIQUES AND PROCEDURES IN TV TEACHING.

At five minutes after ten o'clock on the following Monday morning, Miss Boltz checked in at her studio. She was rewarded with a white light over the pilot screen. She seated herself at the desk, and
after pressing button number two
she folded her hands and waited.

At precisely ten-fifteen the
white light changed to red, and
from the pilot screen her own
image looked down disapprovingly. “Good morning,” she said.
“This is tenth-grade English. I am
Miss Boltz.”

She had decided to devote that
first class period to introducing
herself. Although she could never
become acquainted with her thou­sands of students, she felt that
they should know something about
her. She owed them that much.

She talked about her years of
teaching on Mars—how the stu­
dents attended school together,
how there were only twenty or
twenty-five students in one room,
 instead of forty thousand attend­
ing class by way of as many TV
sets. She described the recess peri­
od, when the students who went
outside the dome to play had to
wear air masks in order to breathe.
She told about the field trips, when
the class, or perhaps the entire
school, would go out to study
Martian plant life, or rocks and
soil formations. She told them
some of the questions her Martian
students liked to ask about Earth.

The minutes dragged tediously.
She felt imprisoned under the un­
blinking eye of the camera, and
her image on the pilot screen be­
gan to look haggard and fright­
ened. She had not realized that
teaching could be such a strain.

The end of the hour came as a
death throe. She smiled weakly,
and from the pilot screen a hideous
caricature of a smile grimaced
back at her. “I’ll be seeing you to­
morrow,” she said. “Good morn­
ing.”

The red light faded to white.
Miss Boltz took a last, shuddering
look at the camera and fled.

She was seated at her desk, for­
lornly fighting to hold back her
tears, when Jim Pargrin looked in
on her.

“What’s the matter?” he asked.

“Just wishing I’d stayed on
Mars.”

“Why would you be wishing
that? You got off to a very good
start.”

“I didn’t think so.”

“I did.” He smiled at her. “We
took a sample Trendex on you this
morning, during the last ten min­
utes. We sometimes do that with
a new teacher. Most students will
start off with their assigned
classes, but if the teacher isn’t
good they switch to something else
in a hurry. So we check at the end
of the first hour to see how a new
teacher is doing. Wilbings asked
for a Trendex on you, and he came
down to watch us take it. I think
he was disappointed.” He chuck­
led slyly. “It was just a fraction
under one hundred, which is prac­
tically perfect.”

He departed before she could
thank him, and when she turned
to her desk again her gloom had
been dispelled as if by magic. Cheerfully she plunged into the task of rewriting the outline of tenth grade English.

She had no objection to the basic plan, which was comprehensive and well-constructed and at times almost logical. But the examples, the meager list of stories and novels and dramas supplied for study and supplemental reading—these were unbelievable. Just unbelievable.

"Recommended drama," the outline said. "You Can't Marry an Elephant, by H. N. Varga. This delightful farce—"

She crossed it out with firm strokes of her pen and wrote in the margin, "W. Shakespeare: The Merchant of Venice." She substituted Dickens's A Tale of Two Cities for Saddle Blankets and Six Guns, a thrilling novel of the Old West, by Percivale Oliver. She found no unit at all which concerned itself with poetry, so she created one. Her pen slashed its way relentlessly through the outline, and her conscience troubled her not at all. Didn't the manual say that originality was encouraged in teachers?

The next morning, when she started down the corridor toward her studio, she was no longer nervous.

The vast unfriendliness of the building and the drab solitude of her office so depressed her that she decided to prepare her classes in her apartment. It was the middle of the third week before she found her way to the tenth floor, where, according to her manual, there was a cafeteria. As she awaited her turn at the vending machines the young teachers who silently surrounded her made her feel positively prehistoric.

A hand waved at her when she turned toward the tables. Jim Par-grin bounded to his feet and took her tray. A younger man helped her with her chair. After so many hours of solitude, the sudden attention left her breathless.

"My nephew," Par-grin said. "Lyle Stewart. He teaches physics. Miss Boltz is the teacher from Mars."

He was a dark-complexioned, good-looking young man with a ready smile. She said she was pleased to meet him and meant it. "Why, you’re the first teacher I’ve spoken to!" she exclaimed.

"Mostly we ignore each other," Stewart agreed. "It’s strictly a survival-of-the-fittest occupation."

"But I’d think that some kind of co-operation—"

He shook his head. "Supposing you come up with something that clicks. You have a high Trendex, and the other teachers notice. So they watch your class, and if they can steal your stuff they will. Then you watch them, to see if they have something you can steal, and you see them using your technique."
Naturally you don't like it. We've had teachers involved in assault cases, and law suits, and varying degrees of malicious mischief. At best, we just don't speak to each other.

"How do you like it here?" Pargrin asked her.

"I miss the students," Miss Boltz said. "It worries me, not being able to know them, or check on their progress."

"Don't you go trying to drag in an abstraction like progress," Stewart said bitterly. "The New Education looks at it this way: we expose the child to the proper subject matter. The exposure takes place in his home, which is the most natural environment for him. He will absorb whatever his individual capacity permits, and more than that we have no right to expect."

"The child has no sense of accomplishment—no incentive to learn," she protested.

"Under the New Education, both are irrelevant. What we are striving for is the technique that has made advertising such an important factor in our economy. Hold the people's attention, and make them buy in spite of themselves. Or hold the student's attention, and make him learn whether he wants to or not."

"But the student learns no social values."

Stewart shrugged. "On the other hand, the school has no discipline problems. No extra-curricular activities to supervise. No problem of transporting the children to school and home again. You aren't convinced?"

"Certainly not!"

"Keep it to yourself. And just between us, I'll tell you the most potent factor in the philosophy of the New Education. It's money. Instead of a fortune invested in buildings and real estate, with thousands of schools to maintain, we have one TV studio. We save another fortune in teachers' salaries by having one teacher for a good many thousands of students instead of one for maybe twenty or thirty. The bright kids will learn no matter how badly they are taught, and that's all our civilization needs—a few bright people to build a lot of bright machines. And the school tax rate is the lowest it's been in the last century and a half." He pushed back his chair. "Nice to meet you, Miss Boltz. Maybe we can be friends. Since you're an English teacher, and I'm a physics teacher, we aren't likely to steal from each other. Now I have to go think up some new tricks. My Trendex is way down."

She watched thoughtfully as he walked away. "He looks as if he's been working too hard," she announced.

"Most teachers don't have contracts like yours," Pargrin said. "They can be dismissed at any time. Lyle wants to go into indus-
try after this year, and he may have a tough time finding a job if he's fired.”

“He's leaving teaching? That's a shame!”

“There's no future in it.”

“There's always a future for a good teacher.”

Pargrin shook his head. “Look around you. The teachers are all young. They hang on as long as they can, because the pay is very good, but there comes a time when security means more than money. Anyway, in the not too distant future there won't be any teachers. Central District is experimenting now with filmed classes. Take a good teacher, film a year of his work, and you don't need the teacher any longer. You just run the films. No, there's very little future in teaching. Did you get your copy of the Trendex ratings?”

“Why, no. Should I have gotten one?”

“They come out every two weeks. They were distributed yesterday.”

“I didn’t get one.”

He swore under his breath, and then looked at her apologetically. “Wilbings can be downright deceitful when he wants to. He probably thinks he'll take you by surprise.”

“I'm afraid I don't understand these ratings.”

“There's nothing complicated about them. Over a two-week period we'll take a thousand samples of a teacher's students. If all of them are watching their assigned class, as they should be, the teacher's Trendex is 100. If only half are watching, then the Trendex is 50. A good teacher will have about a 50 Trendex. If a teacher's Trendex falls below 20, he's dismissed. Incompetence.”

“Then the children don't have to watch their classes unless they want to?”

“The parents have to provide the TV sets,” Pargrin said. “They have to see that their children are present during their assigned class hours—‘in attendance,’ it's called—but they aren't responsible for making them watch any particular class. They'd have to supervise them every minute if that were so, and the courts have held that this would be unreasonable. It would also be unreasonable to require sets that worked only on assigned channels, and even if that were done the students could still watch classes on channels they're supposed to use at another time. So the students are there, and their sets are on, but if they don't like your class they can watch something else. You can see how important it is for the teacher to make the classes interesting.”

“I understand. What was my Trendex?”

He looked away. “Zero.”

“You mean—no one is watching me? I thought I was doing things correctly.”
“You must have done something that interested them that first day. Perhaps they just got tired of it. That happens. Have you watched any of the other teachers?”

“Goodness, no! I’ve been so busy I just never thought of it.”

“Lyle may have some ideas for you. I’ll ask him to meet us at your office for the two o’clock class. And then—well, we’ll see.”

Lyle Stewart spread some papers on the desk in front of her, and bent over them. “These are the Trendex ratings,” he said. “You were supposed to get a copy.”

She glanced down the list of names, and picked out hers. Boltz, Mildred. English, tenth grade. Time, 10:15. Channel 6439. Zero. Year’s average, zero.

“The subject has something to do with the tricks you can use,” Stewart said. “Here’s a Marjorie McMillan at two o’clock. She teaches eleventh grade English, and her Trendex is sixty-four. That’s very high. Let’s see how she does it.” He set the dials.

At precisely two o’clock Marjorie McMillan appeared, and Miss Boltz’s first horrified impression was that she was disrobing. Her shoes and stockings were piled neatly on the floor. She was in the act of unzipping her blouse. She glanced up at the camera.

“What are you cats and toms doing in here?” she cooed. “I thought I was alone.”

She was a trim blonde, with a flashy, brazen kind of prettiness. Her profile displayed sensational curves. She smiled, tossed her head, and started to tiptoe away.

“Oh, well, as long as I’m among friends—”

The blouse came off. So did the skirt. She stood before them in an alluringly brief costume, consisting exclusively of shorts and halter. The camera recorded its scarlet and gold colors brilliantly. She pranced about in a shuffling dance step, flicking the switch for a closeup of the blackboard as she danced past her desk.

“Time to go to work, all you cats and toms,” she said. “This is called a sentence.” She read aloud as she wrote on the blackboard.

“The—man—ran—down—the—street. ‘Ran down the street’ is what the man did. We call that the predicate. Funny word, isn’t it? Are you with me?”

Miss Boltz uttered a bewildered protest. “Eleventh grade English?”

“Yesterday we talked about verbs,” Marjorie McMillan said. “Do you remember? I’ll bet you weren’t paying attention. I’ll bet you aren’t even paying attention now.”

Miss Boltz gasped. The halter suddenly came unfastened. Its ends flapped loosely, and Miss McMillan snatched at it just as it started to fall. “Nearly lost it that time,” she said. “Maybe I will lose it, one of these days. And you
wouldn't want to miss that, would you? Better pay attention. Now let's take another look at that nasty old predicate.

Miss Boltz said quietly, "A little out of the question for me, isn't it?"

Stewart darkened the screen. "Her high rating won't last," he said. "As soon as her students decide she's really not going to lose that thing—but let's look at this one. Tenth-grade English. A male teacher. Trendex forty-five."

He was young, reasonably good-looking, and clever. He balanced chalk on his nose. He juggled erasers. He did imitations. He took up the reading of that modern classic, Saddle Blankets and Six Guns, and he read very well, acting out parts of it, creeping behind his desk to point an imaginary six-gun at the camera. It was quite realistic.

"The kids will like him," Stewart said. "He'll probably last pretty well. Now let's see if there's anyone else."

There was a history teacher, a sedate-looking young woman with a brilliant artistic talent. She drew sketches and caricatures with amazing ease and pieced them together with sprightly conversation. There was an economics teacher who performed startling magic tricks with cards and money. There were two young women whose routines approximated that of Marjorie McMillan, though in a more subdued manner. Their ratings were also much lower.

"That's enough to give you an idea of what you're up against," Stewart said.

"A teacher who can't do anything but teach is frightfully handicapped," Miss Boltz said thoughtfully. "These teachers are just performers. They aren't teaching their students—they're entertaining them."

"They have to cover the subject matter of their courses. If the students watch, they can't help learning something."

Jim Pargrin had remained silent while they switched from channel to channel. Now he stood up and shook his graying head solemnly. "I'll check engineering. Perhaps we could show some films for you. Normally that's frowned upon, because we haven't the staff or the facilities to do it for everyone, but I think I could manage it."

"Thank you," she said. "That's very kind of you. And thank you, Lyle, for helping out with a lost cause."

"The cause is never lost while you're still working," he said.

They left together, and long after the door closed after them Miss Boltz sat looking at the blank TV screen and wondering how long she would be working.

For twenty-five years on barren, inhospitable Mars she had
dreamed of Earth. She had dreamed of walking barefoot on the green grass, with green trees and shrubs around her; and over her head, instead of the blurring transparency of an atmosphere dome, the endless expanse of blue sky. She had stood in the bleak Martian desert and dreamed of high-tossing ocean waves racing toward a watery horizon.

Now she was back on Earth, living in the unending city complex of Eastern United States. Streets and buildings impinged upon its tiny parks. The blue sky was almost obscured by air traffic. She had glimpsed the ocean once or twice, from an aircab.

But they were there for the taking, the green fields and the lakes and rivers and ocean. She had only to go to them. Instead she had worked. She had slaved over her class materials. She had spent hours writing and revising and gathering her examples, and more hours rehearsing herself meticulously, practicing over and over her single hour of teaching before she exposed it to the devouring eye of the camera.

And no one had been watching. During those first two weeks her students had turned away from her by the tens and hundreds and thousands, until she had lost them all.

She shrugged off her humiliation and took up the teaching of *The Merchant of Venice*. Jim Pargrin helped out personally, and she was able to run excellent films of background material and scenes from the play.

She said sadly, "Isn't it a shame to show these wonderful things when no one is watching?"

"I'm watching," Pargrin said. "I enjoy them."

His kindly eyes made her wistful for something she remembered from long ago—the handsome young man who had seen her off for Mars and looked at her in very much the same way as he promised to join her when he completed his engineering studies. He'd kissed her good bye, and the next thing she heard he'd been killed in a freak accident. There were long years between affectionate glances for Miss Mildred Boltz, but she'd never thought of them as empty years. She had never thought of teaching as an unrewarding occupation until she found herself in a small room with only a camera looking on.

Pargrin called her when the next Trendex ratings came out. "Did you get a copy?"

"No," she said.

"I'll find an extra one, and send it up."

He did, but she knew without looking that the rating of Boltz, Mildred, English, tenth grade, and so on, was still zero.

She searched the libraries for books on the technique of TV teaching. They were replete with
examples concerning those subjects that lent themselves naturally to visual presentation, but they offered very little assistance in the teaching of tenth-grade English.

She turned to the education journals and probed the mysteries of the New Education. She read about the sanctity of the individual and the right of the student to an education in his own home, undisturbed by social distractions. She read about the psychological dangers of competition in learning and the evils of artificial standards; about the dangers of old-fashioned group teaching and its sinister contribution to delinquency.

Pargrin brought in another Trendex rating. She forced herself to smile. "Zero again?"

"Well—not exactly."

She stared at the paper, blinked, and stared again. Her rating was .1—one tenth of one per cent. Breathlessly she did some mental arithmetic. She had one student! At that moment she would have waived all of her retirement benefits for the privilege of meeting that one loyal youngster.

"What do you suppose they'll do?" she asked.

"That contract of yours isn't anything to trifle with. Wilbings won't take any action until he's certain he has a good case."

"Anyway, it's nice to know that I have a student. Do you suppose there are any more?"

"Why don't you ask them to write to you? If you got a lot of letters, you could use them for evidence."

"I'm not concerned about the evidence," she said, "but I will ask them to write. Thank you."

"Miss—ah—Mildred—"

"Yes?"

"Nothing. I mean, would you like to have dinner with me tonight?"

"I'd love to."

A week went by before she finally asked her students to write. She knew only too well why she hesitated. She was afraid there would be no response.

But the morning came when she finished her class material with a minute to spare, and she folded her hands and forced a smile at the camera. "I'd like to ask you a favor. I want each of you to write me a letter. Tell me about yourself. Tell me how you like the things we've been studying. You know all about me, and I don't know anything about you. Please write to me."

She received eleven letters. She handled them reverently, and read them lovingly, and she began her teaching of A Tale of Two Cities with renewed confidence.

She took the letters to Jim Pargrin, and when he'd finished reading them she said, "There must be thousands like them—bright, eager children who would love to
learn if they weren't drugged into a kind of passive indifference by all this entertainment."

"Have you heard anything from Wilbings?"

"Not a thing."

"He asked me to base your next Trendex on two thousand samples. I told him I'd need a special order from the board. I doubt if he'll bother."

"He must be getting ready to do something about me."

"I'm afraid so," Pargrin said. "We really should start thinking of some line of defense for you. You'll need a lawyer."

"I don't know if I'll offer any defense. I've been wondering if I shouldn't try to set myself up as a private teacher."

"There are private schools, you know. Those that could afford it would send their children there. Those that couldn't wouldn't be able to pay you, either."

"Just the same, when I have some time I'm going to call on the children who wrote to me."

"The next Trendex is due Monday," Pargrin said. "You'll probably hear from Wilbings then."

Wilbings sent for her on Monday morning. She had not seen him since that first day, but his absurd appearance and his testy mannerisms had impressed themselves firmly upon her memory. "Are you familiar with the Trendex ratings?" he asked her.

Because she knew that he had deliberately attempted to keep her in ignorance, she shook her head innocently. Her conscience did not protest.

He patiently explained the technique and its purpose.

"If the Trendex is as valuable as you say it is," she said, "why don't you let the teachers know what their ratings are?"

"But they do know. They receive a copy of every rating."

"I received none."

"Probably an oversight, since this is your first term. However, I have all of them except today's, and that one will be sent down as soon as it's ready. You're welcome to see them."

He went over each report in turn, ceremoniously pointing out her zeros. When he reached the rating of .1, he paused. "You see, Miss Boltz, out of the thousands of samples taken, we have found only one student who was watching you. This is by far the worst record we have ever had. I must ask you to retire voluntarily, and if you refuse, then I have no alternative—"

He broke off as his secretary tiptoed in with the new Trendex. "Yes. Thank you. Here we are. Boltz, Mildred—"

His finger wavered comically. Paralysis seemed to have clogged his power of speech. Miss Boltz found her name, and followed the line across the page to her rating. It was twenty-seven.
“Evidently I’ve improved,” she heard herself say. “Is there anything else?”

It took him a moment to find his voice, and when he did its pitch had risen perceptibly. “No. Nothing else.”

As she went through the outer office she heard his voice again, still high-pitched, squawking angrily in his secretary’s communicator. “Pargrin. I want Pargrin down here immediately.”

He was waiting for her in the cafeteria. “It went all right, I suppose,” he said, with studied casualness.

“It went too well.”

He took a large bite of sandwich, and chewed solemnly.

“Jim, why did you do it?” she demanded.

He blushed. “Do what?”

“Arrange my Trendex that way.”

“Nobody arranges a Trendex. It isn’t possible. Even Wilbings will tell you that.” He added softly, “How did you know?”

“It’s the only possible explanation, and you shouldn’t have done it. You might get into trouble, and you’re only postponing the inevitable. I’ll be at zero again on the next rating.”

“That doesn’t matter. Wilbings will take action eventually, but now he won’t be impulsive about it.”

They ate in silence until the cafeteria manager came in with an urgent message for Mr. Pargrin from Mr. Wilbings. Pargrin winked at her. “I think I’m going to enjoy this. Will you be in your office this afternoon?”

She shook her head. “I’m going to visit my students.”

“I’ll see you tomorrow, then.”

She looked after him thoughtfully. She sincerely hoped that he hadn’t gotten himself in trouble.

On the rooftop landing area she asked the manager to call an air-cab for her. While she waited she took a letter from her purse and reread it.

My name is Darrel Wilson. I’m sixteen years old, and I have to stay in my room most of the time because I had Redger disease and part of me is paralyzed. I like your class, and please, could we have some more Shakespeare?

“Here’s your cab, ma’am.”

“Thank you,” Miss Boltz said. She returned the letter to her purse and stepped briskly up the cab ramp.

Jim Pargrin ruffled his hair and stared at her. “Whoa, now. What was that again? Class room?”

“I have nine students who are coming here every day to go to school. I’ll need some place to teach them.”

Pargrin clucked his tongue softly. “Wilbings would have a hemorrhage!”

“My TV class takes only five hours a week, and I have the entire year’s work planned. Why
should anyone object to my holding classes for a selected group of students on my own time?” She added softly, “These students need it.”

They were wonderful children, brilliant children, but they needed to be able to ask questions, to articulate their thoughts and feelings, to have their individual problems dealt with sympathetically. They desperately needed each other. Tens of thousands, hundreds of thousands of gifted children were being intellectually and emotionally stifled in the barren solitude of their TV classes.

“What Wilbings doesn’t know won’t hurt him,” Pargrin said. “At least, I hope it won’t. But—a class room? There isn’t a thing like that in the building. Could you use a large studio? We could hang a curtain over the glass so you wouldn’t be disturbed. What hours would your class meet?”

“All day. Nine to three. They’ll bring their lunches.”

“Whoa, now. Don’t forget your TV class. Even if no one is watching—”

“I’m not forgetting it. My students will use that hour for a study period. Unless you could arrange for me to hold my TV class in this larger studio.”

“Yes. I can do that.”

“Wonderful! I can’t thank you enough.”

He shrugged his shoulders, and shyly looked away.

“Did you have any trouble with Mr. Wilbings?” she asked.

“Not much. He thought your Trendex was a mistake. Since I don’t take the ratings personally, the best I could do was refer him to the Trendex engineer.”

“Then I’m safe for a little while. I’ll start my class tomorrow.”

Three of the students arrived in power chairs. Ella was a lovely, sensitive girl who had been born without legs, and though science had provided her with a pair, she did not like to use them. Darrel and Charles were victims of Redger disease. Sharon was blind. The TV entertainers failed to reach her with their tricks, but she listened to Miss Boltz’s every word with a rapt expression on her face. Their intelligence level exceeded by far that of any other class in Miss Boltz’s experience. She felt humble, and not a little apprehensive; but her apprehension vanished as she looked at their shining faces that first morning and welcomed them to her venture into the Old Education.

She had two fellow conspirators. Jim Pargrin personally took charge of the technical aspects of her hour on TV and gleefully put the whole class on camera. Lyle Stewart, who found the opportunity to work with real students too appealing to resist, came in the afternoon to teach two hours of science and mathematics. Miss Boltz
laid out her own study units firmly. History, English, literature, and social studies. Later, if the class continued, she would try to work in a unit on foreign language. That Wednesday was her happiest day since she returned to Earth.

On Thursday morning a special messenger brought in an official-looking envelope. It contained her dismissal notice.

"I already heard about it," Jim Pargrin said, when she telephoned him. "When is the hearing?"

"Next Tuesday."

"It figures. Wilbings got board permission for a special Trendex. He even brought in an outside engineer to look after it, and just to be doubly sure they used two thousand samples. You'll need an attorney. Know any?"

"No. I know hardly anyone on Earth." She sighed. She'd been so uplifted by her first day of actual teaching that this abrupt encounter with reality stunned her. "I'm afraid an attorney would cost a lot of money, and I'm going to need what money I have."

"A little thing like a Board of Education hearing shouldn't cost much. Just you leave it to me—I'll find an attorney for you."

She wanted to object, but there was no time. Her students were waiting for her.

On Saturday she had lunch with Bernard Wallace, the attorney Jim Pargrin recommended. He was a small, elderly man with sharp gray eyes that stabbed at her fleetingly from behind drooping eyelids. He questioned her casually during lunch, and when they had pushed aside their dessert dishes he leaned back and twirled a key ring on one finger and grinned at her.

"Some of the nicest people I ever knew were my teachers," he said. "I thought they didn't make that kind any more. I don't suppose you realize that your breed is almost extinct."

"There are lots of fine teachers on Mars," she said.

"Sure. Colonies look at education differently. They'd be committing suicide if they just went through the motions. I kind of think maybe we're committing suicide here on Earth. This New Education thing has some results you may not know about. The worst one is that the kids aren't getting educated. Businessmen have to train their new employees from primary grade level. It's had an impact on government, too. An election campaign is about what you'd expect with a good part of the electorate trained to receive its information in very weak doses with a sickening amount of sugar coating. So I'm kind of glad to be able to work on this case. You're not to worry about the expense. There won't be any."

"That's very kind of you," she
murmured. "But helping one worn-out teacher won't improve conditions very much."

"I'm not promising to win this for you," Wallace said soberly. "Wilbings has all the good cards. He can lay them right out on the table, and you have to keep yours hidden because your best defense would be to show them what a mess of arrant nonsense this New Education is, and you can't do that. We don't dare attack the New Education. That's the board's baby, and they've already defended it successfully in court, a lot of times. If we win, we'll have to win on their terms."

"That makes it rather hopeless, doesn't it?"

"Frankly, it'll be tough." He pulled out an antique gold watch, and squinted at it. "Frankly, I don't see how I'm going to bring it off. Like I said, Wilbings has the cards, and anything I lead is likely to be trumped. But I'll give it some thought, and maybe I can come up with a surprise or two. You just concentrate on your teaching, and leave the worrying to me."

After he left she ordered another cup of coffee, and sipped it slowly, and worried.

On Monday morning she received a surprise of her own, in the form of three boys and four girls who presented themselves at her office and asked permission to join her class. They had seen it on TV, they told her, and it looked like fun. She was pleased, but doubtful. Only one of them was officially a student of hers. She took the names of the others and sent them home. The one who was properly her student she permitted to remain.

He was a gangling boy of fifteen, and though he seemed bright enough, there was a certain withdrawn sullenness about him that made her uneasy. His name was Randy Stump—"A dumb name, but I'm stuck with it," he mumbled. She quoted him Shakespeare on the subject of names, and he gaped at her bewilderedly.

Her impulse was to send him home with the others. Such a misfit might disrupt her class. What stopped her was the thought that the suave TV teacher, the brilliant exponent of the New Education, would do just that. Send him home. Have him watch the class on TV in the sanctity of his own natural environment, where he couldn't get into trouble, and just incidentally where he would never learn to get along with people.

She told herself, "I'm a poor excuse for a teacher if I can't handle a little problem in discipline."

He shifted his feet uneasily as she studied him. He was a foot taller than she, and he looked past her and seemed to find a blank wall intensely interesting.

He slouched along at her side as she led him down to the class
room, where he seated himself at the most remote desk and instantly lapsed into a silent immobility that seemed to verge on hypnosis. The others attempted to draw him into their discussions, but he ignored them. Whenever Miss Boltz looked up she found his eyes fixed upon her intently. Eventually she understood: he was attending class, but he was still watching it on TV.

Her hour on television went well. It was a group discussion on *A Tale of Two Cities*, and the youthful sagacity of her class delighted her. The red light faded at eleven-fifteen. Jim Pargrin waved his farewell, and she waved back at him and turned to her unit on history. She was searching her mind for something that would draw Randv Stump from his TV-inflicted shell.

When she looked up her students were staring at the door, which had opened silently. A dry voice said, "What is going on here?"

It was Roger Wilbings. He removed his spectacles, and replaced them. "Well!" he said. His mustache twitched nervously. "May I ask the meaning of this?"

No one spoke. Miss Boltz had carefully rehearsed her explanation in the event that she should be called to account for this unauthorized teaching, but this unexpected confrontation left her momentarily speechless.

"Miss Boltz!" His mouth opened and closed several times as he groped for words. "I have seen many teachers do many idiotic things, but I have never seen anything quite as idiotic as this. I am happy to have this further confirmation of your hopeless incompetence. Not only are you a disgustingly inept teacher, but obviously you suffer from mental derangement. No rational adult would bring these—these—"

He paused. Randy Stump had emerged from his hypnosis with a snap. He leaped forward, planted himself firmly in front of Wilbings, and snarled down at him. "You take that back!"


"You can't make us," Randy said.

Wilbings poised himself on the high pinnacle of his authority. "No young criminal—"

Randy seized his shoulders and shook vigorously. Wilbings's spectacles flew in a long arc and shattered. He wrenched himelf free and struck out weakly, and Randy's return blow landed with a splattering thud. The Deputy Superintendent reeled backward into the curtain and then slid gently to the floor as glass crashed in the corridor outside.

Miss Boltz bent over him. Randy hovered nearby, frightened and
contrite. "I'm sorry, Miss Boltz," he stammered.

"I'm sure you are," she said. "But for now—I think you had better go home."

Eventually Wilbings was assisted away. To Miss Boltz's intense surprise, he said nothing more; but the look he flashed in her direction as he left the room made further conversation unnecessary.

Jim Pargrin brought a man to replace the glass. "Too bad," he observed. "He can't have it in for you any more than he already had, but now he'll try to make something of this class of yours at the hearing tomorrow."

"Should I send them all home?" she asked anxiously.

"Well, now. That would be quitting, wouldn't it? You just carry on—we can fix this without disturbing you."

She returned to her desk and opened her notebook. "Yesterday we were talking about Alexander the Great—"

The fifteen members of the Board of Education occupied one side of a long, narrow table. They were business and professional men, most of them elderly, all solemn, some obviously impatient.

On the opposite side of the table Miss Boltz sat at one end with Bernard Wallace. Roger Wilbings occupied the other end with a bored technician who was preparing to record the proceedings. A fussy little man Wallace identified as the Superintendent of Education fluttered into the room, conferred briefly with Wibling, and fluttered out.

"Most of 'em are fair," Wallace whispered. "They're honest, and they mean well. That's on our side. Trouble is, they don't know anything about education and it's been a long time since they were kids."

From his position at the center of the table, the president called the meeting to order. He looked narrowly at Bernard Wallace. "This is not a trial," he announced. "This is merely a hearing to secure information essential for the board to reach a proper decision. We do not propose to argue points of law."

"Lawyer himself," Wallace whispered, "and a good one."

"You may begin, Wilbings," the president said.

Wilbings got to his feet. The flesh around one eye was splendidly discolored, and he smiled with difficulty. "The reason for this meeting concerns the fact that Mildred Boltz holds a contract, type 79B, issued to her in the year 2022. You will recall that this school district originally became responsible for these contracts during a shortage of teachers on Mars, when—"

The president rapped on the table. "We understand that, Wilblings. You want Mildred Boltz
dismissed because of incompetence. Present your evidence of incompetence, and we'll see what Miss Boltz has to say about it, and wind this up. We don't want to spend the afternoon here.”

Wilbings bowed politely. “I now supply to all those present four regular Trendex ratings of Mildred Boltz, as well as one special rating which was recently authorized by the board.”

Papers were passed around. Miss Boltz looked only at the special Trendex, which she had not seen. Her rating was .2—two tenths of one per cent.

“Four of these ratings are zero or so low that for all practical purposes we can call them zero,” Wilbings said. “The rating of twenty-seven constitutes a special case.”

The president leaned forward. “Isn’t it a little unusual for a rating to deviate so sharply from the norm?”

“I have reason to believe that this rating represents one of two things—fraud, or error. I freely admit that this is a personal belief, and that I have no evidence which would be acceptable in court.”

The board members whispered noisily among themselves. The president said slowly, “I have been assured at least a thousand times that the Trendex is infallible. Would you kindly give us the basis for this personal belief of yours?”

“I would prefer not to.”

“Then we shall disregard this personal belief.”

“The matter is really irrelevant. Even if the twenty-seven is included, Miss Boltz has a nine-week average of only five and a fraction.”

Bernard Wallace was tilted back in his chair, one hand thrust into a pocket, the other twirling his keys. “We don’t consider that twenty-seven irrelevant,” he said.

The president frowned. “If you will kindly let Wilbings state his case—”

“Gladly. What’s he waiting for?”

Wilbings flushed. “It is inconceivable that a teacher of any competence whatsoever could have ratings of zero, or of fractions of a per cent. As further evidence of Miss Boltz’s incompetence, I wish to inform the board that without authorization she brought ten of her students to a studio in this building and attempted to teach them in class periods lasting an entire morning and an entire afternoon.”

The shifting of feet, the fussing with cigarettes, the casual whispering stopped. Puzzled glances converged upon Miss Boltz. Wilbings made the most of the silence before he continued.

“I shall not review for you the probably deadly effect of this obsolete approach to education. All of you are familiar with it. In case the known facts require any sub-
stantiation, I am prepared to offer in evidence a statement of the physical damage resulting from just one of these class periods, as well as my own person, which was assaulted by one of the young hoodlums in her charge. Fortunately I discovered this sinister plot against the youth of our district before the effects of her unauthorized teaching became irreparable. Her immediate dismissal will of course put an end to it. That, gentlemen, constitutes our case."

The president said, "This is hard to believe, Miss Boltz. Would you mind telling the board why—"

Bernard Wallace interrupted. "Is it our turn?"

The president hesitated, looked along the table for suggestions, and got none. "Go ahead," he said.

"A question, gentlemen. How many of you secured your own elementary and/or secondary education under the deadly circumstances Wilbings has just described? Hands, please, and let's be honest. Eight, ten, eleven. Eleven out of fifteen. Thank you. Do you eleven gentlemen attribute your present state of degradation to that sinister style of education?" The board members smiled.

"You, Wilbings," Wallace went on. "You talk as if everyone is or should be familiar with the deadly effects of group teaching. Are you an authority on it?"

"I am certainly familiar with all of the standard studies and research," Wilbings said stiffly.

"Ever experience that kind of education yourself? Or teach under those conditions?"

"I certainly have not!"

"Then you are not personally an authority. All you really know about these so-called deadly effects is what some other windbag has written."

"Mr. Wallace!"

"Let it pass. Is my general statement correct? All you really know—"

"I am quite prepared to accept the statements of an acknowledged authority in the field."

"Any of these acknowledged authorities ever have any experience of group teaching?"

"If they are reputable authorities—"

Wallace banged on the table. "Not the question," he snapped. "Reputable among whom? Question is whether they really know anything about what they write about. Well?"

"I'm sure I can't say just what basis they use for their studies."

"Probably not the only basis that counts—knowing their subject. If I could produce for you an authority with years of actual experience and study of the group-teaching system, would you take that authority's word as to its effects, harmful or otherwise?"

"I am always happy to give
AND MADLY TEACH

proper consideration to the work of any reliable authority," Wilbings said.

“What about you gentlemen?”

“We aren’t experts in education,” the president said. “We have to rely on authorities.”

“Splendid. I now give you Miss Mildred Boltz, whose twenty-five years of group teaching on Mars makes her probably the most competent authority on this subject in the Western Hemisphere. Miss Boltz, is group teaching in any way harmful to the student?”

“Certainly not,” Miss Boltz said. “In twenty-five years I can’t recall a single case where group teaching was not beneficial to the student. On the other hand, TV teaching—”

She broke off as Wallace’s elbow jabbed at her sharply.

“So much for the latter part of Wilbings’s argument,” Wallace said. “Miss Boltz is an expert in the field of group teaching. No one here is qualified to question her judgment in that field. If she brought together ten of her students, she knew what she was doing. Matter of fact, I personally would think it a pretty good thing for a school district to have one expert in group teaching on its staff. Wilbings doesn’t seem to think so, but you gentlemen of the board might want to consider that. Now—about this Trendex nonsense.”

Wilbings said coldly, “The Trendex ratings are not nonsense.”

“Think maybe I could show you they are, but I don’t want to take the time. You claim this rating of twenty-seven is due to fraud or error. How do you know those other ratings aren’t due to fraud or error? Take this last one—this special rating. How do you know?”

“Since you make an issue of it,” Wilbings said, “I will state that Miss Boltz is the personal friend of a person on the engineering staff who is in a position to influence any rating if he so desires. This friend knew that Miss Boltz was about to be dismissed. Suddenly, for one time only, her rating shot up to a satisfactory level. The circumstances speak for themselves.”

“Why are you so certain that this last rating is not due to fraud or error?”

“Because I brought in an outside engineer who could be trusted. He took this last Trendex on Miss Boltz personally.”

“There you have it,” Wallace said scornfully. “Wilbings wants Miss Boltz dismissed. He’s not very confident that the regular Trendex, taken by the district’s own engineers, will do the job. So he calls in a personal friend from the outside, one he can trust to give him the kind of rating he wants. Now if that doesn’t open the door to fraud and error—”

The uproar rattled the distant windows. Wilbings was on his feet screaming. The president was
pounding for order. The board members were arguing heatedly among themselves.

"Gentlemen," Wallace said, when he could make himself heard, "I'm no Trendex authority, but I can tell you that these five ratings, and the circumstances surrounding them, add up to nothing but a mess. I'll take you to court cheerfully, and get you laughed out of court, if that's what you want, but there may be an easier way. At this moment I don't think any of us really know whether Mildred Boltz is competent or not. Let's find out. Let's have another Trendex, and have it without fussing around with samples. Let's have a Trendex of all of Miss Boltz's students. I won't make any promises, but if the results of such a rating were in line with this Trendex average, I would be disposed to recommend that Miss Boltz accept her dismissal without a court test."

"That sounds reasonable," the president said. "And sensible. Get Pargrin in here, Wilbings, and we'll see if it can be done."

Miss Boltz sank back in her chair and looked glumly at the polished table top. She felt betrayed. It was perfectly obvious that her only chance for a reprieve depended upon her refuting the validity of those Trendex ratings. The kind of test Wallace was suggesting would confirm them so decisively as to shatter any kind of a defense. Certainly Jim Pargrin would understand that.

When he came in he studiously avoided looking at her. "It's possible," he said, when the president described what was wanted. "It'll upset our schedule, and it might make us late with the next Trendex, but if it's important we can do it. Will tomorrow be all right?"

"Is tomorrow all right, Wilbings?" the president asked.

"Where Miss Boltz is concerned, I have no confidence in any kind of rating taken by our staff."

Pargrin elevated his eyebrows. "I don't know what you're getting at, but if you've got doubts just send in that engineer of yours and let him help out. With this extra load the Trendex men would probably appreciate it."

"Is that satisfactory, Wilbings?" the president asked.

Wilbings nodded. "Perfectly satisfactory."

"Very well. Miss Boltz's class ends at eleven-fifteen. Can we have the results by eleven-thirty? Good. The board will meet tomorrow at eleven-thirty and make final disposition of this case."

The meeting broke up. Bernard Wallace patted Miss Boltz on the arm and whispered into her ear, "Now don't you worry about a thing. You just carry on as usual, and give us the best TV class you can. It's going to be so tough it'll be easy."
AND MADLY TEACH

She returned to her class, where Lyle Stewart was filling in for her. “How did you make out?” Stewart asked.

“The issue is still in doubt,” she said. “But not very much in doubt, I’m afraid. Tomorrow may be our last day, so let’s see how much we can accomplish.”

Her TV class that Wednesday morning was the best she’d ever had. The students performed brilliantly. As she watched them she thought with an aching heart of her lost thousands of students, who had taken to watching jugglers and magicians and young female teachers in tights.

The red light faded. Lyle Stewart came in. “Very nice,” he said. “You were wonderful!” Miss Boltz told her class.

Sharon, the blind girl, said tearfully, “You’ll tell us what happens, won’t you? Right away?”

“I’ll tell you as soon as I know,” Miss Boltz said. She forced a smile and left the studio quickly.

As she hurried along the corridor a lanky figure moved to intercept her—tall, pale of face, frighteningly irrational in appearance. “Randy!” she exclaimed. “What are you doing here?”

“I’m sorry, Miss Boltz. I’m really sorry, and I won’t do it again. Can I come back?”

“I’d love to have you back, Randy, but there may not be any class after today.”

He seemed stunned. “No class?” She shook her head. “I’m very much afraid that I’m going to be dismissed. Fired, you might say.”

He clenched his fists. Tears streaked his face, and he sobbed brokenly. She tried to comfort him, and some minutes went by before she understood why he was weeping. “Randy!” she exclaimed. “It isn’t your fault that I’m being dismissed. What you did had nothing to do with it.”

“We won’t let them fire you,” he sobbed. “All of us—us kids—we won’t let them.”

“We have to abide by the laws, Randy.”

“But they won’t fire you.” His face brightened, and he nodded his head excitedly. “You’re the best teacher I ever saw. I know they won’t fire you. Can I come back to class?”

“If there’s a class tomorrow, Randy, you may come back. I have to hurry, now. I’m going to be late.”

She was already late when she reached the ground floor. She moved breathlessly along the corridor to the board room and stopped in front of the closed door. Her watch said fifteen minutes to twelve.

She knocked timidly. There was no response.

She knocked louder and finally opened the door a crack.

The room was empty. There were no board members, no tech-
nician, no Wilbings, no attorney Wallace. It was over and done with, and they hadn't even bothered to tell her the result.

They knew that she would know. She brushed her eyes with her sleeve. "Courage," she whispered and turned away.

As she started back up the corridor, hurrying footsteps overtook her. It was Bernard Wallace, and he was grinning. "I wondered what kept you," he said. "I went to check. Have you heard the news?"

She shook her head. "I haven't heard anything."

"Your Trendex was 99.2. Wilbings took one look and nearly went through the ceiling. He wanted to scream 'Fraud!' but he didn't dare, not with his own engineer on the job. The board took one look and dismissed the case. Think maybe they were in a mood to dismiss Wilbings, too, but they were in a hurry."

Miss Boltz caught her breath, and found the friendly support of a wall. "It isn't possible!"

"It's a fact. We kind of planned this. Jim and I pulled the names of all of your students, and we sent letters to them. Special class next Wednesday. Big deal. Don't miss it. Darned few of them missed it. Wilbings played right into our hands, and we clobbered him."

"No," Miss Boltz said. She shook her head, and sighed. "No. There's no use pretending. I'm grateful, of course, but it was a trick, and when the next Trendex comes out Mr. Wilbings will start over again."

"It was a trick," Wallace agreed, "but a kind of a permanent trick. It's like this. The younger generation has never experienced anything like this real live class of yours. On the first day you told them all about school on Mars, and you fascinated them. You held their attention. Jim was telling me about that. We figured that putting this class of yours on TV would fascinate them, too. Wilbings took that special Trendex before you got your class going, but Jim has been sneaking one every day since then, and your rating has been moving up. It was above ten yesterday, and now that all of your kids know what you're doing it'll jump way up and stay there. So—no more worries. Happy?"

"Very happy. And very grateful."

"One more thing. The president of the board wants to talk to you about this class of yours. I had dinner with him last night, and I filled him in. He's interested. I've got a suspicion that he maybe has a personal doubt or two about this New Education. Of course we won't tear down TV teaching overnight, but we're making a start. I have work to do, now. I'll be seeing you."

He shuffled away, twirling his keys.

She turned again, and saw Jim
Pargrin coming toward her. She gripped his hand and said, "I owe it all to you."

"You owe it to nobody but yourself. I was up telling your class. They're having a wild celebration."

"Goodness—I hope they don't break anything!"

"I'm glad for you. I'm a little sorry, too." He was looking at her again in that way that made her feel younger—almost youthful. "I figured that if you lost your job maybe I could talk you into marrying me." He looked away shyly. "You'd have missed your teaching, of course, but maybe we could have had some children of our own—"

She blushed wildly. "Jim Pargrin! At our ages?"

"Adopt some, I mean."

"Really—I've never given a thought to what I might have missed by not having my own children. I've had a family all my life, ever since I started teaching, and even if the children were different every year I've loved them all. And now I have a family waiting for me, and I was so nervous this morning I left my history notes in my office. I'll have to run." She took a few steps, and turned to look back at him. "What made you think I wouldn't marry you if I kept on teaching?"

His startled exclamation was indistinct, but long after she turned a corner she heard him whistling.

On the sixth floor she moved down the corridor toward her office, hurrying because her students were celebrating and she didn't want to miss that. Looking ahead, she saw the door of her office open slowly. A face glanced in her direction, and suddenly a lanky figure flung the door aside and bolted away. It was Randy Stump.

She came to a sudden halt. "Randy!" she whispered.

But what could he want in her office? There was nothing there but her notebooks, and some writing materials, and—her purse! She'd left her purse on her desk.

"Randy!" she whispered again. She opened the office door, and looked in. Suddenly she was laughing—laughing and crying—and she leaned against the door frame to steady herself as she exclaimed, "Now where would he get an idea like that?"

Her purse still lay on her desk, untouched. Beside it, glistening brilliantly in the soft overhead light, was a grotesquely large, polished apple.
John Shepley's short stories have appeared in Paris Review, San Francisco Review, The Best American Short Stories of 1956, and in F&SF (GORILLA SUIT, May 1958; THE KIT-KATT KLUB, April 1962). We do not expect that all our readers will like the story below. It is not a simple story, nor is it particularly pleasant. It is a stunning blend of fantasy and reality, of style and (indirect) statement and dramatic urgency.

THREE FOR CARNIVAL

by John Shepley

IT HAD BEEN A DULL PLACE. But now all lovers of the arts, all lovers of tradition, all lovers, could rejoice that New York, after centuries of resistance, had officially adopted the custom of Carnival.

They had agreed to meet at the Battery at eight sharp to begin the last night, there where the fog is thick and the city looks out on the world, by the new ferry terminal. Mother Gimp was the first to arrive. She paced up and down in her skirts and shawls, glancing at her wrist-watch, the one token she had retained from another life. She carried a pail of water and a mop and from time to time admired herself in the mirror of a gum machine; in keeping with her disguise, she chuckled and mumbled aloud.

Now understand that Mother Gimp, for ordinary occasions, was mere Miss Barbara Rowe, blonde and hardly out of Iowa State, who worked as a publisher's reader on Madison Avenue, and took the subway every morning to get there. But here she was everybody's ugly old charwoman, she was something out of an expressionist play, she was a Mediterranean earth-goddess (crone phase). What's more, she had thought it all up herself. Life had so many overtones, as she had often mused, and now Carnival proved it! By the way, who said "mere"? Mr. Cooper- man didn't think her mere, and neither perhaps did Lloyd. And
the tiny gold wrist-watch had been a graduation present from Daddy. Mr. Cooperman came second. His parti-colored tights, from Edel & Fitch, Costume Rentals, fitted him badly, the mask on his face kept slipping askew, but Mother Gimp would have recognized him anyway—he was Harlequin, with a paint factory in Long Island City, a six-foot-two son in the Army, and a wife in analysis. But he seemed a little perplexed on seeing her. “Is it Barbara, lovely Barbara?” he asked with a worried smile. Mother Gimp threw back her head and laughed uproariously. Of course it was! Who else?

Meanwhile all this inconvenience because of Lloyd. If it hadn’t been for him and his ways, they could have started in uptown somewhere, Barbara’s apartment for instance, where Mother Gimp would have brewed old-fashioneds. But he lived on Staten Island with his parents, who ran a chicken and vegetable farm; mornings he took the ferry to Manhattan, to his job in Davega’s sporting goods store on lower Broadway, then home in the evening; it had taken Carnival to induce him to make the trip over twice in one day. Finally a hooting in the fog announced his arrival, and he stepped ashore in his usual blue serge suit, starched collar and cheap necktie, and with his towhead and bumpkin smile, apologizing for being late. Lloyd, it seemed, was never anything but Lloyd. (Imagine there being real farms in New York City!—Barbara could never get over it.) “Just no imagination, you!” shrieked Mother Gimp when she saw him.

Arm-in-arm, they set off uptown, Loyd to left, Harlequin to right, Mother Gimp in the middle. She looked at her watch—it was 8:27. What do you suppose Daddy was doing at this moment? He’d finished dinner, of course, long ago, was probably sitting out on the screen-porch, listening to the katydids and digesting his stock-market reports. To punish Lloyd, she made him carry the pail and mop, but at the corner of Broadway and Wall Street, she changed her mind and made Harlequin carry them instead. Not much going on in this part of town—the impact of Carnival had fallen there earlier in the day. The shreds of banners flapped from the lamp posts, the sidewalk in places was ankle-deep with confetti, but there was little sign of what anyone, whether Barbara or Mother Gimp, would have called life. Lloyd pointed out Davega’s windows, full of ice skates, footballs and crew-neck sweaters, which only he could make out in the darkness, and Harlequin patted him on the shoulder, praising him for the serious, hardworking young man that he so obviously was. At City Hall
Park, two floats, flower-bedecked and capped by giant papier-maché caricatures, had collided, and a night-squad was busily dismantling the wreckage. But were they carnival Commission workers, or scavengers? It was impossible to tell. She looked at her watch—8:49. Going on Daddy's bedtime. She made them switch places, Harlequin to left, Lloyd to right, and took back her pail and mop. Why was she always to be the only one to enter into the spirit of things?

Ahead there were lights and noises. But why walk all the way? Now courtly Harlequin, out of his sleeve, produced a taxicab for the young folks, and on they went. Things were looking up! "East Side, West Side . . ." sang Mother Gimp, careening in the middle. Clickety-clickety went the meter, the driver sat hunched over the wheel, and she wanted to see his disguise. "Aw, Miss," he said tiredly, "can't ya stay put there in the back seat?" She settled back—people who couldn't see made her angry. London Bridge is falling down . . . "Oh, look!" she cried in wonder. For all of Canal Street was in flames.

From the big fires, children lit torches and ran to ignite their own little bonfires of egg crates, while Harlequin deplored the danger to life and property and Lloyd simply gawked. 9:17. Tipsy loiterers yelled greetings to them as they passed, and one threw a straw-covered wine bottle, but the driver dodged it skilfully and it bounced on the opposite sidewalk. Barbara suddenly opined that people who led significant everyday lives would have no need of Carnival, though she knew it was just her puritanical Iowa grandmother talking, not herself. (Daddy, trudging across the living room, would be giving a last sleepy look at the television.) They drove on, through canyons where only broken glass and trampled paper streamers testified to the day's passing glory. Mother Gimp called out to the driver to stop. She wanted to get out of the cab—she felt it her duty to mop up the streets. What was an old charwoman for? But Harlequin entreated her, and Lloyd looked so funny with his shocked expression, that she burst out laughing again and urged the driver on. Ahead of them rose 14th Street like an aurora borealis, a great barrier of light though which they must pass.

A screeching screech of brakes, and the cab stopped in Union Square. "This is as far as I go," growled the driver. "Don't gimme no argument, you people." He leaned around, and Mother Gimp looked at last into his sightless orbs. He was Charon!—as she had suspected all along. She memorized his number in case of further trouble. Harlequin was proffering payment from his wallet, but she thrust herself forward, drowning
out his protests. She took three coins out of her mouth and paid the entire fare.

They strolled east along 14th Street, between twin lines of lights, and she knew that Daddy was now safely upstairs in bed. Poor Lloyd looked so like a fish out of water that she took his hand and tried to make him dance a step or two with her. Harlequin played cicerone. Everything moved him to a gentle, and sometimes ironic, nostalgia: a delicatessen (it wasn't there any more, but he evoked it so well that you saw it) where you used to get the best pastrami sandwiches; a movie theater (still there) for which he once couldn't afford even the fifteen cents for a seat in the balcony; an intellectuals' cafeteria, passed beyond recognition, where he had argued with friends and pored over political pamphlets (yes, he'd been quite a rebel in those days!); a fire-trap loft calling itself a music academy where, a very little lad, he had been sent to take violin lessons. As for now, he had his paint business, went de luxe to Miami, and to first nights on Broadway, but what could take the place of youth? Barbara listened gravely, and from all the doorways, Carmens in crimson shawls, puffing cigarettes and humming the Habanera, came out and listened too.

10:10. They took the Third Avenue El, a legendary structure which had almost lapsed beyond human memory, but had been lovingly reconstructed, down to the last spittoon and pot-bellied stove, for this last night of Carnival. The passengers wore paper hats, blew whistles and whirled noise-makers—some were already ripping up the seats and filching the signs to carry home as souvenirs. Mother Gimp, she wanted to know all about Harlequin's wife. Was she pretty, or had she been? Did she make him too unhappy? Who, incidentally, was her analyst, and how much did he charge? He corrected her philosophically. Harlequin (such were the joys of Carnival) had no wife—Mr. Cooperman (don't mention it!) did.

But what was Lloyd saying as, caught in a great throng, they tumbled down the stairs and poured themselves out onto 42nd Street? Something about (with a blush and stammer) people not needing one on a night like this. Not needing what?—a mask or an analyst? No, he meant a mask. People's usual one was enough, he said. Mother Gimp observed that Lloyd was in danger of becoming a wit, and she couldn't exactly say that the prospect pleased her, but Barbara giggled her agreement.

She went skipping ahead of them, singing and swinging her pail and mop. Let Lloyd sprint, and Harlequin puff, to catch up with her. Lexington, Park, Madison, a screaming of sirens, and an open truck with motorcycle police
escort roared past transporting a bevy of can-can girls, most likely to the Coliseum. Two gossiping boys went by, identically disguised as Madame de Pompadour. Between Fifth Avenue and Times Square, the floats were still circulating, but willy-nilly. The effigies of world figures, presidents, prime ministers, scientists, stars of stage and screen, wrestlers, rolled their eyes and waggled papier-maché arms, and more than one broke down with a snapped axle, while the assembled Pagliaccios, Fata Morganas, gypsies, pirates, cowboys and minstrels goggled and applauded. Oh, the tawdriness of the world's imagination! Mother Gimp didn't know whether to laugh or cry.


And Harlequin, her mystic consort? Mother Gimp took a deep breath. Had set kind limits and promoted virtue. Had charted the soul. Had been, and not been, the question. Had looked into a glass darkly, never face to face. Had loved not wisely but too well. Immortal melodies: the Kol Nidre. Immortal sayings: BRIGHTEN YOUR LIFE WITH COOPER-PAINTS!

They seemed to be on some side-street. Very grave creatures with phosphorescent eyes and stiffening fur came out to stare, but she scampered around them.

"I'll be Mrs. Irwin, Plain little Mrs. Irwin . . ." she sang, and kicked up her legs. Lloyd asked, "Who's the lucky Mr. Irwin?"

"I don't know." (Was it Barbara speaking?) "But there's always a Mr. Irwin for a girl like me."

She became for a moment, with longing, Mrs. Irwin J. Irwin, wife of a Newark accountant, of a car salesman in Scranton, of an economics teacher in Des Moines, of a Sensitive Young Man in Sacramento. She played a good bridge hand, took up watercolors, stood for human values, took Time and the Book of the Month, voted independent. On top of the television set sprawled two floppy rag dolls, Harlequin and Lloyd, keepsakes . . . No!—it was too ghastly. Back to Mother Gimp!
With a vengeance. Shrieking with hag-laughter, she sloshed the contents of her pail in the faces of the passersby, and filthy and dripping, they roared back at her. She fixed an evil eye on them, and they broke out in boils and the Saint Vitus dance. She flung away her pail and mop—she flung away discretion, and Daddy’s watch. Her skirts lifted high, she went pirouetting out over rooftops and abysses, dancing the pas-de-trois, the Carmagnole, the rigmarole, and dragging in her wake a remonstrating Harlequin, a Lloyd petrified with embarrassment. Oh, how she laughed at his expression! Marauding lions broke out of the Coliseum, and great Aztec altars smouldered with human sacrifice. And then they saw him—Mother Gimp saw him, Barbara saw him—it was Daddy, nobody else, wearing his Legion cap and with his fly unbuttoned, whooping it up among the can-can girls! They passed on and he was lost to sight.

Where were they now? The Bronx, by the look of it, or some height above it. In a wilderness of tin cans and stray cats and little coupling dogs, Mother Gimp sat down and wept. No expressionist play was ever so hopeless as this, no earth-goddess’s shrine ever so despoiled, no ugly old charwoman ever more unhappy. She drew her shawl over her head—and suddenly an anguished Harlequin was beside her, taking her in his arms, calling her his child, his angel, and promising her everything, a new wrist watch, a trip to Miami, a divorce from his wife, anything, if only she’d be happy as she deserved to be, and not cry.

But what have we here? Who is this who rises up in wrath? Launcelot, Sir Galahad, Don Ferdinando?—no time to pick a name—quick—to the rescue! His steed was a gymnasium sidehorse, for armor he wore a baseball catcher’s chest protector, with shoulder pads and hockey shin-guards, a fencing mask for visor, and a football helmet topped by a feather-duster plume—everything that the Davega branch store in East Fordham Road could hurriedly assemble at midnight the last night of Carnival to equip its chosen champion. But the sword in his hand was tempered and true, and the inscription on his shield (courtesy of Miss Eunice Jenks, teacher of Latin, now deceased, its last pale whisper through the corridors of Curtis High) read:

AMA ME FIDELITER
FIDEM MEAM NOTA

"Miscreant! Coxcomb!" cried this knight, and plunged his sword in Harlequin’s breast.

And then there wasn’t any Harlequin—only Mr. Saul Cooperman of Long Island City, in a grey business suit, standing there with his amiable smile and his
hidden sorrows. He put out his hand. "Son," he said, "I thank you all the same. These disguises we put on get the better of us sometimes, don't they? Best to get out of them while we can—be ourselves, eh? I go now. If you would . . . would be so kind . . . as to convey to the young lady . . . my regrets . . . the delicacy of my feelings . . . my eternal respect . . ." He went away into the darkness, the sword still in his heart and its handle bobbing in the quiet of the night air.

Lloyd (he was just Lloyd now, astonished at what he had done, and not a little abashed) watched him go. Then he turned. "Past midnight," he said. "Carnival is over. Look, they're already tearing down the El again. You're only Barbara and I'm only Lloyd."

Only? She stared back at him, her aged eyes and wrinkled face under the shawl now beyond all change or renewal. She had become her disguise.

---

**Coming next month**

Roger Zelazny's first story for us was A ROSE FOR ECCLESIASTES. Since then, he has built upon the solid reputation that story established for him with such stories as THE DOORS OF HIS FACE, THE LAMPS OF HIS MOUTH, and . . . AND CALL ME CONRAD.

While he has been writing for us only a relatively short time, his work has already proven him one of the outstanding science fiction writers of the decade. A Roger Zelazny story can be counted on for a unique blend of hard scientific extrapolation and rich poetic vision—for fast-paced action and singing imagery.

A Roger Zelazny story is an Event—and we are proud to announce that next month another such Event will occur: THIS MOMENT OF THE STORM. You will not want to miss it.
"I expect one seldom encounters the older, traditional hazards on your American courses."
"I know it's junk, but I like it."

Which [says Feiffer] is the whole point about junk. It is there to be nothing else but liked. Junk is a second-class citizen of the arts; a status of which we and it are constantly aware. There are certain inherent privileges in second-class citizenship. Irresponsibility is one. Not being taken seriously is another.

Feiffer's super-comic-book is a study in puzzles and paradoxes. Fifty-or-so (large) pages of honest Feiffer text surround 132 more of acknowledged absurd nostalgic junk. It is sadly that I must say that not only Batman and the Green Hornet and Mr. America (none of whom I much cared for even then), but even Superman and the Spirit (both of beloved memory) have not improved with age, any more than the comic-book colors are enhanced by good book paper.

Feiffer himself—whether as cartoonist or essayist—is anything but junk. Except to someone in my peculiar position, I am not sure his fifty pages of autobiography, social comment, and philosophy are worth $9.75 (allowing 20¢ for the value of a double-size comic book), and of course I didn't have to pay for it. But for me, his final chapter on the subject of junk was pure revelation.

"Junk is there to entertain on the basest, most compromised of levels," he says at one point. "It finds the lowest fantasmal common denominator and proceeds from there. Its choice of tone is dependent on its choice of audience, so that women's magazines will make a pretense at veneer scorned by movie-fan magazines, but both are, unarguably, junk."

Or substitute for veneer, intellectual eminence; for women's magazines, the bulk of "category" science-fiction novels.

"The success of the best junk lies in its ability to come close, but not too close; to titillate without touching us. To arouse without giving satisfaction. Junk is a tease..."

Yes indeed. And I only wish I'd...
read it before I began belaboring the authors of good junk—my kind of junk, too—in an attempt to make them come through with the intellectual and literary satisfaction they keep waving just out of reach.

The final quote is as profound as it is paradoxical, concluding as it does a ten-dollar volume with a pop-art Superman cover, which carries twenty-five-year-old comics to the artbook shelf of (I am sure, many of) the same households where the originals were burned on sight.

"A junk that knew its place was underground where it had no power and thus only titillated, rather than above ground where it truly has power—and thus, only depresses."

With unwonted restraint, I shall ignore all the opportunities provided not only for comment on the comment and philosophizing on the philosophy, but for a marvellous multi-meaning word game of junkie, junkie, who's got the junk? (Is Feiffer peddling the junk here, or is the junk peddling him?) More significant is the restraint I intend to show in future.

Shortly after I inherited this space, we asked for readers' comments on the column and what they wanted in it. The results were gratifying, but omniverous. They—you—wanted discursive essays on some books and complete coverage of all books of s-f-interest. It can't be done. There isn't time or space (Ed the Ed. having flatly refused to devote half the magazine to books). So—Feiffer to the rescue, with his twin concepts of good junk and underground junk. Policy statement follows:

This column will no longer endeavor to provide complete coverage of s-f and associated books. Non-junk books, good or bad—those, that is, that seem to make an effort to satisfy the special tastes of the s-f reader—will be discussed at whatever length their merit, my interest, and the space, permit. In addition, the good junk (because, once more, entwined in rosy wreaths—it is my kind of junk, and I love it!) will be described or at least mentioned, and recommended, without such examination as might expose it in either sense: destroy its junk-value by trying to impose responsibility on it, or give it depressant power by dragging it above ground.

Thank you, Jules Feiffer!

Last month, this column devoted much of its space to Games—the theory and application, especially in science-fiction, and most particularly in John Brunner's triple-ploy games-novel, The Squares of the City. Apparently Ballantine, who published that one, is making it an all-out games season, following up with two other volumes as different
from each other as from the Brunner, but equally game-centered.

One of the most memorable Games stories in s-f is Robert Sheckley's "The Prize of Peril." His earlier story on the same theme, "The Seventh Victim," left a less lasting impression on me, but apparently had a more significant impact on Joseph E. Levine, of Embassy Pictures. The result is the movie, "The Tenth Victim" (Why be cheap?), and a "novelization" of the movie, this time by the original author, under the same more generous title.

The idea, as you probably know by now, is a legalized murder-game, government-approved and TV-commercial-sponsored, designed to provide an outlet for individual aggressions, and thus eliminate the emotional pressure toward the greater destructiveness of organized international slaughter. Anyone who gets enough kick out of killing to be willing to risk getting killed registers for the Big Hunt, and the Victim-Hunter pursuits supply the viewing public with all the real gore and surrogate adventure it can use.

As social theorizing, one cannot take the hypothesis too seriously. Happily, neither author Sheckley nor director Petri requires it. The film publicity quotes Petri: "We are giving the lie to violence as glamour, as a heroic ideal ..."

by sheer exaggeration ..." I have not seen the movie, but I gather its tone is much like that of the book, which is highly successful (and withal suspenseful) farce.

What fascinates me, and excites a new kind of admiration for Bob Sheckley, is that this rewrite, far from the usual padding-out and watering-down job, is not only very well done on its own, but applies a completely different technique to the original theme, perhaps more effectively.

The Game in James White's new novel, THE WATCH BELOW, is also one of life-and-death, but in a very different way. This is a thoughtful and thought-provoking novel combining one of the great "classic" s-f ideas (the "Universe" ship) with two major themes of current interest: the problem of adaptation to an alien environment, and that of communication between alien cultures.

The actual space ship involved is—well, on the one hand it is a space fleet, of "Unthan" ships, filled with freeze-sleeping star-colonists and their supplies, seeds, livestock, etc.; manned (if one may use the word) by part-time skeleton crews. The other ship is not in space at all, but a giant empty tanker, half-sunk during World War II, with a handful of

---

*The 10th Victim, Robert Sheckley; Ballantine U5050, 1965; 60g; 158 pp.
*The Watch Below, James White; Ballantine U2285, 1966; 50g; 192 pp.
people aboard who manage to survive long enough in the vast empty holds to establish an ecology cycle for air and food from the supplies of beans on board.

From vastly divergent starting points—a fleet of high-technology water-dwellers embarked on a well-planned space voyage; and five desperate men and women seizing on every scrap of salvage to sustain themselves while waiting rescue from the half-wrecked, reef-grounded tanker—the two groups move into an intriguing parallelism. The theory that provided for only short duty tours for each Unthan, with long spells of freeze-sleep to endure the long trip, proves unworkable, and in the end two couples assume the responsibility of progenitors of the fifteen generations who will have to live out their lives on board the flagship to bring the rest of the fleet through. Meanwhile, back on the Atlantic, the Gulf Trader is wedged securely just enough below the surface to be passed over repeatedly with no effort at rescue or investigation.

On board the Unthan flagship, the two officers who sacrificed their own prospects of reaching journey's end, spend the rest of their lives setting down text and precept and ritual which they hope will enable the space-borne generations to survive the pressures of cultural devolution at least enough to be able to waken the main body of the crew when the time comes. And on the Gulf Trader, they start The Game.

The Game begins only as defense against boredom and panic. It begins as mutual exchange of life-histories, goes on to exercises in memory (as often fantasy as fact) of books, plays, music—all experiences and perceptions. The children born in the submerged ship-world have The Game and its retention-sharpening effects for schooling, entertainment, cultural matrix.

It would be unfair to the author's careful construction to tell more than this. I only wish White had managed to imbue this saga-scope story with more of the emotional conviction and quiet poetry of his best short work. There are flashes of it here, true: unfortunately just enough to bring to mind the warm immediacy of (for instance) his memorable “Christmas Treason.” Perhaps if it could have been a longer book...?

This month's non-junk award to James White—and a Gold Star to Ballantine Books for three-in-a-row with originality, content, and craftsmanship.

STARCHILD, the Pohl-Williamson sequel to REEFS OF SPACE, is a rather more routine
far-space adventure, brightened by spots of colorful effective imagery in which some of the more vivid archetypes of traditional fantasy emerge in pseudo-science masquerade.

Even more routine, and with only its easy-reading slick writing to make it worth mention as a no-strain alternative to television, is van Vogt's Rogue Ship—anther "Universe"-type voyage, with some extra effects provided by (what I found) some most confusing time-slippage metaphysics.

Shepherd Mead brings the aliens down to Earth in a tongue-in-cheek novel so slickly readable that its significance is almost lost between the pacing and the parody. Almost.

Between gentle pokes at saucer-watchers, beatnik artists, and homegrown engineers, and somewhat less gentle prods at Mad Ave, the CAREFULLY CONSIDERED RAPE OF THE WORLD tells a story of alien invaders using advertising-and-market-research control psychology techniques (plus odds and ends of alien super-technology) to take over for Man's Own Good. A household of improbable semi-beats proves just immune enough to the mass-media techniques to stir up some trouble for the genetic do-gooders—who have, however, some well-done genetics going for them. There is much freshness, and more surprise than you might think, in Mead's description of human reactions to the baboon-like "new-mods," the mutant improvement in the alien master-plan, and in the gradual exposure of the motives and methods of the invaders, even in the knowledgeable farce on Mad Ave mores and patois—and believe-it-or-not, in the way the whole thing ends.

Most surprising of all is the realization after the end that the freshness was not limited to the handling of (essentially familiar) components, but extended to the underlying thinking: that all the fun and froth rests on a reasonably respectable thematic base.

The baboon-image, with modifications, pops up again in two recent Berkley novels. In MIND SWITCH (an expanded—but not enough—version of his Galaxy short novel, "The Visitor at the Zoo") Damon Knight builds up an empathetic portrait of what might be called the somapsychic distinctions between his human and alien co-heroes, making use of the old device specified in the title to fresh advantage. Then, having

---

THE CAREFULLY CONSIDERED RAPE OF THE WORLD, Shepherd Mead; Simon & Schuster, 1966; $4.95.
MIND SWITCH, Damon Knight; Berkley, F1160, 1965; 50¢; 144 pp.
A PLAGUE OF DEMONS, Keith Laumer; Berkley, F1086, 1965; 50¢; 159 pp.
demonstrated intriguingly the effects of their new bodies on two intelligent and well-meaning creatures—he just sort of stops, about where the story seemed about to start.

In Laumer's chill-thriller the title— *A Plague of Demons*—serves notice that the "dog-things" are baddies; in fact, he uses virtually the whole catalog of s-f horror—brains-in-machines, the lustful hungry formless life-force, hypnotic controls, an invulnerable man (and maybe some more I forgot). Fortunately, he throws these in so fast that there are still long stretches between-times where his talent for action and suspense narrative, and his good eye and ear for human detail, create absorbing and sometimes breath-holding scenes.

As always, when s-f is selling well, there has been a rash of resurrected "classics" pouring out of moldering pulp page into books, most of them not even worth listing. Two exceptions are *Adam Link, Robot*, Eando Binder; Paperback Library 52-847, 1965; 50¢; 174 pp. Six solid novelets and one short story—a beauty by Lord Dunsany, "The Hoard of the Gibbelins"—all *echter* Sword & Sorcery. O'ertopping all by a grisly head is Clark Ashton Smith's "The Dark Eidolon"—"And the crements of the mummies stirred and fell open at the bosom, and small rodent monsters, brown as bitumen, eyed as with accursed rubies, reared forth from the eaten hearts of the mummies like rats from their holes and chittered shrilly in human speech . . ." Everything else, from the realism of de Camp's "The Hungry Hercynian" to the louting, overblown madness of Michael Moorcock's "Kings in Darkness." By Robert E. Howard: "Shadows in Zamboula"—when will someone realize that "Beyond the Black River" is the far-best

---

*Adam Link, Robot*, Eando Binder; Paperback Library 52-847, 1965; 50¢; 174 pp.  
*The Time Axis*, Henry Kuttner; Ace F-356, (no pub. date given for book; original magazine ca. 1948); 40¢; 142 pp.
Conan novelet and "People of the Black Circle" the best Conan short novel? Also tales by Jack Vance and your anything-but-humble reviewer.

THE GOUL KEEPERS, ed. Leo Margulies, Pyramid, 50¢, 150 pp. Nine items from Weird Tales. Very choice despite Mad-Magazine or Ackermanish punning title. Lively tales, perhaps too naive for nervously hip modern publishers; yet these charming wish-fulfilments do not need to jeer at themselves in the modern manner. "Clair de Lune," by Seabury Quinn: perhaps the psychic detective Jules de Grandin was Hercule Poirot's twin, but he was gustier, while his adventures were the slickest, most sophisticated writing in the grand old magazine that, I was once assured by a cigar-stand owner, was bought only by musicians, New-Orleans femmes de nuit, and other weirdos. Funniest ghost story ever: "Please Go 'Way and Let Me Sleep," by Helen W. Kasson, Stanley Weinbaum's sister. Sturgeon's fantasia of crystal sets, home-wound coils, and dreamy girls with lines: "The Martian and the Moron." Ably supported by Bloch, Kuttner, Hamilton, Harry Altshuler, and de Camp & Pratt.

SELECTED LETTERS 1911-1924, by H. P. Lovecraft, Arkham House, Sauk City, Wis., $7.50, 362 pp. This master of the bizarre horror story was cursed with somatic warps, a syphilitic father, and a genteel, coddling, spinsterish background. But by the exercise of curiosity, rationality, and observation, and by constant communication-in-depth with other writers, he grew saner every day he lived. Typical (p. 129-130): "... I have recently wondered whether or not my anti-erotic views are too hasty ... It was my theory that eroticism would diminish if thinkers would awake and turn to more important phenomena. ... When I dissociate myself altogether from humanity, and view the world as through a telescope, I can consider more justly phenomena which at close range disgust me. Thus I am coming to be convinced that the erotic instinct is in the majority of mankind far stronger than I could ever imagine without wide reading and observation; that it relentlessly clutches the average person—even of the thinking classes—to a degree that makes its overthrow by higher interests impossible. ... The only remedy would seem to lie in the gradual evolution of society out of the puritan phase, and the sanctioning of some looser morality or hetairism. ... surely, the decrease in hypocrisy would make for a gain in wholesomeness." This is the attitude of a thoughtful a-sexual Martian, or a celibate priest wiser than most—a cerebral victory over crippling emotional complexes.
To ease his neuroses, Lovecraft posed as an old man, joshed at pornography, enthused over talented youngsters, sneered at effeminate men, cultivated literary eccentricities—salutations: “Illustrißime!” “H’lo, Sonny!” “Reverend and Philatelic Sir:—” “Malefìous Hippocampus:—” “Hail, hail! The gang’s all here!” He also nursed passions for England, the Age of Reason, Ancient Rome, and cats. And he sometimes described non-North Europeans as if they were animated slime (though there is no record of his ever having behaved meanly or discourteously toward such—he married one.) This book is for those interested in Lovecraft, in early fantasy-coteries, in the years his letters cover, and in slow social-emotional growth against odds.

**DAGON AND OTHER MACABRE TALES,** by H. P. Lovecraft, Arkham, $6.50, 413 pp. This completes Arkham’s republishing of all of Lovecraft’s fiction first issued in those vast tomes **THE OUTSIDER** and **BEYOND THE WALL OF SLEEP.** The 28 stories in this book are uneven in quality, but include the memorable “The Festival,” “The Temple,” “The Strange High House in the Mist,” “Dagon,” and a powerful, socially-minded science fiction, “In the Walls of Eryx.” Also: 5 juvenilia, 4 fragments, and the encyclopedic essay, “Supernatural Horror in Literature.”

—FRITZ LEIBER
The colonists had survived for twenty years. They had cleared forest and jungle, built a town that would eventually be a city. In another generation, the colony could be declared a success. And then one day there came shambling into their little town a troop of some score of hairy creatures of a kind the colonists had never seen before . . .

**THE COLONY**

by Miriam Allen deFord

They were not stranded. They were a deliberately planned colony of voluntary pioneers from an overcrowded planet which they—like the natives of every human-inhabited planet in every Galaxy—called Earth, or The World. They had selected this planet after scouts had investigated its terrain, its climate, its gravity, its atmosphere, the nature of its sun, and had ascertained the absence of any indications of an intelligent native race. They had been there 20 years. The first 250 had grown to more than a thousand, and children had been born who were now young men and women—and who thought of the planet, alien to their parents, as Earth, or The World.

It had been a hard life, but gradually they were taming the wilderness. They had cleared forest and jungle in the section in which they had landed because of its climatic likeness to their original home. At first purely agricultural, they were beginning to create a focus in a town that in time would be a city—in still more time the capital of a great nation, a city built then of stone and glass instead of wood. They had everything essential to most cultures except a cemetery—they cremated their dead and scattered the ashes. In another generation they would be able to declare the colony a success, and to send word (though it would take a long time for the message to reach its destination) that other colonies might
The colony

settle elsewhere on the planet.

Their spaceship still stood on the charred ground where they had landed. Colonists whose only duty it was kept it in good repair. So fully stocked had it been with tools, seeds, all sorts of supplies to enable a civilized community to get started, that for a long time it had served as a warehouse or store-room; now most of its cargo was either used up or in use, but it was kept carefully ready to take off again if ever that became necessary. Rather soon the attendants began to take on the status almost of priests in a temple, and their maintenance job approached a ritual which the young people met increasingly with ridicule.

There had been many problems and difficulties, of course. There were the jungle and the forest, there were rivers (though, knowing that they would not at first be able to build boats, they had settled in the middle of a continent, far from any ocean). There were wild and dangerous animals. The one thing there was not—for otherwise they would, by their home-world Council’s rules, have had to leave at once—was intelligent beings who could be considered the equals or potential equals of themselves. There were beasts that sometimes walked almost upright, and that communicated with one another by grunts and howls, but there was no question that these were beasts, not men.

It may have sounded like a strange and harsh ruling to compel them to evacuate the planet if they discovered any human or potentially human inhabitants. Couldn’t they, one wonders, have come to terms with any such intelligent beings? Wasn’t the planet big enough to be shared? But it was based on bitter experience. There had been other extra-planetary colonies planted by other overcrowded worlds with which their home, their Earth, was in communication. In every instance, any attempt at cohabitation by two completely alien races had resulted in catastrophe: either the colonists themselves had been wiped out, or they had been obliged to exterminate the original natives—and that necessity was overwhelmingly repugnant to a highly civilized people like theirs.

And then one day there came shambling into their little town from the far-off jungle a troop of some score of creatures of a kind the colonists had never seen before.

Like the beasts, these creatures were covered with thick hair. Occasionally they, especially the young ones, dropped on all fours and lurched ahead on their knuckles; but for the most part they walked upright, though round-shouldered and with their heads inclined to the ground. And they chattered. So did many of the
animals, but this chatter sounded almost like speech. Aside from that, they had few characteristics of humans as the colonists understood humanity—they were quite naked, they performed the most intimate functions casually and openly, they grabbed food wherever they found it, and spat it out if it was not to their taste. But they threw stones and wielded sticks, and they made fires. They made them of the nearest fences.

The colonists’ first reaction was spontaneous and inevitable. When the strangers moved into their fields and their streets, raided orchards and markets, met resistance with violence, there was only one thing to do, and that was to fight them off and drive them away. The colonists were a peaceable people, descendants of centuries of good, law-abiding citizens of a peaceful world, but they could not be expected to let themselves be looted, injured, even killed. At first, reluctant to treat these newcomers as they would have treated invading animals not on the borderline of humanity, they tried to drive them off with clubs, even to meet them with bare fists. But the strongest of them was no match for the immense strength of these creatures rather smaller than they; and after several young men had been left bleeding or with broken bones, and two of the older men had died of their injuries, they had no choice left.

They did not possess the most advanced weapons of their native planet, but they had been supplied with plenty of good serviceable firearms and ammunition. So far they had been able to deal with the wild beasts who threatened them, by means of snares and axes. But this was the emergency for which lethal weapons had been given them. Most of the guns were still stored in the ship; a party was organized immediately to get them and bring them back. Four hours after the nomads had wandered into the colony, the colonists gathered in a compact regiment and systematically started firing.

Three of the creatures fell dead, shot expertly through the head. The rest turned tail and dashed back whence they had come. There were mountains a few miles to the east of the valley which was now the colony, and the foothills were full of caves. Undoubtedly it was to these caves that the aggressors were fleeing. They had probably come from them, if they had not wandered from still farther away.

As they ran, one of them suddenly reached out a hairy arm, seized a frightened girl who was in their path, and ran on with his screaming captive held against him. Desperately the nearest men shot after him, willing to kill his victim too if necessary, rather than leave her to a worse horror. But
the bullets missed him. The troop disappeared in the distance.

She was a beautiful girl, just 18 years old. Her name was Amritse; her father was a farmer on the outskirts of the town. He led the group that pursued the fleeing creatures, his face grey, his eyes staring, his gun triggered. But the colonists were soon outdistanced. They led her broken father back to his companions who were caring for their wounded.

Their own dead they cremated, as was their custom; but the three dead invaders they buried, as they did all inedible animals they killed. Only human beings were worthy of dissolution by pure fire.

When at last a shocked quiet had settled on the devastated colony, the Chief Justice, who was their highest official and by common consent their leader, called a general meeting in the largest building of the town—which for the present served them as auditorium, courtroom, school, and church. Even the nearest relatives of the two murdered men were there. Everyone came except the injured and Amritse's stricken parents.

And one other.

Where is Aghonizzen the Chief Justice wondered, looking uneasily about him. Aghonizzen was his son, and his righthand aide. His wife was dead; Aghonizzen was his sole hold on a personal life. Now he was nowhere to be seen. The Chief Justice conquered his disquiet and turned to the assembled throng.

All over the hall people were clamoring to speak first. Firmly, and as soothingly as he could, the Chief Justice established order.

"You will all have a chance to give us your advice," he told them. "But first let us consider what questions we must answer in the face of this disaster."

"First, can we protect ourselves against a return of these invaders, or against another group of them? And how?"

"What about Amritse?" several voices yelled.

"I have not forgotten Amritse," the Chief Justice said sternly. "I hope and believe, poor girl, that she is dead. We have no idea how many of these—these beings there are; for us to leave our own territory, try to find them in the jungle or the caves, would be simple suicide, and have small chance of saving her. We must recognize her as lost, just as our two comrades whose ashes are still warm are lost to us."

Young people were jumping to their feet, shouting him down, waving their fists in the air. For a moment the Chief Justice was in danger of being mobbed and overwhelmed. Then the men and women of his own generation came to his rescue. Margotz, who had been pilot of the spaceship 20 years before; Envereddin, who
had for a long time been the colony's only teacher; Lazzidir, its first doctor and now head of the small hospital, all bestirred themselves. Slowly they calmed the excited protestors, gained silence for the Chief Justice to go on. He felt drained and shaken, but he was not their leader for nothing.

"And the second thing we must consider," he said, facing them down, "is whether these are intelligent beings, however primitive. If they are, we should be violating Council law, to which all of us who founded this colony gave our unbreakable pledge, if we remained on this planet. We should be obligated to destroy all the evidences of our stay here, to activate our ship again, and under our instructions from home to set out again to search for a suitable world."

He shut his eyes and braced himself for the onslaught. He longed for Aghonizzen, who had the same charisma for the young as he had for their parents, who would have been able to control them and get them to think and talk logically about the problems before them. Where has he gone? he worried; and was afraid to let himself guess.

But this time there was no uproar. What he had said seemed to have struck his audience dumb. They sat and stared at him, young and old alike.

Twenty years of sacrifice and toil and struggle, their farms and their homes and their burgeoning town—all to be given up? The long, weary search to begin again? And what if at the end they never found a habitable planet without intelligent autochthons? Were they to return, old and worn out, to the over-populated Earth whose lack of opportunity had driven them out—where the vagaries of time would make that whole world a world of strangers, their relatives and friends long since dead?

It was the original colonists through whose minds darted that bleak prospect. To the young, natives of this planet, the whole idea was unbelievable.

"And I think," the Chief Justice went on, "that we shall have to decide the second matter before we can consider the first."

Under his calm speech anxiety gnawed. What had happened to the boy? Was he living somewhere, hurt or dead? The last sight of him the Chief Justice had had, had been in the midst of the battle. But he continued speaking.

And little by little he persuaded them. Envereddin, Lazzidir, Margotz, others of the older men and women came to his aid. "There is no need for immediate action," he said before he dismissed the meeting. "It is most unlikely that these invaders will return soon, after losing three of their number, or that another nomadic band will arrive suddenly."
After all, in 20 years this is the first such disaster. Talk things over among yourselves, and in a week or so we shall meet again and come to some conclusion.

“One thing more I must say before we leave, and then I must go and see what I can do to comfort Amritse’s poor parents. I know some of you hot-headed youngsters are eager to go in search of her. I implore you not to do so. It is most unlikely that she can still be alive, and you would almost certainly get yourselves killed. We have already lost enough, and we need you.”

And as he watched the assembly breaking up, some of them still stunned into silence, others arguing and urging, he felt within him the frightened certainty that his own son had not waited for that warning.

It was six days later that he knew he was right. The Chief Justice’s first act after the meeting had been to post sentries, day and night, both in the town and on the outskirts of the settlement—strong young men, fleet of foot to raise an alarm. It was a town sentry, late at night, who raised a cry. Exhausted, stumbling under his burden, dirty and ragged and with his hair matted with dried blood from a scalp wound, Aghonizzen staggered into the town. And in his arms he bore the unconscious girl.

At the hospital they sent for his father and for her parents. All he himself needed was first aid and rest and food. The girl was in much worse plight. Her right leg was broken, she had been savagely beaten and was a mass of bruises, and she remained completely unconscious. Aghonizzen, as he laid her down, gasped that until the day before she had been delirious, and she was in a high fever. He had had to gag her to keep her quiet, lest they be heard by her captors. The rest of the story, the doctor ordered, must wait. But after Amritse had been examined and cared for, Lazzidir was forced to acknowledge to her frantic father and mother that the girl had been repeatedly violated.

When the Chief Justice returned to the hospital the following morning, he found his son sufficiently recovered to be discharged. The boy still showed the effects of his terrible journey, but he was able to go home to his own bed and to tell his story, bit by bit, to his father. His first words startled the Chief Justice.

“I had to go,” he said. “Amritse is my girl.”

How little we know of what goes on in the minds and hearts of our children, thought the older man. He had been so close always to the boy, but he had never suspected. And under his surprise was a little glow; Aghonizzen had said “is,” not “was.” He would not have wanted a son whose love could be destroyed by the loved one’s misfortune.

In short bursts—sometimes he
even dozed off in between—Aghonzzen at last gave the whole account. He had started out only minutes after Amritse had been abducted, before any of the others, but even in his agony and despair he had kept his head. He knew there was no chance of rescuing her by force. The band was out of sight but their trail was clear, and at times he could even hear their blundering progress through the forest. Obviously they were heading for the foothills.

It was night before he caught up with them. In the moonlight they lay sprawled on the ground, sound asleep, even they worn out by the day’s excitement. He approached cautiously, pretty sure they would have posted a sentry, and he had guessed correctly. Probably no alien could have the intimate mastery of this wild territory which the natives had, but Aghonzzen had lived always in a half-pioneer community, and he too knew how to walk noiselessly and stay unobserved. From a safe distance he watched, and as he expected saw one of the creatures standing by the embers of their fire. But search as he might, he could catch no glimpse of Amritse.

He watched all night, until they awoke and began to move on again. Then he saw that some of them had slept, not on the ground, but in the lower branches of the trees. And he saw the heavy male who had seized the girl descend from a tree with her in his arms. She had been bound with tough vine-stems; he was not near enough to catch more than a bare sight, but he could hear her moaning. It was all he could do to hold himself back. But he knew any possibility of saving her would be gone forever if he showed himself now; he would have been torn to pieces instantly. In his haste he had not even armed himself; he had no weapon of any kind. As soon as they had picked up and started off again, he followed the trail.

In his night’s vigil he had been able to get a better idea of the creatures. There were 14 of them, he knew now, counting three who had shared the trees with the abductor. Since three had been shot, there had been 17 who had invaded the colony. Eight of those left were children or young adolescents; five were adult females. The three the colonists had killed had been young males of about his own age. So the only full-grown male was the abductor himself, and he must be their leader, or perhaps the father of a polygamous family.

The implications of that sent a cold shudder through Aghonzzen’s body, but there was still no way to rescue Amritse except by strategy. And now he realized another thing—the tying with vine-tendrils meant an ability beyond that of any lower animal: however unevolved or degraded, these were intelligent beings equivalent to man, and by
Council law the colonists would have no choice but to abandon the planet.

But not without the girl, Aghonizzen vowed, unless he himself met death first.

It was on the third night that his opportunity came.

It seemed incredible, careful as he had been, that the sentries had not caught sight or sound of him. He slept by snatches, waking at the least noise. What food he ate was wild fruit or berries; he dared not light a fire, even if he had been able to snare some small animal. Thirst was beginning to tell on him when he came on them again that night, and found them camped on the banks of a river.

There were no trees bordering it large enough to bear the leader's weight. He lay snoring a little way from the rest of them. And Amritse, still bound and either asleep or unconscious, lay tied to a sturdy bush, by his side. The sentry this time was pacing the camp. Now, however, because of the river, he had only three sides to cover.

Aghonizzen watched him with straining eyes. Back and forth he paced, his head cocked for any sign of danger. The fire, which apparently they kept burning to ward off predatory beasts, was almost out.

He watched the sentry searching the ground for twigs to feed it. In this more open country, there were fewer of them than in the forest, and they had already used up what had been close at hand. The sentry turned his back and walked off a dozen steps. He began to gather wood, his head bent.

Risking everything, Aghonizzen took his one chance. Hardly breathing, he sped to the bush, swiftly untied the tendril that held the girl to it, lifted her slight body, and dashed away.

Fortunately she did not wake or cry; perhaps they had fed her soporific herbs to keep her quiet. So silent was he that the sentry was not alerted. Aghonizzen was almost out of hearing, and quite out of sight, before the sentry returned to his round and discovered the captive missing.

Then, as he had known would happen, there were outcries and hubbub, and the chase was on. Abruptly, stopping only for a deep drink of river water, Aghonizzen changed his course. Relatively intelligent these creatures might be, but they were no match for the tactics of a civilized human. They would expect him to return the way he had come. Instead, he went at right angles, making for the forest. As soon as he reached it he searched for a hiding-place. Light as the girl was, and now emaciated too, he also was near the end of his strength. It was in pulling her into the thick underbrush that the jagged end of a broken tree-branch slashed his scalp. There was nothing he could do about that but
brush the blood out of his eyes until the bleeding stopped of its own accord. Holding tightly to Amritse, he fell into exhausted slumber.

When he awoke it was broad daylight. His first thought was of the girl. She was awake now, her eyes open, but there was no recognition in them. As he lifted her she whimpered in terror. His soothing words met no response. He must get help as soon as possible, or he feared she would die. He listened intently and heard nothing except bird-calls and the rustlings of small animals. He laid her gently on the ground and climbed the nearest tree as high as he could clamber. Between the forest and the invisible river there was no sign of his enemies. He climbed down again and, dread in his heart but urgency in his gait, hurried as best he could in the direction of the town.

“She will live,” Lazzidir said. “Whether she will regain her reason I can’t tell yet. But we can hope.”

By the time the second meeting was called, Aghonizzen had recovered sufficiently to be able to address it. The Chief Justice’s advisers had gathered in his house and heard the story first. A long discussion followed, and by the time the colonists had filled the auditorium the leaders’ decisions had been made.

Every colonist able to travel was in the hall. They had spent a week of fear that the marauders would come again. By this time they were confident that there would be no expedition of vengeance. The memory-span of the aborigines was too short, the power of their chief too limited, for a renewed attack.

“There is no doubt that these are intelligent beings, sparse and nomadic as the population may be,” Aghonizzen told them. “They are far too primitive and savage for us to negotiate with them; the only way we could maintain ourselves in safety on this planet would be by exterminating them. That, as we all know, and as my father has already said, would be a violation of the law by which we are bound. We made a mistake, however innocently, and we must pay for it.”

A burly young named Brogdin, bandaged still on both his shoulders, sprang to his feet. He was a troublemaker, and he had followers. But like any colonist he had a right to express his views.

“We are no longer bound by Council rules!” he shouted. “This is our world now; our fathers and we have worked for 20 years to build a home in it. I say, let’s forget the old formalities and protect ourselves! These animals surprised us once and got away with it. It’s not going to happen again, Council rules or no Council rules. Who’ll join me in an armed campaign to hunt these creatures and wipe out all of them wherever we can find them?”
It was touch and go; there was imminent danger that Brogdin would stampede the meeting. It was Envereddin, who had taught them all, who saved the day. She raised her arms, and the tumult halted.

“We are civilized men and women,” she said mildly. “We are not an invading army on this planet; we are peaceful colonists. The first-comers were all chosen by the Council and we are the representatives of an advanced society. We are not going to revert to the condition of the brutes we find now are the original inhabitants.

“Is that the kind of instruction I gave you young people when you were all my promising pupils?”

There was some shamefaced laughter, and the commotion died down.

To the Chief Justice’s surprise, the next objection came from the oldest colonist—Megardis, whose husband had died in their first year, leaving her to work their farm alone.

“I am not satisfied, Chief Justice,” she said, “that just because these creatures strike us with stones and clubs, or know how to tie vine tendrils or kindle fires, this is proof they are fully human. On our own Earth we had apes who could do almost as much. But they were not classed as human beings, and we were free to kill them if they attacked us.”

The Chief Justice glanced significantly at Lazzidir. Reluctantly, the doctor stood up.

“We had hoped,” he said, “that I would not have to reveal this. Unhappily, we have absolute proof. So far, only the few most nearly concerned know about it. As many of you have had occasion to know from experience, one thing we brought from Earth, our home planet, was the most advanced medical techniques and facilities. It is little more than two weeks since the attack on our colony. But the tests I have made are positive. Yes, these are human beings.

“Amritse is pregnant.”

There were gasps and groans. Amritse’s mother burst into sobs. And her father, his face ashen, said in a barely audible voice: “Our poor daughter has been driven mad by her terrible calamity. My wife and I would far rather see her dead than have this further horror inflicted on her. We are hoping to persuade Lazzidir to grant a peaceful death to her and—and the child.”

The doctor shook his head firmly. But before he could speak, Aghonizzen jumped up.

“Listen, all of you,” he cried, his voice breaking. “The child—yes. Lazzidir will know about that, and it is justified by our laws. But Amritse—I love Amritse, and when she was herself she loved me. Amritse is my chosen wife, whether she ever recovers or not. But she will recover—I shall cure her by
my love and care, and she will be again what she was before, this dreadful thing forgotten.

"But not if we must stay on here, in constant danger of another raid by some band of these savages. My father and the wisest minds among us all say we must go, either back to the old home or on to find another. They have many reasons, and they are all good. But I, who was born here like so many of us, and have never known any other home, implore you to vote to go, for Amritse's sake if for no other reason!"

The vote was almost unanimous.

"Margotz," the Chief Justice said then, "you are in charge of our communication system. Exactly how long will it take to tell Earth what has happened and to receive their orders?"

The ex-pilot nerved himself.

"After our talk last night," he said, "I went to the ship. It is 20 years since our transplanetary radio was activated. I examined it with the chief attendant. It is no longer operative, and it is beyond repair with our facilities. We must make our own decision without instructions from home."

The Chief Justice gazed at him keenly. Margotz was the only one of them, except a young man he was training to be his successor, who had the necessary knowledge. It did not seem possible that the radio could deteriorate; but nobody could prove that Margotz was lying. Perhaps he was; perhaps he was among the many who were barricading themselves nightly in their houses and going armed about their work, in fear of a return of the savages, the many whose nerves could not endure the thought of months more of waiting until a message could be sent and returned. The Chief Justice was not sure he could keep his hold on the assembly if he accused so revered an elder of sabotage. His mind, conditioned to legality, was uneasy, but he decided upon the lesser evil.

"Then that's that," he said calmly. "We must make up our own minds. We shall proceed at once to pack our belongings and move into the ship. There were only 250 of us who came here in it, but it has a capacity of five times that number. Then we must systematically destroy every trace of our sojourn here. Some day thousands of years in the future these aborigines will become civilized, and they must never know that aliens from Earth, which to them is a far-off world under another sun, have ever come here.

"All we still have to determine is whether we are to seek another planet in another solar system where we can plant a new colony, or to return to Earth and either remain there or join another colonial quest later."

What he shrewdly guessed would happen came about. Most of
the older men and women longed to die where they were born; the less adventurous among the young either were indifferent or were eager to exchange the hardships of pioneering for the amenities of civilization. A month later, their fields were bare, their buildings were leveled and the structural materials destroyed, their movable property was aboard the ship. The jungle would soon grow back in the clearings.

The first extraterrestrial colony on that planet had disappeared.

In 1969, by permission of one of the new African governments, a team of archaeologists from two European countries and the United States were undertaking a joint excavation under Professor Gundlichen, whose previous digs in the district had made it strongly probable that fossil remains of ancient man would be found there. In previous expeditions flint tools had been unearthed, and the remains of wood fires whose charcoal, by the carbon-14 test, showed an age of approximately 30,000 years.

In the second month of the project, they made their first find. Gundlichen himself was in charge when a worker unearthed a fossilized human thigh bone. Slowly and with infinite care three human skeletons were uncovered, lying tangled together as if they had been thrown into a common grave. They were in a stratum still lower than the one in which Gundlichen had found tools and charcoal the year before.

They were all male, and young. They were of the Neanderthal type—the first of that race to have been discovered in Africa.

The skeletons were photographed in situ preparatory to their removal. Then the finicky operation began. Gundlichen bent down and inserted his fingers delicately under the nearest head as soon as it had been freed. Nearly the whole staff was there watching.

Suddenly he turned ghastly white and dropped the fossil skull.

---

**IT'S CORRECT TO CLIP!**

Filling in the coupon on the next page offers the following advantages:

1. Guaranteed monthly delivery to your door of the best in science fiction and fantasy reading.
2. Reduced rate—it’s cheaper to subscribe than to buy your copies at the newsstand.
3. An essentially unmarred copy of this issue—the coupon is backed up with this box, and its removal does not affect the text of the surrounding material.
back into its resting-place. Pemberton, the British archaeologist, who happened to be beside him, caught him before he collapsed. The others hurried over.

“What is it? Is it his heart?” somebody asked. Gundlichen rallied and pulled himself upright.

“I’m all right,” he said brusquely. “You!” he called to the native foreman. “Tell the men to stop work at once.”

Phlegmatically the workers dropped their implements and stood aside.

“Go home,” Gundlichen said. “Do not come back till tomorrow.”

The puzzled professionals glanced at one another in perplexity. Gundlichen was their chief, but what was wrong? The old man achieved a smile.

“We’ll go on tomorrow, ladies and gentlemen,” he said suavely. “Something’s come up that I want to study before we proceed further. Pemberton, and you, O’Brien”—he turned to his two colleagues—“will you wait here a minute? There’s something I’d like to talk over with you.”

When the three distinguished archaeologists were alone, Gundlichen seemed to have difficulty in speaking. He was still pale, and his eyes glittered.

“We shall of course apply the carbon-14 test to these bones,” he said at last. “I have no doubt that we shall find these fossils even older than the material I dug up last year.

“So—what do you make of this?”

He stooped again and raised the closest skull. It rattled, and something fell out into his hand.

“O’Brien,” he said, “look at the other two.”

Completely at a loss for words, the three men stood staring at the incredible things.

Inside each of those Neanderthaloid skulls there had been a steel bullet.
Whether more things go wrong with suburban homes or in them is an eternal dispute between plumbers and psychiatrists which we do not intend to drag into these pages. We all know, however, that a lot of things always seem to need fixing out there. Take Pete and Gretchen Goodwin, for instance, whose new house had seagulls in the sink, bobcats in the shower stall, white mice in the conversation pit and black furry things under the bed. These are problems which clearly require professional help—this time in the person of Max Kearny, who reluctantly returns to his old hobby, occult detection.

**BREAKAWAY HOUSE**

*by Ron Goulart*

Gretchen Goodwin stepped into the kitchen area, then stepped out and screamed tentatively.

Pete Goodwin came running from the den corner of the recreation area. "What is it?"

"There's," said his wife, nodding at the sink, "a seagull sitting on the chafing dish."

Pete still had their checkbook in his hand. He slipped it into his hip pocket as he approached the sink. "Yeah, that's a seagull all-right." Masking the gesture with his body Pete made a get-out-of-here motion with his thumb. He stepped closer to the dingy brown bird and winked. "I'll try and shoo him away, honey."

"Be careful," said Gretchen. She was a big blonde girl, pale now and standing on tip toe. "Maybe I could call an exterminator."

"It's against the law to exterminate a seagull," Pete said. "Cut it out," he whispered to the bird.

"Maybe Mr. Hazzard with Dillman/Eclectic Homes could help," suggested Gretchen. "We have had all kinds of problems since we moved into San Xavier Acres."

Pete reached out and tried to open the window above the sink. "I can cope with a seagull." He couldn't get the window to open. "All the windows stick," said Gretchen. "I told Mr. Hazzard about it twice."

Pete got the seagull by the feet and carried it to the front door of the house. The bird said, "Awk,"
once but didn’t otherwise object.

“Won’t you make him dizzy carrying him upside down like that?” asked Gretchen.

Her husband tossed the bird out toward their lawn. “Whose side are you on?”

“It’s just that it’s ten miles from the Bay and he’ll need a clear head to fly home.”

Pete closed the door. “I’ll get back to paying the bills. Okay?”

“Pete,” said Gretchen. “There is something wrong with this house. Why don’t you admit it?”

“All new houses have a few kinks in them.”

“We’ve been here two weeks. And we’ve had seagulls in the sink and a bobcat in the shower stall and white mice in the conversation pit and whatever those black furry things were under the bed that night,” said Gretchen. “Not to mention the windows that stick and the doors that don’t open and the legs that fall off sofas and the canisters and apothecary jars that jump off shelves, Pete.”

“It’s better than the apartment we had in San Francisco, isn’t it?”

“No,” said his wife. “I think it’s haunted.”

Pete grunted. “San Xavier Acres is only two months old. Before the houses were here this was just empty fields. How could it have ghosts?”

“Well, poltergeists then.”

Pete said, “I’ve got to figure how we can settle with Macy’s, Magnin’s and Robert Kirk this month.”

“I won’t bother you. I’ll get to work on my children’s book.”

“Which one is this?”

“Kevin The Conveyor Belt,” said Gretchen.

“Good,” said Pete. He fished out the check book and headed back for the den corner.

“Pete,” said Gretchen.

“Um?”

“Listen.”

“To what?”

“Hear that dripping?”

“No.”

“Well, listen.” She started for the bedroom. “In the closet,” she said, pointing.

Pete opened the door. Something was dripping into his tennis shoes. “What the hell.”

“It’s not raining and there aren’t any pipes in here.”

Pete got on his hands and knees and took a sample of the dripping liquid on his forefinger. He sniffed, then tasted. “Maple syrup.” He looked up into the closet. “Seems to be coming from under my sports car cap.” He flicked up the hat and the dripping stopped. There was nothing on the shelf beneath the cap. “Huh,” he said.

“Poltergeists,” said Gretchen.

Pete didn’t answer her.

Max Kearny hurried through the fog and up the steps of the grey Victorian apartment building. There was no mail on the eagle-
footed table in the hallway, which probably meant his wife was home ahead of him.

He let himself into the ground floor apartment and said, "Jillian?"

"In the kitchen," called his wife.

Jillian, a slim, auburn haired girl, was bent over a card table. On the table were a dozen sandwiches.

"Job?" asked Max. Jillian was a food consultant to ad agencies. "Yes," she said. "Do any of these look appetizing?"

Max studied the sandwiches. "No. What's in them?" "Watercress. We've got to get an appetizing shot of a watercress sandwich."

"Who's the client?" "Watercress Advisory Board." "That one with the green olive on top isn't so bad looking," said Max. He kissed Jillian and then sat on a yellow stool.

"Max?"

"Yeah?"

"Do you ever get the urge to take up your old hobby again?"

"Occult detective work?" Max shrugged. "Not too much." He narrowed one eye and watched Jillian. "Why?"

"I've got a case for you if you want to take it."

Max said, "You've got a knack for working a little magic yourself. Is this something you've gotten messed up in?"

"Nope," said Jillian, stepping back from the table. "It's the Goodwins."

"Pete and Gretchen?"

"Yes."

"Pete and Gretchen are mixed up in something occult?" asked Max. "Gee, I can see Pete as just going on as a copywriter with Jarndyce & Jarndyce and Gretchen writing Gordon The Garbage Truck and so on. But I don't see them as possible clients for a ghost detective."

Jillian said, "They've got poltergeists."

Max frowned. "At that new tract house of theirs?"

"Yes," said Jillian and told him what had been happening to the Goodwins.

"That doesn't sound like poltergeists quite."

"Do you think you could investigate?"

"I suppose," said Max. "Is that what Pete and Gretchen want?"

"Gretchen asked me," said Jillian. "I don't think Pete wants anybody to look into it. Which is kind of odd. Anyway, we're invited for dinner Thursday night. Want to?"

Max hesitated. Then said, "Okay."

Pete Goodwin scratched at his short blond hair and said, "Gretchen exaggerates, Max. We're still on our shakedown cruise with this house and little things are going to show up."
Max watched the sherry in his glass. "Of course, Jillian and I are apartment types so far. But maple syrup in the closets and bobcats in the shower. That stuff sounds unusual, Pete."

"Life is different in the suburbs, Max."

A soaking wet man stepped out of the bathroom. He was small and his thick dark hair was running onto his ears and forehead.

Gretchen yelped. "Mr. Hazzard."

"I was," said Hazzard, shaking himself, "standing on your front stoop, I rang the chimes and somehow found myself in the shower stall."

"These new houses," said Jillian, tapping Max's knee. "I don't want to intrude on your cocktail hour," said Hazzard. His suit gave off a smoky smell.

Pete had stepped over into the kitchen area. He caught an orange towel and flipped it to Hazzard. "Mr. Hazzard," he explained, "sold us this house. He's with Dillman/Eclectic, builders of San Xavier Acres."

"The shower was on when I found myself in it," said Hazzard, toweling his head.

"We have trouble getting enough hot water," Gretchen said.

"I didn't notice." Hazzard blot ted his face and patted his shirt front with the towel. "I had a reason for popping over, folks. I'm a little worried about Lot 26."

"That's us," Gretchen told Max and Jillian.

"None of our other modern living homes," said Hazzard, "seem to be having the trouble you people are."

"It's okay," said Pete. "Don't fret about it, Mr. Hazzard. New houses can be quirky."

"Dillman/Eclectic has built nineteen developments since 1953. All of our homes are notably quirk free." Hazzard combed his hair and then shrugged several times in his wet suit.

"We're happy here," said Pete. "Some of the other folks," said Hazzard, "particularly Lots 22 and 23, have the notion, and I don't want a panic to start, that you people are haunted."

"People gossip a lot in the suburbs," said Pete. He took Hazzard's arm and guided him toward the door.

"If it spreads," said Hazzard. "You get into some warm clothes. I'll drop over to your office after work tomorrow and talk to you." Pete helped Hazzard out into the night.

"Pete," his wife said. "Guys in the sales end of things are all twitchy."

"But Pete," said Gretchen, "he got teleported from the front door into the bath."

"We can go into our personal problems when we don't have guests," said Pete. He came back into the conversation sector and
picked up a wedge of feta cheese.  
“Max,” said Gretchen. “What do you think?” 
Max looked across at Pete. “Teleportation isn’t a feature of the average house.” 
Pete said, “Drop it, Max.” 
“It’s a ghost, isn’t it?” Gretchen asked. 
Max drank some of his wine. “If it is, it’s Pete’s ghost. And he doesn’t seem to want to talk about it.” Max set down his glass and glanced at the spot where Hazzard had been standing. He rose and went over. 
Next to a pair of damp footprints was a scattering of dirt. The dirt was dry and as Max touched it it glittered faintly gold. 
Back on the sofa next to Jillian Max said, “When’s your next kids’ book coming out, Gretchen?” 
“Randell The Rotary Press? In September.” The blonde girl jerked to her feet. “I’ll go look after dinner.” 
Jillian put her hand on Max’s knee and squeezed slightly. 
Jillian was sitting cross legged on the end of their bed. Her hair was down, touching her shoulders. “But why a gnome?” she said. 
Max untied his shoes. “Because I get the feeling it’s some kind of elemental. Those clumps of dirt. I think the gnome has them clinging to him. Those little guys live underground, you know. And they can change shape usually.” 

“This gnome was the seagull and the bobcat?” 
“Probably,” said Max, wandering around the bedroom barefooted. “They’re given to pranks. They can also turn invisible if they want to. Which would explain the other tricks. At least some of them.” 
“But why doesn’t Pete admit that something’s wrong?” 
“Well,” said Max, wandering around the bedroom barefooted. “Because he’s met the gnome. Their house, Lot 26, is probably over an underground cave or something.” 
“You mean the gnome might have a treasure hidden there?” asked Jillian. “That’s what gnomes do isn’t it?” 
Max nodded. “It could be Pete’s interested in the treasure.” 
“Is it dangerous?” 
“Sure,” said Max. “Never trust a gnome.” 
“Are you going to investigate?” 
“No,” said Max. “I don’t want to get into a frumus with Pete over this. He was pretty nasty about it tonight.” 
“There’s Gretchen to think about.” 
Max sat on the bed. “She’s not a very good cook, is she?” 
“With a gnome in the house, who would be. But, Max, you will help them?” 
Max said, “If Pete asks me to. Otherwise, no.” 
Jillian bit her lip. 
Pete Goodwin rolled silently
out of bed, listening carefully to the sleeping Gretchen. He skulked across the thin carpet and ducked into the hall.

He moved quietly through the dark, still house and edged through the door to the garage. Kneeling in front of the Volkswagen he pushed aside cardboard cartons.

Beneath a packing case of back issues of The New Yorker was a hole, some three feet in diameter. The hole glowed faintly blue.

"Blum," said Pete. "Hey, Blum."

The hole went quite deep and Pete’s voice echoed.

"Ready to compromise?" said a burred voice.

"We're not going to move," said Pete. "But look, Blum, I've got friends with a lot of occult knowledge. If you don't turn over some of the treasure I'll have something drastic done to you."

A chubby man, some two feet high, rose up out of the hole. He wore a conservative suit and a checkered hat. "Peter, I've told you. I only work here. The treasure belongs to the higher ups. The really influential gnomes. I'm just here to watch it."

"They wouldn't miss a little gold," said Pete.

"I'm in enough trouble already," said the gnome. "I tried to scare the builders away and that didn't work. I've been deviling you and your bride and that isn't working."

"Sooner or later I'm going to outwit you and you'll have to turn the treasure over to me."

Blum shuddered. "I wish you'd never stumbled onto my lair."

"I have a nose for this kind of stuff," said Pete.

"Suppose I gave you one gold nugget. Would you vacate then?"

"One nugget? That won't even settle what we owe Macy's."

"Two is as high as I could go," said Blum. "Once I gave a shepherd three nuggets for taking a thorn out of my foot and I caught some awful trouble from the higher ups."

"Let me cross the barrier," said Pete. "And just look at the gold anyway."

The gnome caught his hat by its brim and shook his head. "No, no. I can get in dutch merely for talking to you. Come on, Peter. I've put centuries into being a gnome. It's the only thing I know. Don't blow it for me."

"But all that gold," said Pete. "Right here, under foot."

"I'm warning you, Peter. All the stops are going to get pulled out," said Blum, jabbing with his thumb. "Whoops," he cried and dived back into the hole.

Pete reached out to catch him but his hand was stopped at floor level by an invisible shield. Then Pete thought to look behind him and see what had caused the gnome to bolt.

He turned and saw a flash of polka dot nightgown retreating.
He held his breath while he moved the boxes back over the hole.

Max Kearny swung his car into the driveway of the Goodwin house. He jumped out and ran across the mist damp lawn and toward the front door. As he rang the bell Pete came around the house from the garage.

"Is Jillian here?" Max said.

"Isn't Gretchen over visiting her?"

"No, damn it," said Max. "What are you and your gnome up to?"

Pete widened his eyes.

"Gnome?"

Max jumped off the welcome mat and down to the cobblestones next to Pete. He grabbed his arm.

"Gretchen saw you last night, you nitwit. She called Jillian and asked for help."

"She did?"

"Look," said Max. He jerked a note out of his coat pocket.

"I didn't know Jillian printed like that," said Pete, studying the note.

"Read the thing."

"'Since you won't help Gretchen I really think I have to tackle that gnome myself,'" read Pete. "'Pete is completely ensnared by the thing.' That's a subjective judgment. 'Gretchen saw him pleading with it in their garage last night. I think I can work a spell or two on the thing and get rid of it.'"

"Now where's Jillian?"

"I hope she's not botching up that gnome, Max. We're friends and all, but I need that gold."

"I wasn't going to do a damn thing for or against you. But now my wife's involved." He pulled Pete toward the garage.

"Could you really work something on Blum," said Pete. "That's the gnome, Blum. We could split the treasure fifty-fifty."

"I'm afraid he's worked something on Jillian and Gretchen."

"They weren't around the house anywhere when I got home from work." Pete stopped next to the boxes that had been over the gnome hole. They were pushed aside and the hole glowed in the dim garage. "I was just coming in to check here when you drove up. I guess they have been prying."

Max knelt next to the hole. Face down at its edge was one of the occult volumes from his library. *Elementals & How To Beat Them.*

"Jillian," Max called.

"You're not down there are you, Gretchen?" said Pete over Max's shoulder.

Finally a voice answered. "You guys. You guys. Have you really any idea what you're doing to me."

Up from the hole came Blum.

"My wife," said Max, turning carefully to the index of the anti-gnome book.

"She's down here with Mrs. Goodwin," said Blum. "Here they stay, too. Until you squatters pack up."
Max ignored him and read briefly in the book. He turned to Pete and said, “I’m going down there. I want you to stay up here.”

“No. I want to see the gold.”

Max gritted his teeth and swung at Pete’s jaw. “Oof,” said Pete. “Hey, Max.”

Max swung again. “Sorry.” He managed to knock his friend down with two more blows.

Then he spun and muttered a quick spell.

Blum blanched. “Everybody’s invading my privacy today.” He retreated.

Max found nothing to block him.

Stone steps twisted in half circles down and around. Far under the garage was a long low cavern. Sitting in one corner, surrounded by a ring of magic fire, were a dusty Jillian and a grimy Gretchen. Near them were bricks-and-boards shelves on which were laid out several dozen bright gold nuggets. Shelves on all the other walls were empty.

“You’re perceptive,” said Blum. “You knew that in order to beat me you have to be uninterested in my gold.”

“Right. Which is why I didn’t want Pete along.”

“And it doesn’t tempt you?”

“Not at the moment. Are you okay, Jillian?” He moved nearer to his wife.

“Yes,” said Jillian. “I’m sorry I botched things.”

“Where’s Pete?” said Gretchen.

“Asleep against the Volkswagen,” said Max. “I want them both released.”

“You’ve got to promise to go away,” said Blum.

“Max,” said Jillian. “On that little table over there.”

Max dived for a portable card table. On it was a memo size sheet of paper. It said: “All gold must be away by midnight. Site to be vacated and gnome Blum to report for reassignment. While no direct charge is made, the authorities are not pleased with gnome Blum’s handling of matters.”

“I saw it while he was chasing us around,” said Jillian.

“I’m making a last ditch try to salvage something,” said Blum. “Maybe if you all go away the higher ups will let me stay.”

“You can’t ignore an official memo.”

Blum grimaced, his hands working at his hat brim. “Things have been so trying lately. The tensions, the failures.”

“I’ll even help you pack,” offered Max.

The little gnome sighed. “Very well. You can have your respective wives back.”

Max said, “That doesn’t look like very effective magic fire anyway.”

“So I’m a second rate gnome,” said Blum. He waved at the circle of fire around the girls and it went out.
Jillian and Gretchen stepped free. “Shall we go back up?” Jillian said.
“Right,” said Max.
The girls left the cavern and Blum said, “Want one gold nugget?”
Max shook his head. “I haven’t been interested in that sort of thing since the day I got married. Sorry.”

Blum hunched his shoulders. “I spent a half a century under Pittsburgh once. I hope they don’t send me back there.”
Max stepped back from the gnome, turned and went up the stairs.
In the garage he put his arm around Jillian while Gretchen tried to explain to Pete why they didn’t have any treasure.

---

Coming next month

... While the raft floated placidly along the river, the sun gave an alarming pulse. A purple film formed upon the surface like tarnish, then dissolved.
The earth is dying, and in its last days magic haunts its surface. Cugel the Clever, having attempted fraud upon Iucounu, the Laughing Magician, has been charged with a terrible quest.
He obtained the magic cusp Iucounu sent him for in THE OVERWORLD (Dec., 1965), but found his troubles were only begun—for he was half the world away from his homeland of Almery and Iucounu, and must return as best he could, on foot, with the demon Firx clenched about his viscera to remind him with terrible pangs of his need to return without dallying. First he crossed the MOUNTAINS OF MAGNATZ (February, 1966), and then encountered THE SORCERER PHARESM (April, 1966). Now he joins a band of pilgrims in their trek to Erze Damath for the Lustral Rite at the Black Obelisk, and enlists their aid on a further leg of his journey, in THE PILGRIMS, Jack Vance’s penultimate story of Cugel the Clever and the Dying Earth.
HIGH ON THE LIST OF RESEARCH projects these days is the problem of beamed power. Beamed power is the transmission of power by radio waves. But instead of the usual radio waves, the beamed power process will use the shorter electromagnetic radiation known as microwaves. The wave lengths used most often have a length of 4 centimeters and 10 centimeters. In five years of research, the power output in the 10 centimeter range has gone up by a factor of 25.

Microwave power transmission demands three tricky pieces of equipment. First, there must be a device that converts electrical energy to microwave energy. Second, there must be a device that transmits a beam of microwave radiation. Third, there must be a device that converts the microwave energy back to electrical energy. That's your power system.

Each of these devices must operate efficiently. You cannot tolerate much in the way of heat losses, beam spreading, or reflection. If each of the three devices is 90 percent efficient, the system will have an efficiency of only 73 percent.

If the present goals can be obtained, and if high power levels can be reached, then no wires will be needed for the transmission of power. Helicopters will hover indefinitely and can be used as platforms for weather observation and for radar and television relay stations. Cities will be powered by a chain of microwave stations. These things have all been predicted as the work progresses.

But the recent power blackout in the Northeast will be child's play compared to what can happen to beamed power. Reflectors positioned in a beam will chop off the power supply completely. Gaseous clouds of microwave absorbers can be released from a distance to drift over the network and black it out; ionized gases will do very nicely. In short, the beamed power research will solve technical problems of great complexity and yet if used will render us vulnerable to the work of any passing enemy or crackpot.
The space program had been flat on its back since the Great Depression of 1978. This shot was an opener—a one man, cut-rate trip to Mars. The mission was clear enough: To grab some impressive looking data on the fly—anything which might reap enough publicity and, eventually, money, to make more trips possible. There were no clear instructions on what to do if the data grabbed back.

FLATTOP

by Greg Benford

It was straight out of the book. A gray rim of a crater over on the left, stars glinting in the black sky and nothing else but some slightly eroded rock formations. I had come millions of miles to see it, and already I was tired of the view.

Mars, the cut-rate planet. No life forms noticeable, plant or animal, a gritty look to the surface caused by too many silicones, an achingly brilliant ball of a sun fixed in a hard sky. As advertised.

The part of my mind that believes in schedules gave me a nudge. I ran my binocs out to the extreme telescopic range, and that’s when I saw it. It wasn’t out of the book at all.

At this distance the movement was just on the edge of perception, something making a flicker of change in the weak light. Not tall, but not another lump of rock either.

“All air scouts landed,” Roger broke in. “Recovery in three hours.” The helmet mike left a ringing in my ears.

“Later,” I said, and started out at a long, slow-motion lope. Martian gravity was stronger than the Moon’s, but there was enough similarity to make my running style effective.

At least here there wasn’t as great a chance of catching the suit on a barb of rock and listening to your life scream out through a hole the size of a fingernail. And no one to help you patch it within fifty million miles.

I got a better look at it as I approached. It was a dull mat-like thing, and the movement I had detected was a slow, rhythmic push that carried it smoothly along the
ground with barely perceptible speed.

We’d landed just a few miles from the edge of one of the brownish areas that appear in the Martian summer, hoping to get the biggest variation in lifeforms—if any—within our operating radius of five hundred miles. But we might not have to go anywhere. The ecology was coming to us.

I bent over to look at it. Fiberous layers laced all through its brown surface, but the edge had the rigid look of muscle.

It seemed to be making about a mile an hour with no appreciable noise—nothing I could pick up through my suit, though you’d be surprised how much does get through even the best insulation—and with a slight undulation at the rim. A plant, most probably.

I pulled a boot back in time to avoid touching it. Plant or no, it might be stronger than it looked.

“Take a sample,” Roger said. I had forgotten he could pick up everything I saw from the television camera mounted under my left ear.

“That’s my decision,” I snapped. He was right, of course, but I still didn’t like being ordered around by a machine. They try to make them cordial, good-natured, warm, polite, etc., but somehow they always come out with the personalities of electronics engineers, and I never liked double-e’s.

I slid a surgical knife out of my side pouch and made a cut. The mat tried to back away but it wasn’t fast enough and I got a chunk the size of my hand. It went into the sterilized sample carrier and I could hear Roger muttering to himself as he made an entry in the log.

I watched the progress it made for a few moments, knowing Roger would edit out the best shots and beam them back to Earth.

The first large-scale extraterrestrial life, and all mine. I was interested, but somehow it didn’t seem quite the sensation I’d imagined. Probably because I knew that even if the plant could play bridge and quote Shakespeare, Roger wouldn’t let me spend as much time on it as I’d like. Anyway, it’s a little hard to get cold shivers down the spine about something that in a dim light could pass as a living room rug.

I spent some time inventing and discarding theories about its origin, and then moved up the side of the shallow ravine the plant occupied.

It’s hard to see how erosion could take place in an atmosphere less than one percent as dense as Earth’s, but in the low places a thin, grainy soil had collected. The rest was bare rock. Stones showed those fine overlayed webs that result from constantly freezing and thawing the small amounts of water caught in the rock, cracking and splintering the surface
with every revolution of the planet. I climbed over a short, steep ridge and got a view of the land beyond. Roger whistled.

I'm usually annoyed when computers simulate human noises, but in this case I would have done the same thing. The plain beyond was completely covered with the mat. A brown sea, lapping at the feet of the hills that stood out sharply in the distance.

"Aerial scouts just reported back," Roger said. "The growth is continuous for a radius of fifty miles."

I scrambled back down by a different path, taking the gentle slope. I could have made a good guess just from our orbit photos, but somehow our thinking had been only in terms of patches of vegetation linked together, not one plant alone. It sounded like something out of a very bad invasion-from-space movie. I was sure somebody back on Earth was going to be clever and invert the old forest-and-trees cliche.

"The timetable calls for . . . ."

"I know," I broke in. "Set up external defenses and sensors." He didn't sound very interested in the plant. But then, it wasn't his job to be curious. Maybe it wasn't mine, either.

I trotted back to the ship, opened the cargo port and began unloading the non-mobile equipment; with Mars gravity it was easy. Everything I did was rigidly scheduled; what was left of NASA wasn't taking chances with the last of its resources.

They couldn't afford to. Most of my equipment was designed and built in the middle of the '70's, to be tested on the moon flights. If it worked out, the basic apparatus would be duplicated and every one of the ships in the Mars fleet would have the same basic complement. But it didn't quite work out that way, Professor.

This is the Century of Non-Anticipation. The Great War didn't become World War One until the Second was well under way. So when the Second Great Depression hit in '78 it had to wait a while before getting a name, and by that time the space program was flat on its back and barely breathing. Nobody likes to think about it, but the exploration of space is icing on the cake and always will be.

Everybody said we were coming out of it now—1985. But the barbecue pit and tail fin crowd was grumbling about taxes, and NASA hadn't yet seen much of the New Prosperity that the Chamber of Commerce was pushing. A little bit was leaking through from the Air Force, just enough to finance this shot.

Space scientists without money become irritable, so they were using me as openers. Make a quick one-man trip with the pilot doped under drugs so he doesn't mind riding in a shoe box for half a year.
Have him grab some data on the fly—not necessarily the best information you could get, you understand, just something to look impressive and justify the expense.

Then reap the harvest of newsprint. Let every columnist from the Farm and Dairy News on up interview the astronaut (“Will you be eating fresh eggs during the trip, sir?”), push him in front of every TV camera you can find (“Are you looking forward to this historic voyage?”), let Congressmen badger him (“You’re a billion dollars worth of prestige to the country, boy!”), and gouge every homey detail out of his biography until it looks like a remake of Oliver Twist. Try to keep the technical staff quiet when they realize how little time is going to be spent on the surface.

Science, they called it.

“Sundown in one hour,” Roger announced, and I hurried to connect the power lines. I wanted to get back to the plant, but there wasn’t time.

I worked through the last half hour of sunset, a sea of darkening shadows and brutal flashes of reflected brilliance as the silicone layers in the hills caught the light. Because the Martian atmosphere lies so close to the surface, the normal diffusion of the sun’s rays doesn’t color the sky. But when the sun sinks into the thin layer of water vapor, gases and dust which the planet has been able to retain with its weak gravity, the Raleigh scattering processes take over and the land is suddenly dashed with blood, a weird fantasy of somber images.

A thin wind came up, stirring the dust like water currents mingling ocean sand. Dante would have liked the view.

And suddenly it was gone, as if a light bulb had flared, fused and gone out. Only a weak pink glow remained on the horizon, rapidly darkening into the rest of the obsidian sky.

I went inside and closed the outer lock. There was only an hour to study the preliminary returns of the air scouts, aerial photos and some sample pouches. I put my personal sample carrier with the cutting from the plant in the small isolation room next to the galley, and set the environmental conditioner to duplicate the Martian surface. Analysis could wait until I had some rest.

I read the scout reports over dinner. It was good to have a bowl of soup lie down in the bottom and behave, but the summaries, printed out in the all-capital type of computerese, weren’t going to keep me on the edge of my chair. There were no other apparent large life-forms, not even some ambitious fungi. Maybe the competition was too rough. Except for Flattop, The Educated Plant, Mars was just plain monotonous.

The food was drugged, but I’d
expected that. When NASA wants you to sleep, by God, you sleep.

By morning the dark sheet was breaking like a slow bow wave on the narrow bluff of rock below the base of the ship. The flash shots Roger took in the night showed that it moved best in the first few hours of darkness, slowing to a stop before dawn.

I ate a bar of cereal concentrate and looked out the side port. Surveys reported microrganisms—some of fairly large size—distributed uniformly in the thin soil, all with a basic DNA reproduction mechanism. That must be what the plant was after. Water could be trapped between the grains of the soil and frozen there in the Martian winter. When the short summer came, it would melt during the day and form a solution of microrganisms that Flattop could pick up without trouble.

But it was bypassing the ship like a Boston matron ignoring an immigrant. The ship was on bare, uninviting rock and evolution had probably taught Flattop to keep low, where the water collected.

God knew how old it was. Not that God necessarily had anything to do with it. My theology, basically, is that the universe was dictated but not signed, so Flattop—like the rest of us—was in limbo.

I checked the night log and found an entry about the television camera in the isolation cell. Cam-

eras are usually turned off when the area isn't being used, since Roger depends on his other senses for overseeing the maintenance. When it was rewarmed this morning, though, it showed symptoms Roger diagnosed as shorting out of some of the components, so he turned it off and was waiting for me to repair it.

That would have to wait for the flight back. The schedule, you know.

"Positive pressure gradient Section 3C," Roger droned. Coffee hissed into a cup in the automatic galley, and I sat down with it to wait for the followup check. Everything was breaking down at once.

"Pressure now normal on exterior panels." He paused. I waited, still a little tired. "Increase on internal panel 47."

I looked at the number on the wall. Forty-seven. The metal was bulging out a foot into the galley as though something were trying to push it in. My brain started operating. I remembered that 3C was the outer skin of the isolation cell, and the cell was next to the galley. I started to get up.

A grin that turned into a sneer split the bulge at its peak and widened. Wind whipped by me with a high whine to equalize pressures with the cell, which was at Martian atmosphere level. I caught a musky odor like mildewed burlap, and Roger tried to shout something
at me but couldn’t make it over the noise. Flattop was coming through the hole.

I threw my coffee at it, a reflex action, and backed away. It covered the drops before they had a chance to run down the wall. My ears popped as Roger adjusted the pressure.

“The plant is enlarging,” Roger said quickly. “Try to cut it into sections with your knife.”

I didn’t have a knife. I hadn’t thought I needed one to get a cup of coffee.

The bulkhead split again and the brown mass began to gush through. The galley only allowed enough room to do isometric tension exercises and no-gee rebounds off the walls while in flight. I was flat against the opposite wall with nowhere else to go.

I prodded it with a fork but the webbing wrapped around the prongs like an old friend and wouldn’t let go. I looked around. The deck was almost completely covered.

I caught hold of a handle set in the bulkhead and lifted myself up, fitting my heels flush with the wall. Flattop closed in below. It really did smell like burlap.

I took a last look, let go the handle and sprang. In Mars gravity it was enough to take me through the galley hatchway before I caught my right shoulder on an equipment locker and slammed into the deck. I rolled. My right side went numb, but nothing had snapped on impact.

I tried to get up, slipped on my right foot and hit the deck again. Pain began to seep back into the shoulder, a steady pulse that felt like a tendon pulled almost to the limit. Little fireballs were still popping in front of my eyes. I decided to sit there for a few minutes and think about philosophy.

The hatch had closed behind me, before Flattop could get to it. But it might be able to force its way through this bulkhead too. I remembered Roger.

“Deploy all your heavy mobile equipment against the walls around the galley. Reinforce the ventilator seals and run a continuous pressure check everywhere in the ship.”

Roger mumbled something over his loudspeaker, and I caught the low rumble of things moving. I stumbled into the pilot’s couch and fiddled on internal television. Flattop was covering the walls now, pressing against everything that contained traces of liquid.

For the first time I had that feeling you get when you miss a step in the dark and aren’t really sure there’s a next one. Until now it had just been an interesting lifeform, something you cut samples out of and filed away for the ones back home to investigate. Flattop is a funny haircut from the ’50’s or the name of somebody’s kid. And this one had almost killed me.
I watched the television screen and referred to indicators on the panel in front of me. It was several minutes before I noticed that my left hand was gripping the arm rest, knuckles white as death. I was scared.

I watched the plant until it crawled over the lens. The interior pressure built up, alternating from one wall to another, but all the life-support apparatus is between the galley and the main cabin and has double reinforcement. For the moment, Flattop couldn't crack it.

Roger and I talked about it and tried to get through to Earth, but the solar storm Cape Kennedy had forecasted was starting up, and we got nothing but noise. It was just bad luck it had to come when we were on the surface.

On a hunch, I had him pump alcohol vapor into the galley to see if it had a toxic effect. Nothing happened. Lousy hunch. We worked our way through the chemicals on board, made up theories about its body chemistry, and tried some more. Flattop didn't seem to mind.

It was mid-afternoon. "Call in all probes," I ordered, and put on my pressure suit. Roger tried to give me an argument, but I wasn't listening.

This time I didn't take the second sample inside the ship. It gave me an uneasy feeling just to get close enough to it to take a cutting.

Under the field microscope there wasn't anything very remarkable about the plant's internal structure. A gelatin sac in the center served as a digestive system and the semi-rigid fibers on the outside rolled forward like caterpillar treads when it wanted to move. Its strength came from very long threads that seemed to play the role of muscles. They contracted rapidly when they were stimulated by an electrical impulse.

I disassembled the rest of the equipment around the ship and returned it to the hold. There wasn't much point in carrying out the schedule now.

The solar flare silently hammered at the plain, its tempo gradually building. The warning light on the radiation counter under my viewplate winked redly at me, but I wasn't in the mood to wink back.

We were at an impasse, but one that would run against me the longer Flattop held on. I could get to the food supplies indefinitely, but too many things could go wrong with it in the ship. I had to act. And gnawing in the back of my stomach was the realization that if I did the wrong thing, made one bad move, I would die here, without ever getting off this barren plain.

I went back in through the lock. There was no concern about the shielding material in the drums surrounding the living area being adequate—unless, of course, you were the pilot. Human feces has a very high absorption ratio for high-
energy radiation, you see, and we *did* have a problem with dumping the waste material, you see, so . . .

They had been very careful to check for any signs of claustrophobia before okaying me for the flight.

I realized I was trying to cheer myself up, keep my mind busy.

Roger listened to what I'd found and began to mull the problem over while I checked in the air scouts we'd have to abandon when we left. Roger wasn't a high-IQ type—we didn't have the weight allowance for that—but his tapes were crammed with xenobiology, and he might stumble over an idea.

My suit ran its daily medcheck on me and reported high blood pressure and too much adrenalin. I ignored it.

"You should continue making all measurements possible while confined to the ship," Roger said.

He was right. If I sat still and did nothing, I couldn't think. I spent the next few minutes setting up and activating the equipment.

I focused the main camera and ran it through a series of shots, using all the filter types. Oily rock on the distant slopes shot toward me and then retreated in jumps as the tracker went through its programmed routine, analyzing, measuring. In the last frame closest to the ship, something caught my eye.

It was the sample. An hour ago I'd cut off a slice the size of my finger.

Now I could play football with it.

"Galley pressure relieved," Roger announced, and I woke up.

I unbuckled and floated out of the couch, consciously timing my moves. The body is a tricky thing. Even a few hours on the surface will throw off your no-gee reflexes enough to cause trouble. I didn't want to break a wrist in a routine maneuver at this point.

"Open a ventilator grille and take a sample," I said, pulling my suit from its rack.

I could hear the rustle of one of Roger's miniaturized robot jack-of-all-trades as it slid down the narrow air shaft. As I put on the suit, I drifted by the port and looked out.

The night side of Mars was unrelieved by any hint of reflected light, not even an occasional faint trace of a meteorite. An orbit above Earth is always broken by the pin-pricks of cities or the gentle diffuse glow the oceans give back to the moon. Suddenly I felt more alone than I had in years.

We were in an equatorial orbit matched with the Martian day, to keep the ship always in the planet's shadow. Roger had talked me into sleeping while he took care of slowly feeding some of the ship's water supply into the galley.

"Plant gives no reaction to stimulus," Roger's voice crackled. "Sample shows three hundred percent increase in cell volume."
"Thanks. Pump down the ship and open the outer lock. When I'm ready, put the galley hatch on manual."

I drifted across the small cabin and switched off one of the magnetic clamps along the wall. The thin sheet of metal it had been holding fell loose. It had a good sharp edge—two hours worth of work and it had a passable appearance of a sword with handles.

Out of the corner of my eye I noticed the outer lock swing open on the stars. There wasn't any point in waiting.

I gave Roger the signal. Holding the sword in one hand, I undogged the galley hatch.

Flattop filled the hatchway, a solid wall of dirty bile-colored organics. I hesitated. My palms were sweating. I gave it a tentative jab, not sure how it would react.

The exterior seemed hard and tough, and then it split open slowly, lazily, like an overripe watermelon. The material was paler on the inside and my blade came away wet. I had an impulse to laugh.

There wasn't any worry about it moving. Its cells were swollen with moisture from the opened galley stores, so rigid it couldn't shift balance and maintain force on the walls any longer.

I chopped out a chunk as large as myself and aimed it out through the open lock. It was going to be a long, messy job.

The key was radiation. Flattop's digestive and metabolic processes were catalyzed by ionization caused by high-velocity cosmic rays passing through it. Add summer heat and it had enough energy to become active, like a bear coming out of hibernation. That explained the periodic green spots on the surface.

When I put the first sample in the isolation cell it broke open the containers of chemical fluids stored there and used them to build up its body tissue. During the day, when the solar flare acted up, there was more radiation. It could grow, despite being shielded by the ship from most of the incident particles. The galley walls stopped it for a while, but given time it would have gotten through.

The same thing happened to the second sample, but it must have had only the moisture that collected on the instruments in the field lab. But it was enough to give me a lead.

I got another lump out of the galley and drifted with it over to the lock. I braced my feet, gave a shove and watched it tumble off toward Orion.

A faint crescent glowed at the rim of the planet, light caught by the thin belt of atmosphere. So thin it couldn't stop the radiation Flattop needed to live.

But Mars has no iron core—and consequently, no magnetic field—so particles coming from
the sun would find no free ride on the fields to the night side of the planet. It was the only place I could go to get away from the flux of radiation that in a few days would have given Flattop enough usable weight to crack the galley walls.

Here Flattop got no ionization to digest its food, so the added liquid Roger gave it was useless. Evolution hadn't had the chance yet to tell it about the evils of gluttony.

"Maximum possible fuel requirements are still sufficient for re-entry and escape," Roger said. "Radio to Earth probably will not be open for a minimum of twenty hours. I shall begin computing the orbit."

"Wait." Without contact from Kennedy it was my decision. "How's Stage Four?"

The booster to take us home was in another orbit slightly further out.

"Functioning normally." Was there a trace of antagonism in his voice, or was I imagining it? "Orders are to carry out as much of the assigned mission as possible without endangering chances of the return flight."

"Orders are that I'll give the orders."

"Care in handling future samples will eliminate the danger. There are still a number of ecological and geographical factors which remain to be studied."

"And suppose one of them is as dangerous as the last? What if a little chunk of Flattop got into the ion tube by accident?"

He didn't answer. I might as well have been passing the time of day. We both knew what the risks were; it was just a matter of being programmed different ways.

I looked down at the cratered surface.

I could take the ship in again and use the survey equipment we had left. We could have another few days on the surface, without cutting the fuel margin too close. It would be the scientific thing to do. ASTRONAUT RISKS LIFE FOR HUMAN KNOWLEDGE.

But NASA didn't want science, it wanted money. Research is something you can do after the bonuses are paid and reputations secured. Maybe we could come back in a few years and do the job right. Maybe.

"Snap to," I said, and punched instructions into the console. The ship shivered in the night of vacuum, paused, and we lifted up and out.
Introduction to "H. P. Lovecraft, The House and the Shadows"

When, in a book review a while back, we expressed something less than total awe and utter respect for the person and produce of H. P. Lovecraft, there were shrill screams and frenzied roars . . . almost entirely from Johnnys-come-lately. Those who had known HPL reacted quite differently; August Derleth, Fritz Leiber, and Robert Bloch, for instance, all said in effect, “What you wrote was more-or-less true—but there was another and a better side to Lovecraft . . .” This did not seem unreasonable to us, and we feel the following well-balanced appraisal of HPL will interest readers. (See also the review of the long-awaited volume of Lovecraft’s letters in this month’s Books.) J. Vernon Shea, friend to Lovecraft and author of this article, was born in Dayton, Ky., in 1912, the son of a professional magician who numbered among his friends such famous conjurors as Thurston, Hermann the Great, Houdini, and Blackstone. Mr. Shea, an overseas veteran of the Army Medical Corps, now works as a metallurgist in Cleveland. He wrote his first story at fourteen—“Lovecraft professed to see merit in my early stuff, but he was just being generous”—and was the editor of the anthologies, Strange Desires (Lion, 1954) and Strange Barriers (Pyramid, 1961). He describes himself as “a Fantasy and Science Fiction fan from away back . . . bought a copy of the first issue of Amazing Stories, as well as, of course, F&SF . . .” Our own great reservations about HPL and his writings—we think them, among other things, totally unwholesome—have never blinded us to his talents and his literary influence. He was a strange man, inhabiting a strange house peopled with strange shadows. One wonders if anyone ever really knew him.

—Avram Davidson
H. P. LOVECRAFT: THE HOUSE AND THE SHADOWS

by J. Vernon Shea

The name of Howard Phillips Lovecraft, obscure during his lifetime except to a select circle of devotees, has acquired a measure of posthumous fame. He has been praised and damned extravagantly as a writer of Gothic fiction. August Derleth refers to him always as “the late great H. P. Lovecraft”, and many readers echo that sentiment. Derleth’s viewpoint is perhaps partisan, for he was a friend and correspondent of Lovecraft’s for many years, and is now the executor of his estate; Derleth’s publishing house, Arkham House (a name derived from Lovecraft’s fictional “Arkham”) was established primarily to print Lovecraft’s writings. On the other hand, numerous critics, among whom can be counted Edmund Wilson, Fletcher Pratt, L. Sprague de Camp, Kingsley Amis and Charles Beaumont, have been especially hostile toward Lovecraft and his works.

Damon Knight, in reviewing one of Lovecraft’s books, referred to him as “a neurasthenic recluse, scholarly, fastidious, and prim,” and this is the impression most readers receive. There is justice in the charge, but not complete justice. There was a far better side to Lovecraft that will not be revealed fully until the publication of his selected letters. (See this month’s books.) Lovecraft could write warm, wonderful letters. I know. He wrote scores of them to me from 1931 almost up to the time of his death in 1937. These letters are on file in Brown University’s John Hay Library.

H. P. Lovecraft was born on August 20, 1890 in Providence, Rhode Island, where he spent most of his life. Very little is known about his father, Winthrop Lovecraft, a traveling salesman. He was presumably somewhat of a rake (the logical reaction to his wife’s puritanical attitude toward sex); he was placed in a mental home when Howard was three and died five years later of paresis. Howard either did not know or refused to acknowledge to himself the reason for his father’s death, but he must have received some hints or have suspected something of the truth, for he was extremely reticent about his father, mentioning him in his

Quotations from letters by H. P. Lovecraft, by permission of Arkham House
correspondence as little as possible, and his stories are concerned to a suspicious degree with the effect of a tainted heredity. There is no one now to come to the elder Lovecraft's defense; he may have been a pathetic-tragic figure along the lines of Willy Loman in *Death of a Salesman*. And Howard may have inherited some of his astounding mental gifts from him. However, it has been established that Winthrop Lovecraft was no great reader; the large library of the household came from Howard's maternal grandfather.

The key to Lovecraft's personality is his mother, Sarah Phillips Lovecraft. My knowledge of her is slight, and I may be maligning her memory, but the impression I gather is that she was almost truly a monster, albeit a pathetic one. Very possibly she wished well of her son, but her own influence could scarcely have been more deleterious. There is evidence that she was psychoneurotic and ended her days, like her husband, in a madhouse. It is very probable that she recoiled from her husband, whom she must have regarded from her puritanical background as an incorrigible lecher, for whom paresis (the final stage of syphilis) was a fitting end. Her behavior toward the young Howard was possibly motivated by an unconscious feeling of revenge toward her husband and a determination that her son would not follow in his footsteps. So Howard was brought up in the strict code of the Victorian gentleman, to whom sex was an unmentionable subject. The intellectuality he displayed early was eagerly nourished; he could read at four and was encouraged to dip into the volumes of his grandfather's library, so that he became somewhat of an infant prodigy, writing his first story at eight and editing an amateur paper on astronomy at eleven. Howard was always a sickly child; like the father of Elizabeth Barrett Browning, Mrs. Lovecraft was solicitous as to his health (urging upon him milk, which he loathed), but she enforced a regimen that was certain to perpetuate his invalidism. Mrs. Lovecraft mistakenly believed that Howard was to become a great poet. But lyricism was not in his nature, and the verses he produced were never more than minor. His true forte—the writing of tales of supernatural horror—did not emerge until years after his mother's death.

In my correspondence with Lovecraft, I once cited George Kelly's play, *Craig's Wife*, as bad psychology in that Mrs. Craig, although passionately interested in the appearance of her home to the exclusion of everything else, including her husband, none the less almost never permitted visitors inside that house; this quirk seemed to me unnatural, for I thought it was only feminine for a woman to
want to show off her possessions. But Lovecraft upheld Kelly’s characterization of Mrs. Craig, writing that he had known just such women. I didn’t realize at the time that he meant his mother. For Mrs. Lovecraft, instead of wishing to exhibit her brilliant son, also discouraged visitors.

Howard must have been an unwanted child. His mother, presumably to get back at his father, told him as a child that he was too hideous to be seen in company. This cruel judgment was completely without physical justification, for Howard, although sickly, was no more unprepossessing than anyone else. It would be facile for an amateur psychologist to say that it set up a scarifying trauma in his mind that was to affect his whole life. Even as an adult, Lovecraft preferred to sleep and stay indoors by day with the shades drawn, going out at night to prowl the streets of Providence like a cat, and doing most of his writing by night. He lived a recluse’s existence, rarely visiting, and maintaining contact with the world principally through an extensive correspondence with young writers whom for the most part he never met. It is easy to draw parallels here with the ghoulish protagonist of his famous story, *The Outsider*.

It would be very facile to establish this “trauma” explanation for Lovecraft’s whole mode of behavior, but there is one piece of evidence that would seem to rule it out. A photograph. For if one examines the photograph of Sarah Phillips Lovecraft, it is clearly seen that Howard bore a remarkable resemblance to his mother. Mrs. Lovecraft could hardly have believed a son who looked just like her to be “hideous.” One must search for other motivations within her twisted mind.

The Lovecraft household was always essentially a house of women. Mrs. Lovecraft tried to smother Howard as upon a great downy pillow, collecting to herself his devotion and individuality. The only regular visitors were his maternal aunts, with whom he went to live after his mother was taken away. One of these aunts, Mrs. Gamwell, resided with Lovecraft almost entirely through his adult life, taking care of the household chores; she outlived him by a few years. Still, Lovecraft must have been too familiar through his reading with the legend of vampirism not to recognize, if only subconsciously, the vampire in his household. Long before such exposes of the son-devouring mother as Sidney Howard’s *The Silver Cord* and Philip Wylie’s *Generation of Vipers* appeared, he understood his mother’s attempt to emasculate him, and he was careful to maintain some essentially masculine pursuits, such as his love of firearms and his devotion to the tradition of military academies.
The only guiding masculine hand Howard was to know in his early years was that of his grandfather, of whom he wrote affectionately; unfortunately, the grandfather died before his corrective influence could have much effect. Lovecraft wrote of him (in a letter to me dated February 4, 1934): "I never heard oral weird tales except from my grandfather—who, observing my tastes in reading, used to devise all sorts of impromptu original yarns about black woods, unfathomed caves, winged horrors (like the ‘night-gaunts’ of my dreams, about which I used to tell him), old witches with sinister cauldrons, and ‘deep, low, moaning sounds.’ He obviously drew most of his imagery from the Early Gothic romances—Radcliffe, Lewis, Maturin, etc.—which he seemed to like better than Poe or other later fantaisistes. He was the only other person you knew—young or old—who cared for macabre and horrific fiction."

The grandfather can scarcely be faulted for turning Howard’s tastes in reading toward morbid channels, for the boy displayed a love for the weird from the very beginning. He wrote as follows in an early essay, *Idealism and Materialism*: "The writer can cite a subjective childhood fancy of his own which well illustrates the false position of the intuitive theist. Though the son of an Anglican father and Baptist mother, and ear-
themselves, and laughed at unbelievers, for he knew. Now he realizes that he saw these things with the eye of imagination only; that his devotion to the gods was but a passing phase of childish dreaming and emotionalism, to be dissipated with time and knowledge.”

Protective love, one of the profoundest forms of arrogance, can be ruinous. Sarah Phillips Lovecraft was determined that her son was to be a genius of one kind or another. Her insistence upon music lessons, although her son was almost tone-deaf and in later life was indifferent to music, is typical. Once I wrote Howard of an uncle of mine whose superb lyric tenor might have carried him to the Metropolitan had he been ambitious enough, but who preferred the company to be found in bars and poolrooms. Lovecraft answered, in a letter dated November 8, 1933: “It always provokes us to see a great innate gift neglected, and yet in most cases the fact of neglect itself argues some deep-seated quality antagonistic to success. On a very modest scale I can parallel your uncle. When I was 7 years old I seemed to show a marked talent for the violin. I took lessons for two years under the best teacher in Providence. But god, what a grind it got to be! My taste in music is not good, and (like your uncle) I wanted to have a good time with popular songs instead of laboriously absorbing the foundations of the art and working my way up through graded simplifications of the classics. By the time I was 9 the whole field of formal music and violin practice became so hateful that I was threatened with one of the nervous breakdowns so frequent in my youth. At the doctor’s orders my lessons were stopped—and that was the end of HPL as Kreisler’s great rival!”

It was perhaps an unconscious regret for that lost art that caused Lovecraft to value The Music of Erich Zann second amongst his stories (The Colour Out of Space was his first choice—a judgment no critic shares.) The Music of Erich Zann is one of the best of H. P. L.’s early tales, but it is no better than, say, Pickman’s Model, which it parallels to some extent. Lovecraft never abandoned music altogether; in his adolescence he loved to sing the popular songs of the day in groups. His memory of the lyrics and the songs’ dates of publication was to remain exact.

If Lovecraft’s childhood experiences were so traumatic, as so many commentators have suggested, it is odd that so little of them are reflected in his stories. There is much that is autobiographical in Howard’s writings, yet he never wrote a novel or story in which a child is the central figure. Children are almost non-existent in his tales; he always depicts the shadowy world of adults. Even in his
juvenilia, in which some children do appear, there are no tormented or obsessed victims.

It is ironic that Lovecraft's first story should have been called The Noble Eavesdropper, for nothing in later life ran so counter to his philosophy than prying into the affairs of others. He had, it is true, an inordinately inquisitive mind, but its researches delved into the field of ideas, never into people. He wrote that he had once entertained the idea of suicide, but the thought of thereby missing out on the latest developments of science was so repugnant that he dismissed the idea immediately. Howard would have failed miserably as a reporter (despite his keen interest in amateur journalism), for he had considerably less than the normal human curiosity about people, and was inclined to take the idealistic self-portraits of his correspondents at face value. To use his acquaintances as literary material, as almost all writers must do, was to him the act of a cad; and the only literary eavesdropping he would condone was the talk of casual strangers one cannot help overhearing in public vehicles or upon the streets. This gentlemanly reluctance to intrude upon the privacy of others worked very unfavorably for his own fictional characterizations, since he simply did not know enough about the way people talk and behave to flesh them properly. He used dialogue as sparingly as possible. His ear was attuned to the oddities of varying regional idioms rather than to their emotional connotations. It was his belief that the people in supernatural fiction were relatively unimportant, that they need only be representative. H. P. L. had neither the inclination nor the skill to turn to naturalistic fiction. The everyday concerns of the man in the street were as remote to him as those of Laplanders. So there is no compassion in him for his fictional people, for they mean nothing to him; they are only foreordained victims.

What did matter to him in his writings can be seen from this quotation from a letter of his of October 14, 1931: "My idea of the essence of a weird tale is that it successfully present a picture of some impressive violation of the established order of things—some defeat of time, space, or natural law, or some subtle intrusion of influences from another imagined order of being upon the familiar order of being. It is hard to achieve this effect with the hackneyed stage properties of the old-time ghost story (with which Derleth is all too often content), hence I find greatest merit in those tales which I call cosmic—tales which bring in sharp reminders of the vast unplumbed recesses of space that loom perpetually around our insignificant dust-grain. That is the only way one can be weird and
quasi-realistic at the same time—supplementing reality rather than actually contradicting known reality. But every man to his taste. I agree with you that horror is not necessary to a good weird tale—as proved by the bulk of Dunsany's work. I have experimented in this direction, though without success. It takes a greater amount of subtlety and adroitness than I possess."

Some years after Lovecraft's death Dr. David H. Keller wrote an article about him in which he made much of Winthrop Lovecraft's paresis and suggested that he had transmitted the syphilis to his wife, thereby causing the eventual disintegration of her mind. He further suggested that Lovecraft himself may have been a lifelong victim of the inherited disease, which would explain his physical infirmities, his distaste for sexual activities and his virtual withdrawal from society. It is a persuasive thesis, yet it is completely unsupported by medical evidence. (Lovecraft died of Bright's disease and intestinal cancer.)

As may be imagined, Dr. Keller's article created a furore in fantasy circles. Lovecraft's circle of friends and admirers rallied to his defense. It was hinted that since Dr. Keller himself was completely outside the Lovecraft circle, some trace of jealousy might have dictated his adverse psychoanalysis of Lovecraft's work. For Dr. Keller never enjoyed the great popularity among the readers of Weird Tales (a pulp magazine in which both appeared as regular contributors) that Lovecraft commanded. Dr. Keller's stories frequently have fine ideas, but they are hamstrung by mediocrity of execution.

Dr. Keller's theory can be supported only up to a point. Internal evidence from the stories themselves would incline the casual reader to agree with him. The women in Lovecraft's stories are completely sexless, for his domination by his mother spoiled forever any great sexual urge upon his part. Howard was almost completely indifferent to the feminine figures of fantasy and mythology which have allured other writers: Circe, mermaids, lamias, nymphs and vampires. And his stories are full of references to tainted ancestry. The Shadow Over Innsmouth (which may have been suggested by Irvin S. Cobb's Fishhead) is a novel about an inbred community which lives near the sea and has suspiciously fishlike or batrachian traits; and in the final chapter the narrator discovers that he himself bears the same tainted blood. Yet Howard refused to identify himself with the narrator in any way; he wrote (in a letter of October 14, 1931): "Science long ago exploded the myth that there is necessarily anything unhealthy about
the offspring of close kin. In ancient Egypt the marriage of brothers and sisters was very common, and no harm ever came of it. All that a consanguineous union really does, is to intensify in the offspring whatever latent hereditary weakness or strength the parties may possess.” None the less, Innsmouth’s fishlike inhabitants linger long in the memory; it would be very easy to explain that Lovecraft’s unconscious dread of his mother made him create womb-symbols, horrible creatures from the deep dark sea (a fishy odor is vulgarly associated with the vagina.) A psychoanalyst could also make much of the title figure of Howard’s The Outsider, saying that a recurrent dream of being hideously diseased or of falling apart with decay indicates a deep-seated fear of harming the love-partner.

Howard’s writings were deeply influenced by Arthur Machen. Machen, the son of a clergyman, had an upbringing similar to Lovecraft’s, and his writings are full of a repressed sexuality. His story, The Novel of the White Powder, in which the protagonist upon taking a drug is reduced to a loathsome white slime, has been interpreted as an adolescent’s masturbation fantasy (Lovecraft achieved a similar effect in his Cool Air), and other stories like The Great God Pan and The White People hint at sexual orgies of which Machen dared not write. Machen finally sublimated his repressions by translating Casanova’s Memoirs, but no such recourse was available to Howard. Although almost any other writer of fantasy would have had the followers of Cthulhu (in Lovecraft’s numerous stories of the Cthulhu Mythos) participating in ineffably nasty orgiastic rites, the prim Howard foreswore any mention of sex. The reader has to use his imagination to intuit what upset Howard so terribly. Like Machen, like Hawthorne, H. P. L. could not bear to bring himself to deal directly with sexual problems in his stories. Obviously, for him incest was something to shudder at; it is the covert sin in his stories of tainted communities. His stories almost always involve a flight at the end; but it is not really from monsters that his protagonists flee, but from real or imagined sins. Similarly, H. P. L.’s life was a long flight from society.

Curiously, Lovecraft seems never to have rebelled against his mother’s standards of morality. He believed himself to be sexually cold. This passage (from a letter to me dated October 14, 1931) is self-revelatory: “While the traditional system of sex ethics is probably rather clumsy, it still has certain advantages over that which seems to be replacing it; and is certainly the most sensible one to follow unless one’s temperament
makes it wholly impracticable. At present, the following of an alternative course involves so much commonness and ignominious furtiveness that it can hardly be recommended for a person of delicate sensibilities except in extreme cases. It remains to be seen what sort of middle course the future will work out. No conceivable system can be really perfect, for there are opposite emotions which make for ceaseless conflict under any sort of arrangement; but it is possible that some improvement may be made on the existing state of things—a state in which the actual situation tends to depart farther and farther from the nominal one. In these transitional days the luckiest persons are those of sluggish eroticism who can cast aside the whole muddled business and watch the squirming of the primitive majority from the sidelines with ironic detachment. Sex experience is certainly not necessary to good authorship or other aesthetic endeavour, although of course in dealing seriously with real life one ought to have all the experience and perspective one can possibly command. I'd reverse the general tenor of Derleth's advice” (my note: Derleth had advised me to get some sexual experience in a hurry) “by merely suggesting that the bulk of one’s work dealing with the details of erotic relationships be postponed till after one is domestically established in the accepted way. Not that experience be hurried, but that certain types of heavier writing be deferred. I never thought pre-marital experiment worth the attendant ignominiousness, and doubt very much if I was the loser thereby. Indeed, I can’t see any difference in the work I did before marriage and that I did during a matrimonial period of some years—none of my stylistic transitions corresponding in the least to any change in biological status. Weird work, without a doubt, is to an enormous degree independent of objective circumstances.”

Many men overly protected in their youths have turned to homosexuality. Case histories are full of such deviates with backgrounds similar to Howard’s. But the idea of homosexuality was wholly repugnant to him. Some would-be psychiatrists, learning of H. P. L.’s detestation of perverts (he cold-shouldered Hart Crane in Cleveland and was railing against Oscar Wilde as late as the Thirties), learning of Lovecraft’s forays into the night and his encouragement of young male writers, might suspect that all this covered up an unconscious urge in that direction, like Saint-Loup’s in Remembrance of Things Past or the housemaster’s in Tea and Sympathy. But they would be very wrong. There is not an iota of evidence to support such a suspicion. For H. P. L. was as nearly sexless as anyone but a eunuch can be; he seems almost
to have been born cold. His one sorry attempt at marriage (possibly to prove to himself that he had not been completely emasculated by his mother) was doomed from the beginning. He married Sonia Greene, one of his revision clients from the early days of *Weird Tales*, and the marriage was amicably dissolved some years later. People who knew Howard during this period say that he seemed content enough and picked up considerable weight. Miss Greene later wrote an article for a commemorative volume on Lovecraft; the article, while far from hostile, reveals very little.

Edgar Allan Poe was a great influence upon Lovecraft in his formative literary years. Howard unconsciously aped his style in a few stories, to such a degree that, were one not to know better, his *The Outsider* might easily pass as a “forgotten” story of Poe's. The similarity to *The Masque of the Red Death* is obvious. But their personal traits rarely met on common ground. H. P. L. possessed none of Poe’s vulgarity nor his addiction to drink, drugs, and self-dramatizations. Lovecraft’s erudition was very real; Poe’s was largely fake. On the other hand, enwrapped within the cocoon of Poe’s charlatanism lay genius, while H. P. L. had only an uncommon talent.

Lovecraft’s personality was more like Hawthorne’s. The parallels are frequently remarkable. Salem, once a flourishing port, had become run-down even in Hawthorne’s day; fat weeds grew upon the wharves, and the cobblestones were grown over with grass. Once accustomed to making merry with sailors who had startling tales to tell of the cannibal isles, the people were taciturn and withdrawn into secret conclaves. They peered out from their Gothic many-gabled houses, now moss-grown and worm-eaten, and ventured out little, for they were in effect buried there. Spiders abounded everywhere, and the people were enclosed in mental cobwebs.

It was a town that whispered of grim tales. The witch legends had never fully died. The stocks and the ear-croppings were very recent history. In the nearby hollows in the hills, it was said, black masses were still performed. Young Nathaniel, the queer Hawthorne boy, thought often he detected a ghost at the gate. It could be seen only by indirection.

Hawthorne as a boy was very like young Howard. He listened to the conversation of the bells, loved the black shadows cast by the hills, watched the trees reversed and transfigured in the calm river, loved caves and decaying stumps, the evening light outlining a lonely figure, the effect of moonlight upon a well. He went often to visit Gallows Hill, and imagined the condemned “witches” being carted up it slowly to their dooms. He
read Tieck and Hoffmann and devised similar tales in his imagination.

Salem, too, was to enchant Howard’s fancy. There he placed his witch covens—but deep down in subterranean warrens. He was especially sensitive to atmospheric effects and was delighted when he or other writers could show continuity with the past. Most fantasists are inept in describing the physical details of the worlds of their imaginations. They are cloud-enshrouded Never-Lands, their atmosphere merely states of mind. For all Branch Cabell’s many novels of Poictesme, no reader could draw a map of the land or tell wherein it differs from any other world. But H. P. L.’s New England comes across to the reader as intimately as Joyce’s Dublin.

All old New England was Lovecraft’s province. He knew details of its history that most historians have forgotten. He loved it with passion (so far as he could feel passion—publicly proclaimed emotion was as inadmissible to him as nudity in the Boston Common), and his love for its traditions betrayed him into hostility toward “foreign” elements which he felt might disrupt or destroy those traditions. In his youth he was violently anti-Semitic, his views on the matter gradually modifying as he entered into correspondence with Jews like the talented young Robert Bloch. Because Boston society was so bitterly opposed to Sacco and Vanzetti, he never could be persuaded of their innocence. New England’s rock and ice, and so are New Englanders; in Lovecraft stories one always senses that his New England is a closed community, wary of and ultimately hostile to strangers, as in Shirley Jackson’s The Summer People: the people are all inbred, and they have had some very odd ancestors.

Yet it is curious that Lovecraft, always identified with New England, steeped in its history and a student of its speech-patterns, was never able to create a convincing New Englander in his stories, but only a figure in a Gothic tale; while on the other hand Edith Wharton, merely a summer visitor, wrote into the New England scene a tour de force unlike any other of her works. Like most contes cruels, “Ethan Frome” is not really true to life, but it possesses an amazing verisimilitude. The reader cannot forget Miss Wharton’s three doomed figures; he cannot remember even the names of Lovecraft’s New Englanders.

For H. P. L.’s stories take place in a world of the imagination almost completely divorced from reality. When the modern world creeps in, ever so faintly, one is startled: I remember congratulating him in a letter upon the introduction of a phonograph recording in The Whisperer in Dark-
ness; it seemed almost as anachronistic there as it would have been in a work of Voltaire's. Lovecraft himself wrote, in a letter of October 27, 1932: "Whenever I assemble realistic detail it is with great effort—and more important still, I simply haven't anything to say in any field outside the unreal. I have not a keen sensitiveness for the drama of actual life."

It is only in his settings that any modernity is permitted; otherwise the stories might have been written in the time of Walpole or Maturin. Modern New York—a horror to him—and modern New England, with carefully reproduced but jarring dialects, are vividly recreated, and Lovecraft was careful to keep his science fiction within the possibilities of modern scientific thought; but the mood and feeling of the tales are strictly eighteenth century.

The eighteenth century, in fact, was Lovecraft's special love. His style was influenced by the writers of the eighteenth century, one of the most graceful periods in English literature; the brocade of that style was what most infuriated critics like Fletcher Pratt. Howard liked to imagine himself transported back to the eighteenth century and part of its ways, periwig and all; and, probably for that reason, esteemed Berkeley Square above all other films he had seen. But I imagine that the eighteenth century would soon have palled upon Howard. Like most fantasists, he was at home only in his own mind and home and amongst strange books.

Long Howard would sit in his house, savoring shadows. His cat might wander in from time to time, sniffing amongst the old books and perhaps jumping upon the desk where his master was writing his manuscripts or letters in his crabbed, spidery, almost microscopically small handwriting. (Howard employed the typewriter only when absolutely necessary.) Howard might fondle the cat absently, his mind elsewhere.

It would be very easy for a critic to draw a hostile portrait of Lovecraft. He might start with his appearance. With his odd, gaunt, bony face and cadaverous frame, Howard might have posed for his own Outsider. The face looked not unlike Max von Sydow's, the hero of Bergman's film The Seventh Seal; the chin like Meyerbeer's. An eighteenth-century face: Horace Walpole's face was similar but womanish. It was a face that rarely smiled; even when he was enjoying himself at a banquet, Howard looked weighted down by melancholy.

His aversion to cold has been cited as one of his outstanding phobias. The reason was not psychological but physiological. When one is extremely thin and inclined toward anemia one feels the cold intensely. Howard would
pass out on the street whenever the temperature dropped below 20 degrees; and when one considers the harshness of New England winters one realizes that H. P. L. spent most of those winters indoors. The summers were never too warm for him; it is doubtful that he could ever sweat. When he visited Florida in the hottest summertime the weather seemed ideal to him.

His long story *At the Mountains of Madness* has been mentioned frequently as an especially good example of H. P. L.'s aversion to cold; yet when it is read closely it shows nothing of the sort. Paradoxically, Lovecraft was fascinated by the thought of polar expeditions and read extensively upon the subject; he himself would have liked to have been a member of such an expedition had his health permitted, for the idea appealed to him as adventurous and wholly masculine, and thus a repudiation of his mother. The novella was planned as a kind of sequel to Poe's *Narrative of A. Gordon Pym* (fitting into his tales of the Cthulhu Mythos) and Howard took extraordinary pains to get his scientific data accurate. When I objected to the refrigerated prose of the story, H. P. L. was delighted, for he felt that it indicated that he had achieved the objectivity and impersonality of style of scientific reports.

Lovecraft had misgivings as to the title, feeling that it was excessively melodramatic; he knew that it was taken from something he had read, but for once his prodigious memory failed him. When I pointed out that it was a quotation from Dunsany he was relieved and decided to retain the title.

Lovecraft was not, as has been claimed, indifferent to food. It was just that his tastes in food remained substantially those of his childhood, when his mother strove to please his palate. Knowing of his aversion to milk (which psychiatrists might make much of), she mixed it with both vanilla and chocolate to disguise the taste; he accepted it even then grudgingly. He was inordinately fond of ice cream and would go out of his way to sample all available flavors, liking coffee and vanilla best. He wrote once to me in wonder, "How could anyone dislike cheese?" When I wrote that I couldn't stand maple flavoring because of its cloyingly sweet taste, he replied that nothing was too sweet for him.

His loathing for sea food has been considered highly symbolic by some commentators, who link it with his "hatred" for the sea. The matter seems simple to me, who has no especial feeling for the sea one way or the other: H. P. L. disliked sea food for the same reason I do—because of its horrible taste. To test the genuineness of this distaste, one of his acquaintances once mixed some
shredded fish into a salad; after one taste, H. P. L. pushed the salad aside, thinking it spoiled.

Much has been made of Lovecraft's supposed hatred of the sea. I believe it existed only in the minds of his commentators, who confused the materials of his stories with the man. It is true that Lovecraft wrote many horror tales of the sea. But then, so did Conrad and William Hope Hodgson. It is curious that a person who was supposed to detest the sea lived all his life in places that were never far from the sound of the sea; even in his travels, Howard rarely ventured away from places that were situated near great bodies of water: New Orleans and Cleveland and Quebec and Florida.

He may have suffered from claustrophobia. This phobia is most evident in his story of the pulsing masses of New York City, *The Horror at Red Hook*, but also can be detected in his tales of tombs and vaults and other underground horrors. The feeling of oppressive dankness, of fetid air, submerges the reader of his *Imprisoned With the Pharaohs* (ghost-written for Houdini) or *The Case of Charles Dexter Ward*; and the stories of the Cthulhu Mythos abound with secret doors and passageways that lead into the depths of the earth. Most terrifying of all Lovecraft's tales are those of the horrors to be found underground: the beast-men raised as food in *The Rats in the Walls*, the enormous monster underneath *The Shunned House*, the ghoulish Outsider, the thing that spoke up the tube in *The Statement of Randolph Carter*, the reanimated corpses in *In the Vault* and in other tales. But here again one must display caution; even as a child, Howard loved caverns, and it is quite possible that he shared Poe's necrophiliac fascination with the dead. He loved to visit old cemeteries.

Perhaps even his state of hermitage, like Hawthorne's, has been exaggerated. He could not very easily separate himself for long from mankind. His hushed withdrawal from the world was premature. It didn't take; the world was too importunate. He could draw down his shades in the daylight, but he couldn't shut out the sounds and the smells. His sleep was continually disturbed.

As a recluse, he was merely the shy child he had been all over again. He must hide from visitors only for fear of being repulsed. He might hear from his mother's lips again what a hideous child he was . . . Yet he longed for company, and perhaps his nightly journeys were an unconscious search for them. The night provides an invisible cloak through which you can safely peer out at people. In the immensity of the night, when no one presses too close to you and everything seems fresh and nearly transformed and the stars wheel-
ing high make you ponder your place in the universal scheme, you are free to indulge your thoughts; littleness is gone, and your step is adventurous. You wonder at the secret life behind the fanlighted doors, and pause briefly to make up fantasies about the dwellers within. That shuttered, abandoned house with its sour-smelling yard: you get an idea here for a story, *The Shuttered House*. You hear the intimate song of the wind and the water lapping at the docks. You pause long at the graveyard: here come ideas for many tales. Night is a necessity to you. But when a passerby looks too curiously at you, you shrivel inside, and you begin to think of ghouls and other rejected creatures.

Yet Lovecraft never erected the schizophrenic's invisible wall between himself and other people. Despite his mother's conditioning and his New England rearing, he had an instinct for gregariousness. As an adolescent, as has previously been noted, he took part in singing groups; he talked to E. Hoffman Price almost around the clock when he visited him in New Orleans; he went often to New York to see a fellow writer, Frank Belknap Long, and allowed himself to be taken by him to all the latest movies; he was a member for years of an amateur writers' group and even served a term as its president. All this hardly coincides with some fans' picture of him as a spidery character scuttling through dark alleys.

It has been said that if H. P. L. had not dissipated so much of his time with his correspondence with obscure young writers he would surely have had time for more writing of his own, and might have become the great writer he showed himself potentially to be; his financial returns in any case would have been much larger. Members of the Lovecraft circle have castigated themselves mentally upon learning that Lovecraft virtually starved himself in order to have funds for postage and notepaper. Yet his correspondents were necessary to him; he needed their admiration to bolster his always faltering ego, needed their paper friendship at a time when he had no friends, needed their narration of outside events to keep up to some degree with the world he felt slipping away from him. He blossomed under their protective regard to the point where he was actually making trips to far states and even on occasion meeting some of his correspondents; emerging from his shell. And the correspondence itself was eminently worth doing; H. P. L. was in the line of great letter writers like Horace Walpole.

Yet H. P. L. invited veneration rather than fellow-feeling; his closing signatures, like "Grandpa Theobald," while intended humorously, served to keep his correspond-
ents at a distance, if only by age (the youngsters thought of him as an old man, yet he was only forty-seven when he died); and it is possible, though unlikely, that he brandished his near-encyclopedic knowledge as an unconscious weapon to repel any feeling of equality. He discouraged too many intimacies; it would have been unthinkable to write him an off-color joke.

My father brought home the first issue of *Weird Tales* in 1923, when I was eleven, and the magazine opened up a new world to me. I read each issue avidly. I soon had picked out favorites among the authors, and foremost was H. P. Lovecraft. He seemed a highly mysterious figure. Farnsworth Wright, the editor, divulged nothing about his stable of writers, and I often pondered what Lovecraft could be like. From some quality in his style I judged him to be a clergyman!

I didn't summon up courage to write to Lovecraft until 1931, after I had tried my hand unsuccessfully at weird fiction myself. I expected at best a few lines of formal acknowledgement. I was virtually bowled over when Lovecraft's first letter came. It was almost a manuscript in itself—twenty pages written on both sides in a handwriting so minute that Lovecraft managed to get more upon a page than a typewriter could manage. It was a letter so friendly, so considerate in answering all the questions I had asked, so shrewd in analyzing the writers I had mentioned, so encouraging to my literary endeavors that I could scarcely wait to pen a reply. And the letters kept coming through the years.

Lovecraft's letters were amazing. What impressed his correspondents first was his erudition. He had read very widely in the arts and sciences and retained in his astounding memory almost everything he had read. No matter what the subject, from architecture to zoology, his knowledge seemed encyclopedic—so that each correspondent found himself confronted by an expert who knew more about his own specialty than he did. Howard knew the literary classics thoroughly and railed at me and other young writers for neglecting them in favor of modern works. He had a vast command of languages not only Greek and Latin, but modern ones; he even knew a smattering of Bantu. For one of my stories I called upon my faltering Spanish, and Howard immediately corrected the errors. Every time one of the *Weird Tales* writers needed a terrifying-sounding inscription in Latin, he would consult Howard; one young college student, a Latin major, even carried on a correspondence with him in the language. As an antiquarian, Howard was especially knowledgeable about history and
could pick out the errors in Hollywood's "historical" spectacles.

But what ultimately held Lovecraft's correspondents was his personality. The style of the letters was relaxed—he wrote them exactly the way he spoke—and had an intimate tone he would never permit in his rather starched formal writing. He had a sense of humor the stories never reveal and he could be unexpectedly witty. The wit very frequently was at his own expense; sometimes he would make a drawing to illustrate his shortcomings, as when he drew a rather devastating self-portrait in one of his letters to me. Howard had none of the egoism and prickly pomposity of the college professor; he was modest to a fault. He was his own most severe literary critic; he was so conscious of his real or imagined shortcomings that he despaired of continuing writing, and frequently would refuse to submit manuscripts he considered unworthy.

He could be amazingly generous. The ability to be impetuously generous—one of the few virtues of the very rich—is encountered more rarely in the poor, who, although they can feel compassion because of their own travails, have to count the pennies to keep their own families from starving; their feeling of largesse toward others is worn down by mean economies and undignified haggling. Lovecraft was so wretchedly paid for his writings that he had to limit his food budget to a dollar a day, and weakened his frail constitution still further thereby. Yet if a correspondent mentioned some books he would like to read and they were in Howard's own library, he would mail them off immediately. Howard had to eke out his existence by revising the work of other Weird Tales contributors (they became so transformed in the process that the stories are much more Lovecraft's than the nominal writers'). Yet his correspondents were continually sending him manuscripts for his criticism. No matter how bad they were, Howard could always find something encouraging to say about them—and very frequently he would revise whole paragraphs without charge.

It is no wonder that the members of the so-called "Lovecraft circle" felt so warm and fiercely protective toward him. Without his encouragement, it is very probable that some of them would have discontinued writing altogether, for the principal market for their stories, Weird Tales, paid only a cent a word, upon publication, and the editor, Farnsworth Wright, was subject to idiosyncratic whims: he would sometimes reject a manuscript two or three times before finally accepting it. Although possibly the magazine's most popular writer, H. P. L. was never certain of Wright's favor himself; Wright might reject a story of his as "too
horrible" and then years later ask to see it again. Many of Lovecraft's stories did not please Wright; they had to wait for appearances in non-paying fan magazines or posthumous publication.

Howard's death came as a profound shock to me and to all his other correspondents. Robert Bloch wrote that, had he known he was dying, he would have crawled upon his hands and knees if necessary to reach his bedside. Writers who had rarely written verse were inspired to write commemorative poems, fan magazines put out special issues in his memory, and book publishers, who had steadfastly disdained his manuscripts—Lovecraft had only one book published during his lifetime, the privately printed Shadow Over Innsmouth—showed a belated interest.

If Lovecraft's work is judged in the terms of the very greatest art, it admittedly fails; and this Lovecraft himself was the first to concede. But it must be remembered that the markets for which he wrote were wretchedly paying pulp magazines and that their readers were uninterested in subtleties or niceties of style. Lovecraft recognized his limitations, and wrote within them.

Handsome, Sturdy
VOLUME FILES
for Your Copies of
FANTASY AND SCIENCE FICTION

Each Volume File will keep 12 copies of FANTASY &

SCIENCE FICTION clean, orderly, and readily accessible. Sturdily built; the files are covered with a rich black and red washable leatherette, and the lettering is in 16-carat gold leaf.
Reasonably priced at $2.50 each, 3 for $7.00, or 6 for $13.00, they are shipped fully prepaid on a money back basis if not satisfactory. Order direct from: JESSE JONES BOX CORPORATION
Dept. F&SF  P.O. Box 5120  Philadelphia 41, Pa.
A reader recently wrote to say that he was partial to any story with dragons in it and would we please publish more of them. Well, dragons are our second favorite things—our first are lovely girls. The charming fable below contains three dragons and one lovely girl, and we hope that it will satisfy everybody.

THE THIRD DRAGON

by Ed M. Clinton

Did you ever wonder why it’s called a dragonfly? Not even the dictionary knows, though it knows about werewolves, which is to say man-wolves, and which are a similar kind of thing.

It happens every morning when the sun comes up. One moment you’re a dragon, breathing fire and making the earth shake and thrashing around a great long tail. Not to mention being beautiful, with your tremulous, colorful wings. The next thing you know, you’re just a dragonfly.

Now, a dragonfly is a nice enough creature, and it’s probably not a bad life, flitting from flower to flower in the warm summer air, looking rather pretty and maybe scaring a few children once in a while just by flying close to them. But it’s quite a come-down when you’ve been the real thing.

Under such circumstances, it would be anybody’s ambition to be a full-time, day-and-night dragon. But not many make the grade; because, you see, there’s a secret to it. And only a few ever discover this secret.

But I know of one who did, and that’s what I’m going to tell you about. Actually, there are three of these part-time dragons in this story, but as far as I know, two of them are still only dragonflies when the sun shines.

Once upon a time, then, there were these three dragons—at
night, that is. After the sun came up, of course, they were just three average dragonflies, zipping and floating across the fields.

Don't ask me how they got into this fix. I suspect that, like everything else about them, it was their own fault.

Their vanity was so great they had abandoned their given names and taken new ones which they felt better suited to their particular outstanding natures, but which of course actually only suited their remarkable fancies. One, thinking himself the most powerful and fearsome creature on earth, answered only to the name of Thunderer. The second, who fancied himself the most beautiful of all creatures, insisted on being called Ravisher. And the third, whose vanity was his presumption of supreme intelligence, styled himself Socrates, a perhaps subtler appellation, which he had picked up from some intellectual friends.

They fought together incessantly. "I am the mightiest and most fearsome of all creatures," Thunderer would hiss. "Ha! A mere smasher of trees, squasher of creatures, and maker of loud noises. What is that beside the supernal glory of my ultimate beauty?" And Ravisher would flutter his wings ecstatically. (They really were quite beautiful, consisting of delicate membranes of green and yellow and magenta.)

"I am like the thunder for which I am named, and when I walk the ground shakes, and when I roar the world holds its breath in fear," Thunderer would say.

"Nonsense. In point of fact, I don't think you're such hot stuff at all. I'm quite convinced that not only am I the most beautiful, but am incidentally probably the mightiest of all dragons, though that is an element of my personality which I regard as of only secondary importance. Anybody can be destructive and noisy. Anybody can spit fire. True beauty is a rare gift."

"But how sad," Thunderer would say, "to have to depend upon a pair of silly wings for one's importance."

"Better than hanging one's career on a matter of hot breath. Look here, I turn the forest of the night into a living rainbow."

"And my very appearance stops the heart of any living creature."

"All things pale before perfect beauty."

"If so, what greater beauty than my perfect strength?"

"The world can only be cowed by you, and it is humbled by me."

"Overweaning peacock."

"Inflated elephant."

"Effete!"

"Insensitive!"

And pretty soon the flames would flash from their mouths and their claws would unfurl and their wings would flutter the air into a terrible turbulence.
"Braggart!"
"Fool!"

Then they would leap at each other, with much thrashing of tails and snarling, and flapping of wings, and they would spin round and round until they were like one huge pinwheel, all flame and noise. Around and around, burning the underbrush, breaking down trees, driving all the other forest creatures away.

Socrates was of a different sort, quieter; his vanity was a more rarefied one, but his self-satisfaction was just as great and got him into quite as much trouble. His opinion of his two companions was very low, and he never hesitated to tell them how stupid he thought they were. "Oh, stop it," he would say, "stop your silly fighting. It's all over nothing, you know, because it's brains that count in this world. In the last analysis, brains always rule. And as I am the brainiest of all creatures, I clearly outrank, outshine, and generally outdo the both of you. Besides, I'm not at all sure"—and he would preen his wings—"that I'm not utterly more beautiful than either of you. And as far as being fearsome"—here he roared and sent out a sheet of fire and flicked his long tail—"I don't feel I have to take a back seat to you there, either." At which point Thunderer and Ravisher would stop their quarrel and turn on him. "Overweening ego," Thunderer would say.

"Intellectual fop," Ravisher would add.

Then the three of them would have at it, on through the night. But soon would come the dawn, the cover of night would vanish before the light of day, and out of the forest three ordinary dragonflies would emerge to soar and dart across the meadow, burning with the injustice of their respective fates: that such sublime beauty, such noble power, and such profound intellect should be trapped in the unprepossessing bodies of common insects.

But one summer night, wearied by his quarreling friends, Socrates wandered off to a quieter part of the forest so that he could meditate on deep subjects. While he was trying to think of a deep subject upon which to meditate, he could hear Thunderer and Ravisher in the distance beginning their nightly quarrel.

Socrates snorted, his nostrils glowing a little and a flicker of sparks dancing round his tongue. Didn't they realize, wouldn't they ever understand, how pointless all their fighting was? Well, he thought, intellectual creatures have always borne this cross: never recognized until after the fact. No matter—with a toss of his head and a trembling of his wings—we know our worth.

Suddenly the sounds of squabbling stopped. Socrates looked over in the direction where the other
two dragons were, and saw that even the glow of dragon-fire had stopped. "Curious," he said, and started back.

Then he heard Thunderer shriek: "Now! This is the moment of truth! She can tell us that I, the mightiest of all dragons, am the emperor of all creatures!"

"On the contrary, she will tell us that I, the most beautiful of all dragons, am supreme."

"Curious," Socrates said again. He halted and listened.

"In peril of your life, helpless inferior human being," roared Ravisher (and Socrates saw the sky light up with dragon-fire and felt the wind rush from the beating of dragon wings), "tell this idiot that I, the most beautiful of dragons, am hence the supreme creature of the earth."

"Not so! You must tell this silly wiggler of wings that I, the most fearsome of dragons, am owed the deference of all other creatures—including him."

And the sky turned red and purple and the ground shook and there was the sound of splintered trees crashing to earth.

"Hey—she's getting away!"

During all of this, Socrates had stood quite still, listening with amusement, and very puzzled. His tail flicked ever so slightly and his great purple and orange wings throbbed gently up and down.

"She's gone!"

"I can't find her!"

"Blast!"

"Your damned noise frightened her off—"

"If you hadn't been so busy preening yourself, she wouldn't have—"

"Your fault!"

"Yours!"

Just then, Socrates heard a crunching of twigs near his right forepaw. He turned his head and curved his long neck down to gaze at the spot.

There was a human creature, standing horrified at the sight of him, her hand to her mouth, her wide eyes staring up in terror at him.

"Why—you're just a girl," he said.

She began to cry and fell to her knees.

And a very lovely girl, too, he thought, with long red hair and fair rosy cheeks and a soft ivory skin.

"They ought to be ashamed of themselves," he said, feeling very superior. "Frightening you like that."

She only cried harder.

"Don't be afraid. I shan't hurt you. Come, come. Look up, now."

But there seemed nothing to be done for her tears.

"You shouldn't be in the forest at night, you know. You must be lost." The hiss and crunch of Ravisher and Thunderer rolling and thrashing among the trees came to his ears. "Oh, bother such tomfool-
isness. Come, come. Enough tears. Look, I'll show you a trick. See—” And he vibrated his wings just enough to lift himself a foot and a half from the ground.

The girl with the long red hair stopped crying and said, “Oh, that's marvelous. Can you... can you go higher?”

“Sure.” And he went up to three feet.

When he had come back down, he said, “Feel better?”

“A little.” At least she wasn’t crying, but she still looked terribly frightened.

“My,” she said, after she had wiped her eyes, “my, you have the most beautiful wings. May I see?”

Never before in his life had anyone said anything so nice to Socrates, and he really didn’t quite know what to do. So after blinking his eyes and swallowing hard, he said, “Okay,” and folded his right wing down so that she could get a close look at it.

“My,” she said, “the colors are all in concentric spirals.”

Now, even though he fancied himself above all creatures in intellect, Socrates hadn’t the slightest idea what concentric spirals might be. So he said, “Yeah.”

“And they’re iridescent.”

“Yeah.”

“I wish I had beautiful wings like that.”

Socrates looked down into her eyes and sighed. “No, you don’t need them,” he said, “for you are already the loveliest of all creatures.”

She laughed when he said this. Then she frowned. “But tell me, why are your friends fighting so? They’re just awful, you know, and I hope you don’t mind my saying it.”

“They always fight. Sometimes I fight too,” he added, a little embarrassed.

“That’s a silly thing to do.”

“They’re fighting over who’s the most beautiful and who’s the most fearsome, and, given those propositions, which of them is pre-eminent among all creatures.”

“Pooh! Such silliness. You’re just as beautiful as either of them, and much nicer, too. And I’ll bet you’re just as strong, too, and could scare anybody just as easily—but you’re too nice to do that.”

“I guess I’m pretty strong.” He flicked his tail.

“Could you break that tree over there with your tail?”

“Oh, sure.” He snapped his tail and the tree toppled with a crash. “And can you breathe fire?”

“Sure I can. Watch.” He made a small swath of red, blue, and green dragon-fire, about three feet long. It was a very minor effort, but he did not want to frighten her. “If you really want, I could make it bigger—”

“Do, oh do! Make it as big as you can!” The girl sat back on her legs and tossed the long red hair over her shoulders. “Make the biggest,
brightest fire you ever made, just for me!"

Socrates inhaled until he thought his lungs would burst, and then, squeezing his eyes tight shut, he heaved out the mightiest breath he had ever breathed. The flames licked and curled for twenty feet, and lit up the forest for a hundred yards in all directions.

The girl clapped her hands. "Wonderful! Wonderful! Dragon, I love you, for you are the kindest, most beautiful, most fearsome creature I have ever seen!"

He lowered his head, because as I have said he was not at all used to having nice things said to him. "But it's terribly late," she said, "and I've got to find my way home. Could you show me the way out of the forest?"

Proudly, Socrates said: "My pleasure." He hesitated. "But—one thing, first, please. If I bend my wing down again, will you—would you explain to me what it means, concentric spirals and iridescent?"

"Of course."

So he folded down the right wing again, and with her hand the beautiful girl traced the swirling patterns of concentric orange and green and purple and white, and explained what iridescent meant. "Thank you," he said, and led her to the edge of the forest. "Goodbye." He felt very sad, for he had grown to love the girl and he knew he would never see her again.

"Oh, dear dragon, goodbye. You have been kind and good to me. Always be just what you are, dear dragon, and I'm sure the world will go well with you."

"I promise," he said.

Sadly he watched her running across the meadow toward the town, her long red hair streaming behind her. What was that wonderful word? Iridescent: yes, he thought, her hair was almost iridescent in the first slanting rays of the rising sun.

The sun? The sun!

Two dragonflies buzzed angrily about his head and flashed out into the meadow.

Socrates could not believe what his eyes told him. It was day, the sun had risen, and yet . . . and yet here he stood, a real dragon.

He tossed his head, breathed a little fire, and turned back into the forest. For, you see, he had learned that to be a real dragon in the light of day, one must be the dragon one is. Otherwise, you become just another dragonfly.
TIME AND TIDE

by Isaac Asimov

What with one thing and another, I've gotten used to explaining various subtle puzzles that arise in connection with the scientific view of the universe. For instance, I have disposed of the manner in which electrons and photons can be waves part of the time and particles the rest of the time in a dozen different ways and by use of a dozen different analogies.

I've gotten so good at it, in fact, that at dinner parties the word nervously goes about, "For heaven's sake, don't ask Asimov anything about wave-particle duality."

And no one ever does. I sit there all primed and aching to explain, and no one ever asks. It kills the party for me.

But it's the simple thing that throws me. I've just been trying to write a very small book on the Moon for third-graders and as part of the task I was asked to explain why there are two high tides each day.

Simple, I thought, and a condescending smirk passed over my face. I flexed my fingers and bent over the typewriter.

As the time passed, the smirk vanished and the hair at my temples grew perceptibly grayer. I managed at last, after a fashion, but if you don't mind, Gentle Reader, I'd like to try again. I need the practice.

The tides have bothered people for a long time, but not the good old Greeks, with reference to whom I start so many articles. The Greeks, you see, lived (and still live, for that matter) on the shores of the Mediterranean Sea. That sea happens to be relatively tideless because it is so nearly landlocked that high tide can't get through the strait of Gibraltar before the time for it has passed and it is low tide again.

About 325 B.C., however, a Greek explorer, Pytheas of Massalia (the modern Marseilles) ventured out of the Mediterranean and into
the Atlantic. There he came across pronounced tides, with two periods of high water each day and two periods of low water in between. Pytheas made good observations of these, undoubtedly helped out by the inhabitants of the shores facing the open ocean, who were used to the tides and took them for granted.

The key observation was that the range between high water and low water was not always the same. It increased and decreased with time. Each month there were two periods of particularly large range between high and low tides ("spring tides") and, in between, two periods of particularly small range ("neap tides").

What's more, the monthly variations matched the phases of the Moon. The spring tides came at full Moon and new Moon, while the neap tides came at first quarter and third quarter. Pytheas suggested, therefore, that the tides were caused by the Moon. Some of the later Greek astronomers accepted this, but for the most part, Pytheas' suggestion lay fallow for two thousand years.

There were plenty of men who believed that the Moon influenced the manner in which crops grew, the rationality or irrationality of men, the way in which a man might turn into a werewolf, the likelihood of encountering spooks and goblins—but that it might influence the tides seemed to be going a bit far!

I suspect that one factor that spoiled the Moon/tide connection for thoughtful scholars was precisely the fact that there were two tides a day.

For instance, suppose there is a high tide when the Moon is high in the sky. That would make sense. The Moon might well be drawing the water to itself by some mysterious force. No one in ancient and medieval times had any notion of just how such a force might behave, but one could at least give it a name such as "sympathetic attraction." If the water heaped up under a high Moon, a point on the rotating Earth, passing through the heap, would experience a high tide followed by a low tide.

But a little over twelve hours later, there would be another high tide and then the Moon would be nowhere in the sky. It would be, in fact, on the other side of the globe, in the direction of a Man's feet. If the Moon were exerting a sympathetic attraction, the water on the man's side of the globe ought to be pulled downward in the direction of his feet. There ought to be a hollow in the ocean, not a heap.

Or could it be that the Moon exerted a sympathetic attraction on the side of the Earth nearest itself and a sympathetic repulsion on the side opposite. Then there would be a heap on both sides, two heaps
all told. In one rotation of the Earth, a point on the shore would pass through both heaps and there would be two high tides each day, with two low tides in between.

The notion that the Moon would pull in some places and push in other places must have been very hard to accept, and most scholars didn’t try. So the Moon’s influence on the tides was put down to astrological superstition by the astronomers of early modern times.

In the early 1600’s, for instance, Johann Kepler stated his belief that the Moon influenced the tides, and the sober Galileo laughed at him. Kepler, after all, was an astrologer who believed in the influence of the Moon and the planets on all sorts of earthly phenomena and Galileo would have none of that. Galileo thought the tides were caused by the sloshing of the oceans back and forth as the Earth rotated—and he was quite wrong.

Came Isaac Newton at last! In 1685, he advanced the law of universal gravitation. By using that law it became obvious that the Moon’s gravitational field had to exert an influence on the Earth and the tides could well be a response to that field.

But why two tides? What difference does it make whether we call the force exerted by the Moon on the Earth “sympathetic attraction” or “gravitational attraction”? How could the Moon, when it was on the other side of the Earth, cause the water on this side to heap upward, away from the Moon. The Moon would still have to be pulling in one place and pushing in another, wouldn’t it? And that still wouldn’t make sense, would it?

Ah, but Newton did more than change words and substitute “gravity” for “sympathy.” Newton showed exactly how the gravitational force varied with distance, which was more than anyone before him had shown in connection with the vaguely postulated sympathetic force.

The gravitational force varied inversely as the square of the distance. That means the force grows smaller as the distance grows larger; and if the distance increases by a ratio of $x$, the force decreases by a ratio of $-x$.

Let’s take the specific case of the Moon and the Earth. The average distance of the Moon’s center from the surface of the Earth nearest itself is 234,000 miles. In order to get the distance of the Moon’s center from the surface of the Earth farthest from itself, you must add the thickness of the Earth (8,000 miles) to the first figure, and that gives you 242,000 miles.

If we set the distance of the Moon to the near surface of the
Earth at 1, then the distance to the far surface is \( \frac{242,000}{234,000} \) or 1.034. As the distance increases from 1.000 to 1.034, the gravitational force decreases from 1.000 to \( \frac{1}{1.034} \), or 0.93.

There is thus a 7.0 percent difference in the amount of gravitational force exerted by the Moon on the two sides of the Earth.

If the Earth were made of soft rubber, you might picture it as yielding somewhat to the Moon’s pull, but each part would yield by a different amount depending on the strength of the pull on that particular part.

The surface of the Earth on the Moon’s side would yield most since it would be most strongly attracted. The parts beneath the surface would be attracted with a progressively weaker force and move less and less toward the Moon. The opposite side of the Earth, being farthest from the Moon would move toward it least of all.

There would therefore be two bulges; one on the part of the Earth’s surface nearest the Moon, since that part of the surface would move the most; and another on the part of the Earth’s surface farthest from the Moon, since that part of the surface would move the least and lag behind all the rest of the Earth.

If that’s not clear, let’s try analogy. Imagine a compact group of runners running a long race. All of them run toward the finish line so that we might suppose some “force” is attracting them toward that finish line. As they run, the speedier ones pull out ahead and the slower ones fall behind. Despite the fact that only one “force” is involved, a “force” directed toward the finish line, there are two “bulges” produced; a bulge of runners extending forward toward the finish line in the direction of the force, and another bulge of runners extending backward in the direction opposite to that of the force.

Actually the solid body of the Earth, held together by strong intermolecular forces yields only very slightly to the gravitational differential exerted by the Moon on the Earth. The liquid oceans, held together by far weaker intermolecular forces, yield considerably more and make two “tidal bulges,” one toward the Moon and one away from it.

As the Earth rotates, an individual point on some seacoast is carried past the first tidal bulge and then half a day later through the second. There are thus two high tides and two low tides in one complete rotation of the Earth—or, to put it more simply, in one day.

If the Moon were motionless, the tidal bulges would always remain in exactly the same place, and high tides would be exactly twelve hours apart. The Moon moves in its orbit about the Earth, however, in the same direction that the Earth rotates, and the tidal bulges move with
it. By the time some point on Earth has passed through one bulge and is approaching a second, that second bulge has moved onward so that the Earth must rotate an additional half-hour in order to pass the point under question through high-tide again.

The time between high tides is 12 hours and 25 minutes, and the time from one high tide to the next but one is 24 hours and 50 minutes. Thus, the high tides each day come nearly one hour later than on the day before.

But why spring tides and neap tides and what is the connection between tides and the phases of the Moon?

For that we have to bring in the Sun. It, too, exerts a gravitational influence on the Earth. The gravitational pull of two separate heavenly bodies on the Earth varies directly with the mass of the bodies in question and inversely with the square of their distance from the Earth.

To make things simple, let's use the mass of the Moon as the mass-unit, and the average distance of the Moon from the Earth (center to center) as the distance-unit. The Moon possesses 1 Moon-mass and is at 1 Moon-distance in other words, and the Moon's gravitational pull upon us can therefore be set at $1/1^2$ or 1.

The mass of the Sun is 27,000,000 times that of the Moon and its distance from the Earth is 392 times that of the Moon. We can say, then, that the Sun is 27,000,000 Moon-masses and is at 392 Moon-distances. The gravitational pull of the Sun upon the Earth is therefore $27,000,000/392^2$ or 176. This means that the Sun's gravitational pull upon the Earth is 176 times that of the Moon. You would therefore expect the Sun to create tidal bulges on the Earth, and so it does. One bulge on the side toward itself, naturally, and one on the side opposite itself.

At the new Moon, the Moon is on the same side of the Earth as the Sun, and both Moon and Sun are pulling in the same direction. The bulges they produce separately add to each other, producing an unusually large difference between high and low tide.

At the full Moon, the Moon is on the side of the Earth opposite that of the Sun. Both, however, are producing bulges on the side nearest them and on the side opposite them. The Sun's near-bulge coincides with the Moon's far-bulge and vice versa. Once again, the bulges produced separately add to each other and another unusually large difference between high and low tide is produced.

Therefore the spring tides come at new Moon and full Moon.

At first and third quarter, when the Moon has the half-Moon ap-
pearance, Moon, Earth and Sun form a right triangle. If you picture
the Sun as pulling from the right and producing a tidal bulge to the
right and left of the Earth, the Moon at first quarter is pulling from
above and producing a bulge up and down. (At third quarter, it is
pulling from below and still producing a bulge up and down.)

In either case, the two sets of bulges tend to neutralize each other.
What would ordinarily be the Moon’s low tide is partially filled by the
existence of the Sun’s high tide, so that the range in water level between
high and low tide is cut down. Thus we have the neap tides at first and
third quarter.

But hold on. I said that the Moon’s low tide is “partially filled” by the
existence of the Sun’s high tide. Only “partially.” Does that mean the
Sun’s tidal bulges are smaller than the Moon’s tidal bulges?

It sure does. The tides follow the Moon. The Sun modifies the
Moon’s effect but never abolishes it.

Surely, one ought to ask why that should be so. I have said that the
Sun’s gravitational pull on the Earth is 176 times that of the Moon.
Why then should it be the Moon that produces the major tidal effect?

The answer is that it is not the gravitational pull itself that pro-
duces the tides, but the difference in that pull upon different parts of
the Earth. The difference in gravitational pull over the Earth’s width
decreases rapidly as the body under consideration is moved farther off,
since, as the total distance increases, the distance represented by the
width of the Earth makes up a smaller and smaller part of the total.

Thus, the distance of the Sun’s center from the Earth’s center is
about 92,900,000 miles. The Earth’s width makes far less difference
in this case than in the case, earlier cited, of the Moon’s distance. The
distance from the Sun’s center to the side of the Earth near it is
92,896,000, while the distance to the far side is 92,904,000. If the
distance from the Sun’s center to the near side of the Earth is set equal
to 1, then the distance to the far side is 1.00009. In that distance, the
Sun’s gravitational pull drops off to only 1/1.00009 or 0.99982.

In other words, where the difference in the Moon’s gravitational
pull from one side of the Earth to the other is 7.0 percent; the dif-
ference of the Sun’s gravitational pull is only 0.018 percent. Multiply
the Sun’s gravitational difference by its greater gravitational pull over-
all (0.018 x 176) and you get 3.2 percent. The tide-producing effect
of the Moon is to that of the Sun as 7.0 is to 3.2 or as 1 is to 0.46.

We see then that the Moon’s effect on tides is more than twice that
of the Sun, despite the Sun’s much greater gravitational pull.
A second way of attaining the comparative gravitational pulls of two bodies upon the Earth is to divide their respective masses by the cubes of their respective distances.

Thus, since the Moon has 1 Moon-mass and is at 1 Moon-distance, its tide-producing effect is $1/1^3$ or 1. The Sun with 27,000,000 Moon-masses at 392 Moon-distances, has a tide-producing effect of $27,000,000/392^3$ or 0.46.

We can easily see that no body other than the Sun and the Moon can have any significant tidal effect on the Earth. The nearest sizable body other than those two is the planet Venus. It can approach as closely as 26,000,000 miles, or 108 Moon-distances, at year-and-a-half intervals. Even then its tidal effect is only $66/108^3$ or 0.0000051 times that of the Moon.

The tides, in a way, affect time. At least, it is the tides that make our day 24 hours long. As the tidal bulge travels about the Earth, it scrapes against shallow sea-bottoms (the Bering Sea and the Irish Sea are supposed to be the prime culprits) and the energy of Earth's rotation is dissipated as frictional heat. The energy of the Earth's rotation is so huge that this dissipation represents only a very small portion of the total over any particular year or even any particular century. Still, it is enough to be slowing the Earth's rotation and lengthening the day by 1 second every 100,000 years.

This isn't much on the human time-scale, but if the Earth has been in existence for five billion years and this rate of day-lengthening has been constant throughout, the day has lengthened a total of 50,000 seconds or nearly 14 hours. When the Earth was created, it must have been rotating on its axis in only 10 hours (or less, if the tides were more important in early geologic times than they are now, as they well might have been).

As the Earth's rate of rotation slows down, it loses angular momentum as well, but this angular momentum cannot be dissipated as heat. It must be retained, as angular momentum, elsewhere in the Moon-Earth system. What the Earth loses the Moon must gain and it can do this by receding from the Earth. It's greater distance means a greater angular momentum as it turns, since angular momentum depends not only upon rate of turn, but also upon distance from the center about which an object is turning.

The effect of the tides, then, is to slow the Earth's rotation and to increase the distance of the Moon.

There is a limit to how much the Earth's rotation will be slowed.
Eventually, the Earth will rotate about its axis so slowly that one side will always face the Moon as the Moon turns in its orbit. When that happens, the tidal bulges will be “frozen” into place immediately under the Moon (and on Earth’s opposite side) and will no longer travel about the Earth. No more friction, no more slowing. The length of the Earth day will then be more than fifty times as long as the present day; and the more distant Moon will turn in its orbit in twice the period it now turns.

Of course, the tidal bulges of the Sun will still be moving about the Earth some seven times a year and this will have further effects on the Earth-Moon system, but never mind that now.

Even if there were no oceans on the Earth, there would still be tidal friction, for the solid substance of the Earth does yield a bit to the differential pull of the Moon. This bulge of solid material travelling around the Earth also contributes to internal friction and to the slowing of the Earth’s rotation.

We can see this at work on the Moon, which has no oceans. Just as the Moon produces tides on the Earth, so the Earth produces tides on the Moon. Since the mass of the Earth is 81 times that of the Moon, but the distance is the same one way as the other, you might suspect that the tidal effect of Earth-on-Moon would be 81 times that of Moon-on-Earth. Actually, it’s not quite that high. The Moon is a smaller body than the Earth so there’s a smaller gravitational difference over its width than there would be in the case of the larger Earth. Without going into the details of the mathematics (after all, I must spare you something) I can give you the results—

If the effect of Moon-on-Earth is considered to be 1.00, then the effect of Earth-on-Moon is 32.5.

With the Moon affected 32.5 times as much as the Earth is, and with its mass, and therefore its rotational energy, considerably less than that of the Earth, there has been ample time in the history of the Solar system to dissipate its rotational energy to the point where the tidal bulge is frozen into the Moon, and where the Moon faces one side only toward the Earth. This is actually the situation.

We can suspect that any satellite which receives a tidal effect even greater than that received by the Moon would (unless it were very much larger than the Moon) also face one side to its primary at all times.

As a matter of fact, there are six other satellites in the Solar system that are Moon-sized or a little larger, and each of them is attached
to a planet considerably more massive than the Earth. They are therefore much more affected tidally. If we continue to consider the effect of the Moon on the Earth to be 1.00, then we can say—

<table>
<thead>
<tr>
<th>Satellite Combination</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neptune-on-Triton</td>
<td>720</td>
</tr>
<tr>
<td>Saturn-on-Titan</td>
<td>225</td>
</tr>
<tr>
<td>Jupiter-on-Callisto</td>
<td>225</td>
</tr>
<tr>
<td>Jupiter-on-Ganymede</td>
<td>945</td>
</tr>
<tr>
<td>Jupiter on Europa</td>
<td>145</td>
</tr>
<tr>
<td>Jupiter on Io</td>
<td>5,650</td>
</tr>
</tbody>
</table>

There seems no question but that all these satellites have had their rotations with respect to their primaries stopped. Each of these satellites faces one side to its primary constantly.

What about the reverse, though? What about the effect of the various satellites on their primaries?

Of the six Moon-sized satellites just mentioned, the two which are closest to their primaries are Io and Triton. Io is 262,000 miles from Jupiter and Triton is 219,000 miles from Neptune. Because the effect varies inversely with the cube of the distance, we can suspect that these two will have considerably more effect on their primaries than will the remaining four which are all much farther away from their primaries.

If we consider the Jupiter/Io and Neptune/Triton pairs, then we note that Jupiter is far larger than Neptune and that there will therefore be a larger drop in the gravitational field across the width of Jupiter than across the lesser width of Neptune. Since the extent of this drop is crucial, it is fair to conclude that of the six planet/satellite combinations we have been considering, the tidal effect of Io on Jupiter is the strongest. Let's see how much that is.

Again, we are considering the tidal effect of the Moon on the Earth to be 1.00. In that case (if you will trust my calculations) the effect of Io on Jupiter is equal to 30.

This is a sizable amount, surprising to anyone who would assume, without analysis, that a small satellite like Io could scarcely have much of a gravitational effect on giant Jupiter.

Well, it has. It has 30 times the effect on Jupiter that our Moon has on the Earth. Io exerts roughly the effect on Jupiter that the Earth exerts on the Moon.

Naturally, although the Earth's effect is sufficient to stop the Moon's rotation relative to itself, we wouldn't expect Io's similar effect on Jupiter to slow Jupiter's rotation significantly. After all, Jupiter is far larger
in mass than the Moon is and packs far more rotational energy into its structure. Jupiter can dissipate this rotational energy for billions of years without slowing its rotation much while the Moon, dissipating its rotational energy at the same rate is brought to a halt. And, indeed, Jupiter still rotates with a period of only 10 hours.

However, there are tidal effects other than rotation-slowing. It has recently been discovered that Jupiter's emission of radio waves varies in time with the rotation of Io. This seems to puzzle astronomers and a number of theories to explain it have been proposed which I am not sure I exactly understand. (I am not, after all, a professional astronomer.)

I suspect that these explanations must surely take into account Io's tidal action on Jupiter's huge atmosphere. This tidal action must affect the turbulence of that atmosphere and therefore its radio emission. In the extremely unlikely case that this has not been considered, I offer the suggestion to all comers free of charge.

That leaves only one more thing to consider. I have discussed the effect of the Sun upon Earth's tides. This is not terribly large (0.46) and one can expect that since the Sun's tide-producing effect drops off as the cube of the distance, the effect on planets more distant than the Earth would prove to be insignificant.

What about the effect on Venus and Mercury, however, which are closer to the Sun than is the Earth?

Well, according to my calculations, the Sun's tidal effect on Venus is 1.06 and its effect on Mercury is 3.77.

These are intermediate figures. They are more than the Moon's effect on Earth, which is not sufficient to stop Earth's rotation altogether; but they are less than the Earth's effect on the Moon, which was enough to stop the Moon.

One might suppose, then, that the rotations of Venus and Mercury, while slowed, would not yet have slowed to a stop.

Nevertheless, for a long time, the rotations of Venus and Mercury were considered as having been stopped, so that both planets faced a single side to the Sun at all times. In the case of Venus, this was a pure guess for no one had ever seen the surface, but in the case of Mercury, where surface markings could be made out (though obscurely) the feeling seemed to check with observations.

In the last year or two, however, this view has had to be revised in the case of both planets. Venus and Mercury are each rotating slowly
with respect to the Sun as (with the wisdom of hindsight) one might have suspected from the figures on tidal effects.

Both rotations are quite odd, moreover, and I would go into that if I had more data and if my allotment of pages were not used up. But alas, magazine space, like time and tide, will not adjust itself to the needs of mere man.

FULL COLOR PRINTS OF F&SF COVERS!

COVERS BY EMSH, HUNTER, BONESTELL, AND OTHERS

We have a limited supply of beautiful full color proofs of F&SF covers without overprinting. These are proofs pulled just before the covers were printed, and we cannot make any additional printings.

$1.00 FOR ONE COLOR PRINT
3.00 FOR FOUR DIFFERENT COLOR PRINTS
5.00 FOR EIGHT DIFFERENT COLOR PRINTS

Each order for four will include one wrap-around double cover print; and each order for eight will include two.

FANTASY & SCIENCE FICTION 347 East 53 St., New York, N.Y. 10022

Send me ___ full color prints of F&SF covers without overprinting. I enclose $____ (1.00 for one, four for $3.00, eight for $5.00).

Please print

Name ____________________________________________

Address ____________________________________________

City ____________________________ State _______ Zip ______

This month’s cover by Mel Hunter pictures three ships descending into the shaft of an unusually deep crater on a planet circling a red giant star. Proofs of this cover are available (please specify). Requests for other specific covers will be filled when possible; otherwise, we will send our selection.
When H. L. Gold offered this story to us for possible reprint (it has appeared once in a book, never in a magazine), he mentioned that probably no one has ever invented an alien quite like the Dorfellow. We would venture a strong guess that nobody has even come close, and, after reading the story, we think you will concur.

**MAN OF PARTS**

by H. L. Gold

There wasn’t a trace of amnesia or confusion when Major Hugh Savold, of the Fourth Earth Expedition against Vega, opened his eyes in the hospital. He knew exactly who he was, where he was, and how he had gotten there.

His name was Gam Nex Biad.

He was a native of the planet named Dorfel.

He had been killed in a mining accident far underground.

The answers were preposterous and they terrified Major Savold. Had he gone insane? He must have, for his arms were pinned tight in a restraining sheet. And his mouth was full of bits of rock.

Savold screamed and wrenched around on the flat, comfortable boulder on which he had been nibbling. He spat out the rock fragments that tasted—nutritious.

Shaking, Savold recoiled from something even more frightful than the wrong name, wrong birthplace, wrong accident, and shockingly wrong food.

A living awl was watching him solicitously. It was as tall as himself, had a pointed spiral drill for a head, three knee-action arms ending in horn spades, two below them with numerous sensitive cilia, a row of socketed bulbs down its front, and it stood on a nervously bouncing bedspring of a leg.

Savold was revolted and tense with panic. He had never in his life seen a creature like this.

It was Surgeon Trink, whom he had known since infancy.
“Do not be distressed,” glowed the surgeon’s kindly lights. “You are everything you think you are.”

“But that’s impossible! I’m an Earthman and my name is Major Hugh Savold!”

“Of course.”

“Then I can’t be Gam Nex Biad, a native of Dorfel!”

“But you are.”

“I’m not!” shouted Savold. “I was in a one-man space scout. I sneaked past the Vegan cordon and dropped the spore-bomb, the only one that ever got through. The Vegans burned my fuel and engine sections full of holes. I escaped, but I couldn’t make it back to Earth. I found a planet that was pockmarked worse than our moon. I was afraid it had no atmosphere, but it did. I crash-landed.” He shuddered. “It was more of a crash than a landing.”

Surgeon Trink brightened joyfully, “Excellent! There seems to be no impairment of memory at all.”

“No?” Savold yelled in terror. “Then how is it I remember being killed in a mining accident? I was drilling through good hard mineral ore, spinning at a fine rate, my head soothingly warm as it gouged into the tasty rock, my spades pushing back the crushed ore, and I crashed right out into a fault...”

“Soft shale,” the surgeon explained, dimming with sympathy. “You were spinning too fast to sense the difference in density ahead of you. It was an unfortunate accident. We were all very sad.”

“And I was killed,” said Savold, horrified. “Twice!”

“Oh, no. Only once. You were badly damaged when your machine crashed, but you were not killed. We were able to repair you.”

Savold felt fear swarm through him, driving his ghastly thoughts into a quaking corner. He looked down at his body, knowing he couldn’t see it, that it was wrapped tightly in a long sheet. He had never seen material like this.

He recognized it instantly as asbestos cloth.

There was a row of holes down the front. Savold screamed in horror. The socketed bulbs lit up in a deafening glare.

“Please don’t be afraid!” The surgeon bounced over concernedly, broke open a large mica capsule, and splashed its contents on Savold’s head and face. “I know it’s a shock, but there’s no cause for alarm. You’re not in danger, I assure you.”

Savold found himself quieting down, his panic diminishing. No, it wasn’t the surgeon’s gentle, reassuring glow that was responsible. It was the liquid he was covered with. A sedative of some sort, it eased the constriction of his brain, relaxed his facial muscles, dribbled comfortingly into his mouth. Half of him recognized the heavy odor and the other half identified the taste.
It was lubricating oil. As a lubricant, it soothed him. But it was also a coolant, for it cooled off his fright and disgust and let him think again.

"Better?" asked Surgeon Trink hopefully.

"Yes, I'm calmer now," Savold said, and noted first that his voice sounded quieter, and second that it wasn't his voice—he was communicating by glows and blinks of his row of bulbs, which, as he talked, gave off a cold light like that of fireflies. "I think I can figure it out. I'm Major Hugh Savold. I crashed and was injured. You gave me the body of a . . . " he thought about the name and realized that he didn't know it, yet he found it immediately, " . . . a Dorfellow, didn't you?"

"Not the whole body," the surgeon replied, glimmering with confidence again as his bedside manner returned. "Just the parts that were in need of replacement."

Savold was revolted, but the sedative effect of the lubricating oil kept his feelings under control. He tried to nod in understanding. He couldn't. Either he had an unbelievably stiff neck . . . or no neck whatever.

"Something like our bone, limb, and 'organ banks," he said. "How much of me is Gam Nex Biad?"

"Quite a lot, I'm afraid." The surgeon listed the parts, which came through to Savold as if he were listening to a simultaneous translation: from Surgeon Trink to Gam Nex Biad to him. They were all equivalents, of course, but they amounted to a large portion of his brain, skull, chest, internal and reproductive organs, mid-section, and legs.

"Then what's left of me?" Savold cried in dismay.

"Why, part of your brain—a very considerable part, I'm proud to say. Oh, and your arms. Some things weren't badly injured, but it seemed better to make substitutions. The digestive and circulatory system, for instance. Yours were adapted to foods and fluids that aren't available on Dorfel. Now you can get your sustenance directly from the minerals and metals of the planet, just as we do. If I hadn't, your life would have been saved, but you would have starved to death."

"Let me up," said Savold in alarm. "I want to see what I look like."

The surgeon looked worried again. He used another capsule of oil on Savold before removing the sheet.

Savold stared down at himself and felt revulsion trying to rise. But there was nowhere for it to go and it couldn't have gotten past the oil if there had been. He swayed sickly on his bedspring leg, petrified at the sight of himself.

He looked quite handsome, he had to admit—Gam Nex Biad had
always been considered one of the most crashing bores on Dorfel, capable of taking an enormous leap on his magnificently wiry leg, landing exactly on the point of his head with a swift spin that would bury him out of sight within instants in even the hardest rock. His knee-action arms were splendidly flinty; he knew they had been repaired with some other miner's remains, and they could whirl him through a self-drilled tunnel with wonderful speed, while the spade hands could shovel back ore as fast as he could dig it out. He was as good as new . . . except for the disgustingly soft, purposeless arms.

The knowledge of function and custom was there, and the reaction to the human arms, and they made explanation unnecessary, just as understanding of the firefly language had been there without his awareness. But the emotions were Savold's and they drove him to say fiercely, "You didn't have to change me altogether. You could have saved my life so I could fix my ship and get back . . . ."

He paused abruptly and would have gasped if he had been able to. "Good Lord! Earth Command doesn't even know I got the bomb through! If they act fast, they can land without a bit of opposition!"

He spread all his arms—the two human ones, the three with knee-action and spades, the two with the sensitive cilia—and stared at them. "And I have a girl back on Earth . . . ."

Surgeon Trink glowed sympathetically and flashed with pride. "Your mission seems important somehow, though its meaning escaped me. However, we have repaired your machine . . . ."

"You have?" Savold interrupted eagerly.

"Indeed, yes. It should work better than before." The surgeon flickered modestly. "We do have some engineering skill, you know."

The Gam Nex Biad of Savold did know. There were the underground ore smelters and the oil refineries and the giant metal awls that drilled out rock food for the manufacturing centers, where miners alone could not keep up with the demand, and the communicators that sent their signals clear around the planet through the substrata of rock, and more, much more. This, insisted Gam Nex Biad proudly, was a civilization, and Major Hugh Savold, sharing his knowledge, had to admit that it certainly was.

"I can take right off, then?" Savold flared excitedly.

"There is a problem first," glowed the surgeon in some doubt. "You mention a 'girl' on this place you call 'Earth.' I gather it is a person of the opposite sex."

"As opposite as anybody can get. Or was," Savold added moodily. "But we have limb and organ banks back on Earth. The doctors there can do a repair job. It's a damned big one, I know, but they
can handle it. I'm not so sure I like carrying Gam Nex Biad around with me for life, though. Maybe they can take him and . . ."

"Please," Surgeon Trink cut in with anxious blinkings. "There is a matter to be settled. When you refer to the 'girl,' you do not specify that she is your mate. You have not been selected for each other yet?"

"Selected?" repeated Savold blankly, but Gam Nex Biad supplied the answer—the equivalent of marriage, the mates chosen by experts on genetics, the choice being determined by desired transmittable aptitudes. "No, we were just going together. We were not mates, but we intended to be as soon as I got back. That's the other reason I have to return in a hurry. I appreciate all you've done, but I really must . . ."

"Wait," the surgeon ordered.

He drew an asbestos curtain that covered part of a wall. Savold saw an opening in the rock of the hospital, a hole-door through which bounced half a dozen little Dorfellows and one big one . . . Straight at him. He felt what would have been his heart leap into what would have been his chest if he had had either. But he couldn't even get angry or shocked or nauseated; the lubricating oil cooled off all his emotions.

The little creatures were all afire with childish joy. The big one sparkled happily.

"Father!" blinked the children.

"Mate!" added Prad Fim Biad in a delighted exclamation point.

"You see," said the surgeon to Savold, who was shrinking back, "you already have a mate and a family."

It was only natural that a board of surgeons should have tried to cope with Savold's violent reaction. He had fought furiously against being saddled with an alien family. Even constant sautration with lubricating oil couldn't keep that rebellion from boiling over.

On Earth, of course, he would have been given immediate psycho-therapy, but there wasn't anything of the sort here. Dorfellows were too granitic physically and psychologically to need medical or psychiatric doctors. A job well done and a family well raised—that was the extent of their emotionalism. Savold's feelings, rage and resentment and a violent desire to escape, were completely beyond their understanding. He discovered that as he angrily watched the glittering debate.

The board quickly determined that Surgeon Trink had been correct in adapting Savold to the Dorfel way of life. Savold objected that the adaptation need not have been so thorough, but he had to admit that, since they couldn't have kept him fed any other way, Surgeon Trink had done his best in an emergency.

The surgeon was willing to ac-
cept blame for having introduced Savold so bluntly to his family, but the board absolved him—none of them had had any experience in dealing with an Earth mentality. A Dorfellow would have accepted the fact, as others with amnesia caused by accident had done. Surgeon Trink had had no reason to think Savold would not have done the same. Savold cleared the surgeon entirely by admitting that the memory was there, but, like all the other memories of Gam Nex Biad's, had been activated only when the situation came up. The board had no trouble getting Savold to agree that the memory would have returned sooner or later, no matter how Surgeon Trink handled the introduction, and that the reaction would have been just as violent.

"And now," gleamed the oldest surgeon on the board, "the problem is how to help our new—and restored—brother adjust to life on this world."

"That isn't the problem at all!" Savold flared savagely. "I have to get back to Earth and tell them I dropped the bomb and they can land safely. And there's the girl I mentioned. I want to marry her—become her mate, I mean."

"You want to become her mate?" the oldest surgeon blinked in bewilderment. "It is your decision?"

"Well, hers, too."

"You mean you did the selecting yourselves? Nobody chose for you?"

Savold attempted to explain, but puzzled glimmers and Gam Nex Biad's confusion made him state resignedly, "Our customs are different. We choose our own mates." He thought of adding that marriages were arranged in some parts of the world, but that would only have increased their baffled lack of understanding.

"And how many mates can an individual have?" asked a surgeon.

"Where I come from, one."

"The individual's responsibility, then, is to the family he has. Correct?"

"Of course."

"Well," said the oldest surgeon, "the situation is perfectly clear. You have a family—Prad Fim Biad and the children."

"They're not my family," Savold objected. "They're Gam Nex Biad's and he's dead."

"We respect your customs. It is only fair that you respect ours. If you had had a family where you come from, there would have been a question of legality, in view of the fact that you could not care for them simultaneously. But you have none and there is no such question."

"Customs? Legality?" asked Savold, feeling as lost as they had in trying to comprehend an alien society.

"A rebuilt Dorfellow," the oldest surgeon said, "is required to assume the obligations of whatever major parts went into his reconstruction. You are almost entirely
made up of the remains of Gam Nex Biad, so it is only right that his mate and children should be yours."

"I won't do it!" Savold protested. "I demand the right to appeal."

"On what grounds?" asked another surgeon politely.

"That I'm not a Dorfellow!"

"Ninety-four point seven per cent of you is, according to Surgeon Trink's requisition of limbs and organs. How much more of a citizen can any individual be?"

Gam Nex Biad confirmed the ruling and Savold subsided. While the board of surgeons discussed the point it had begun with—how to adapt Savold to life on Dorfel—he thought the situation through. He had no legal or moral recourse. If he was to get out of his predicament, it would have to be through shrewd resourcefulness and he would never have become a major in the space fleet if he hadn't had plenty of that.

Yeah, shrewd resourcefulness, thought Savold bitterly, jouncing unsteadily on his single bedspring leg on a patch of unappealing topsoil a little distance from the settlement. He had counted on something that didn't exist here—the kind of complex approach that Earth doctors and authorities would have used on his sort of problem, from the mitigation of laws to psychological conditioning, all of it complicated and every stage allowing a chance to work his way free.

But the board of surgeons had agreed on a disastrously simple course of treatment for him. He was not to be fed by anybody and he could not sleep in any of the underground rock apartments, including the dormitory for unmated males.

"When he's hungry enough, he'll go back to mining," the oldest surgeon had told the equivalent of a judge, a local teacher who did part-time work passing on legal questions that did not have to be ruled on by the higher courts. "And if he has no place to stay except with Gam Nex Biad's family, which is his own, naturally, he'll go there when he's tired of living out in the open all by himself."

The judge thought highly of the decision and gave it official approval.

Savold did not mind being out in the open, but he was far from being all by himself. Gam Nex Biad was a constant nuisance, nagging at him to get in a good day's drilling and then go home to the wife, kiddies, and their cozy, hollowed-out quarters, with company over to celebrate his return with a lavish supply of capsuled lubricating oil. Savold obstinately refused, though he found himself salivating, or something very much like it.

The devil of the situation was that he was hungry and there was not a single bit of rock to munch
on. That was the purpose of this fenced-in plot of ground—it was like hard labor in the prisons back on Earth, where the inmates ate only if they broke their quota of rock, except that here the inmates would eat the rock they broke. The only way Savold could get out of the enclosure was by drilling under the high fence. He had already tried to bounce over it and discovered he couldn't.

"Come on," Gam Nex Biad argued in his mind. "Why fight it? We're a miner and there's no life like the life of a miner. The excitement of boring your way through a lode, making a meal out of the rich ore! Miners get the choicest tidbits, you know—that's our compensation for working so hard and taking risks."

"Some compensation," sneered Savold, looking wistfully up at the stars and enviously wishing he were streaking between them in his scout.

"A meal of iron ore would go pretty well right now, wouldn't it?" Gam Nex Biad tempted. "And I know where there are some veins of tin and sulphur. You don't find them living around on the surface, eh? Nonminers get just traces of the rare metals to keep them healthy, but we can stuff ourself all we want—"

"Shut up!"

"—and some pools of mercury. Not big ones, I admit, but all we'd want is a refreshing gulp to wash down those ores I was telling you about."

Resisting the thought of the ores was hard enough, for Savold was rattlingly empty, but the temptation of the smooth, cold mercury would have roused the glutton in anyone.

"All right," he growled. "but get this straight—we're not going back to your family. They're your problem, not mine."

"But how could I go back to them if you won't go?"

"I'm glad you see it my way. Now where are those ores and that mercury?"

"Dive," said Gam Nex Biad. "I'll give you the directions."

Savold took a few bounces to work up speed and spin, then shot into the air and came down on the point of his awl-shaped head, which bit through the soft topsoil as if through—he shuddered—so much water. As a Dorfellow, he had to avoid water; it eroded and corroded and caused deposits of rust in the digestive and circulatory systems. There was a warmth that was wonderfully soothing caused by drilling into rock. He ate some to get back his strength, but left room for the main course and the dessert.

"Pretty nice, isn't it?" asked Gam Nex Biad as they gouged a comfortable tunnel back toward the settlement. "Nonminers don't know what they're missing."

"Quiet," Savold ordered surlily,
but he had to confess to himself that it was pleasant. His three knee-action arms rotated him at a comfortable speed, the horn spades pushing back the loose rock; and he realized why Gam Nex Biad had been upset when Surgeon Trink left Savold's human arms attached. They were in the way and they kept getting scratched. The row of socketed bulbs gave him all the light he needed. That, he decided, had been their original purpose. Using them to communicate with must have been one of their first steps toward civilization.

Savold had been repressing thoughts ever since the meeting of the board of surgeons. Now he experimentally called his inner partner.

"Um?" asked Gam Nex Biad absently.

"Something I wanted to discuss with you," Savold said.

"Later. I sense the feldspar coming up. We head north there."

Savold turned the drilling over to him, then allowed the buried thoughts to emerge. They were thoughts of escape and he had kept them hidden because he was positive that Gam Nex Biad would have betrayed them. He had been trying incessantly, wheedlingly, to sell Savold on mining and returning to the family.

Hell with that, Savold thought grimly now. He was getting back to Earth somehow—Earth Command first, Marge second. No, surgery second, Marge third, he corrected. She wouldn’t want him this way . . .

"Manganese," said Gam Nex Biad abruptly, and Savold shut off his thinking. "I always did like a few mouthfuls as an appetizer."

The rock had a pleasantly spicy taste, much like a cocktail before dinner. Then they went on, with the Dorfellow giving full concentration to finding his way from deposit to deposit.

The thing to do, Savold reasoned, was to learn where the scout ship was being kept. He had tried to sound out Gam Nex Biad subtly, but it must have been too subtle—the Dorfellow had guessed uninterestedly that the ship would be at one of the metal-fabricating centers, and Savold had not dared ask him which one. Gam Nex Biad couldn’t induce him to become a miner and Dorfellow family man, but that didn’t mean he could escape over Gam Nex Biad’s opposition.

Savold did not intend to find out. Shrewd resourcefulness, that was the answer. It hadn’t done him much good yet, but the day he could not outfox these rock-eaters, he’d turn in his commission. All he had to do was find the ship . . .

Bloated and tired, Savold found himself in a main tunnel thoroughfare back to the settlement. The various ores, he disgustedly had to confess to himself, were as delicious as the best human foods, and there was nothing at all like
the flavor and texture of pure liquid mercury. He discovered he had some in his cupped cilia hands.

“To keep for a snack?” he asked Gam Nex Biad.

“I thought you wouldn’t mind letting Prad Fim and the children have a little,” the Dorfellow said hopefully. “You ought to see them light up whenever I bring it home!”

“Not a chance! We’re not going there, so I might as well drop it.”

Savold tried to open his cilia hands. They stayed cupped. That was when he realized that he had supposed correctly. Gam Nex Biad could prevent him from escaping.

Savold had to get some sleep. He was ready to topple with exhaustion. But the tunnels were unsafe—a Dorfellow traveling through one on an emergency night errand would crash into him hard enough to leave nothing but flinty splinters. And the night air felt chill and hostile, so it was impossible to sleep above ground.

“Please make up your mind,” Gam Nex Biad begged. “I can’t stay awake much longer and you’ll just go blundering around and get into trouble.”

“But they’ve got to put us up somewhere,” argued Savold. “How about the hospital? We’re still a patient, aren’t we?”

“We were discharged. And nobody else is allowed to let us stay in any apartment—except one.”

“I know, I know,” Savold replied with weary impatience. “Forget it. We’re not going there.”

“But it’s so comfortable there—”

“Forget it, I told you!”

“Oh, all right,” Gam Nex Biad said resignedly. “But we’re not going to find anything as pleasant and restful as my old sleeping boulder. It’s soft limestone, you know, and grooved to fit our body. I’d like to see anybody not fall asleep instantly on that good old flat boulder . . .”

Savold tried to resist, but he was worn out from the operation, digging, and the search for a place to spend the night.

“Just look at it, that’s all,” Gam Nex Biad coaxed. “If you don’t like it, we’ll sleep anywhere you say. Fair enough?”

“I suppose so,” admitted Savold.

The hewn-rock apartment was quiet, at least; everybody was asleep. He’d lie down for a while, just enough to get some rest, and clear out before the household awoke . . .

But Prad Fim and the children were clustered around the boulder when he opened his eyes. Each of them had five arms to fight off. And there was Surgeon Trink, the elder of the board of surgeons, and the local teacher-judge all waiting to talk to him when the homecoming was over with.

“The treatment worked!” cried the judge. “He came back!”

“I never doubted it,” the elder said complacently.
"You know what this means?" Surgeon Trink asked Savold.

"No, what?" Savold inquired warily, afraid of the answer.

"You can show us how to operate your machine," declared the judge. "It isn't that we lack engineering ability, you understand. We simply never had a machine as large and complex before. We could have, of course—I'm sure you're aware of that—but the matter just never came up. We could work it out by ourselves, but it would be easier to have you explain it."

"By returning, you've shown that you have attained a degree of stability," added the elder. "We couldn't trust you with the machine while you were so disturbed."

"Did you know this?" Savold silently challenged Gam Nex Biad.

"Well, certainly," came the voiceless answer.

"Then why didn't you tell me? Why did you let me go floundering around instead?"

"Because you bewilder me. This loathing for our body, which I'd always been told was quite attractive, and for mining and living with our family—wanting to reach this thing you call Earth Command and the creature with the strange name—Marge, isn't it? I could never guess how you would react to anything. It's not easy living with an alien mentality."

"You don't have to explain. I've got the same problem, remember."

"That's true," Gam Nex Biad silently agreed. "But I'm afraid you have to take it from here. All I know is mining, not metal-fabricating centers."

Savold suppressed his elation. The less Gam Nex Biad knew from this point on, the less he could guess—and the smaller chance that he could betray Savold.

"We can leave right now," the judge was saying. "The family can follow as soon as you've built a home for them."

"Why should they follow?" Savold demanded. "I thought you said I was going to be allowed to operate the ship."

"Demonstrate and explain it, really," amended the judge. "We're not absolutely certain that you are stable, you see. As for the family, you're bound to get lonesome . . ."

Savold stared at Prad Fim and the children. Gam Nex Biad was brimming with affection for them, but Savold saw them only as hideous ore-crushing monsters. He tried to keep them from saying good-by with embraces, but they came at him with violent leaps that threatened to chip bits out of his body with their grotesque point awl heads. He was glad to get away, especially with Gam Nex Biad making such a damned slobbering nuisance of himself.

"Let's go!" Savold blinked frantically at the judge, and dived after him into an express tunnel.

While Gam Nex Biad was busily grieving, Savold stealthily worked
out his plans. He would glance casually at the ship, glow some mild compliment at the repair job, make a pretense of explaining how the controls worked—and blast off into space at the first opportunity, even if he had to wait for days. He knew he would never get another chance; they’d keep him away from the ship if that attempt failed. And Gam Nex Biad was a factor, too. Savold had to hit the takeoff button before his partner suspected or their body would be paralyzed in the conflict between them.

It was a very careful plan and it called for iron discipline, but Savold had plenty of that. All he had to do was maintain his iron self-control.

He did—until he saw the ship right ahead on the hole-pocked plain. Then his control broke and he bounced with enormous, desperate leaps toward it.

“Wait! Wait!” glared the judge, and others from the fabricating center sprang toward the ship.

Savold managed to reach the pilot room and slam the door before Gam Nex Biad, asking in frightened confusion “What are you doing?” locked their muscles so that Savold was unable to move.

“What am I doing?” Savold glinted venomously. “Getting off your lousy planet and back to a sane world where people live like people instead of like worms and moles!”

“I don’t know what you mean,” said the Dorfellow anxiously, “but I must stop you until the authorities say it’s all right.”

“You can’t stop me!” Savold exulted. “You can paralyze everything except my own arms!”

And that, of course, was the ultimate secret he had been hiding from Gam Nex Biad.

His finger slammed down the takeoff button. The power plant roared and the ship lifted swiftly toward the sky.

It began to spin.

Then it flipped over and rushed suicidally at the ground.

“They did something wrong to the ship!” cried Savold.

“Wrong?” repeated Gam Nex Biad vacantly. “It seems to be working fine.”

“But it’s supposed to be heading up!”

“Oh, no,” said Gam Nex Biad as the converted ship started to drill. “Our machines never go that way. There’s no rock up there.”
MARKET PLACE

Did you know that man is not an animal—the brain is not the mind—you may be stuck in your mind—you can be released from your mind? If you don’t know these things, then you best find out! Read Dianetics: The Modern Science of Mental Health by L. Ron Hubbard. Send $5.00 to The Distribution Center, Inc. Dept. FSF, Box 242, Silver Spring, Md. 20907. Order your copy and read the book that millions have read throughout the world.

BOOKPLATES

FREE CATALOGUE—Many beautiful designs. Special designing too. Address BOOKPLATES, Yellow Springs 4, Ohio.

HYPNOTISM


FREE Hypnotism, Self-Hypnosis, Sleep learning Catalog Drawer G400, Ruidoso, New Mexico 88345.


PERSONAL

DEVELOP YOUR ESP $1.00. Evelyn McKeever, 642 Jones Street, San Francisco, California, 94102.

UNUSUAL, ODD CURIOS. 1000 gifts. Catalog 10¢. WORLDWIDE CURIO HOUSE, Dept. FSF, Box 5655, Minneapolis, Minn. 55417.

English speaking Swedish/German girls seek penfriends/husbands. Photoalbum $5.00; prospectus free—COSMOCLUB “SILVERTHISTLE”, Hamburg 72/SF, Germany.

Do you have something to advertise to sf readers? Books, magazines, typewriters, telescopes, computers, space-drives, or misc. Use the F&SF Market Place at these low, low rates: $3.00 for minimum of ten (10) words, plus 30¢ for each additional word. Send copy and remittance to: Adv. Dept., Fantasy and Science Fiction, 347 East 53 Street, New York, N. Y. 10022
COINS

100 Foreign Coins for $2.95. Bells, Box 276, Tolleson, Arizona.

WANTED

One copy each of the U.S. edition of Venture Science Fiction, Jan. 57, Sept. 57, and Jan. 58. Write Mercury Press, Box 271, Rockville Centre, N.Y. 11571

MISCELLANEOUS

Secret Agents, salesmen, or just for fun, this double track recorder carried in the pocket, purse or briefcase records up to 30 minutes per reel. Complete with tie clasp microphone. Less batteries $19.95. Jack Ryan, 2356 Ohio Avenue, Cincinnati, Ohio.

FOREIGN EDITIONS of Fantasy and Science Fiction Limited offer—Send $1. for any 3 foreign edition copies of F&SF (usually 50c each)—French, German, Italian, Japanese, Spanish, or British Venture SF. Mercury Press, Box 271, Rockville Centre, N.Y. 11571.

YOUR MARKET PLACE

A market is people—alert, intelligent, active people.

Here you can reach 180,000 people (averaging three readers per copy—60,000 paid circulation). Many of them are enthusiastic hobbyists—collecting books, magazines, stamps, coins, model rockets, etc.—actively interested in photography, music, astronomy, painting, sculpture, electronics.

If you have a product or service of merit, tell them about it. The price is right: $3.00 for a minimum of ten (10) words, plus 30¢ for each additional word. To keep the rate this low, we must request remittance with the order.

Advertising Dept., Fantasy & Science Fiction
347 East 53 St., New York, N.Y. 10022