

VIEWPOINT ESSAY CONTEST! Details inside!

ASIMOV'S

Isaac

SCIENCE FICTION

MAGAZINE

1.75 JUNE 1983

THE HIGH TEST

FREDERIK POHL

NORMAN SPINRAD

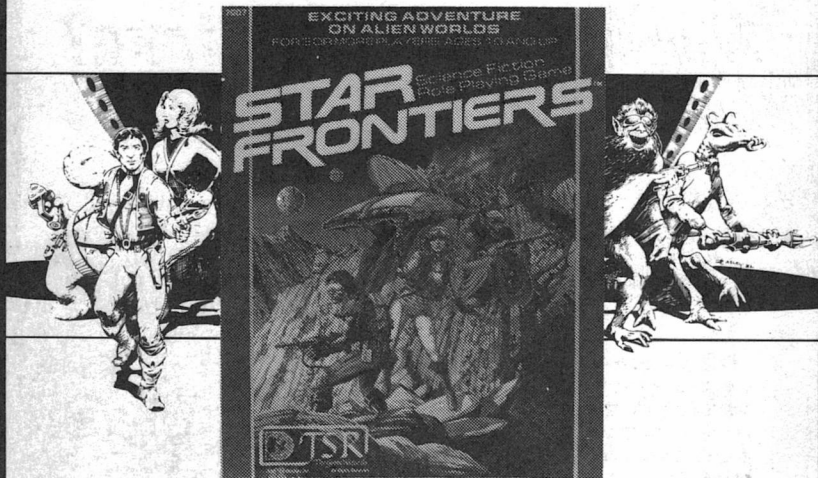
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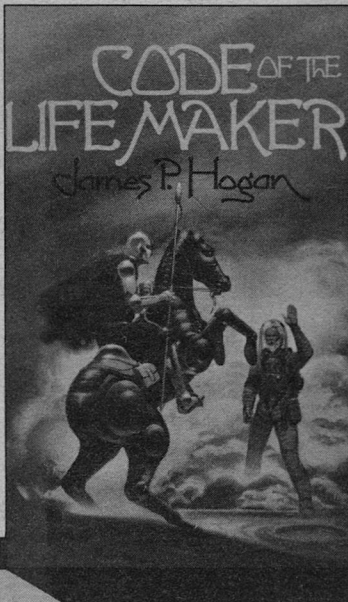
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Cover art for "The High Test" by Joe Burleson

**Joel Davis: President & Publisher Isaac Asimov: Editorial Director
Shawna McCarthy: Editor**

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UP FRONT

by Shawna McCarthy

Well, as I promised you in the March issue, here's the announcement of the Viewpoint contest. First of all, what I'm looking for: personal, perhaps controversial, essays on or around the field of science fiction and fantasy. These should be up to 1200 words long, and should deal with whatever subject you feel most strongly on in relation to our field. Do you feel fantasy is corrupting science fiction? Do you feel science fiction is creeping too often into fantasy? Are movies diluting the appeal of written science fiction? Is science fiction dead, dying, or just off visiting its mother? Etc. Whatever bee is currently buzzing around in your bonnet, whatever grievance you feel needs immediate and public airing—that's what I want you to write about.

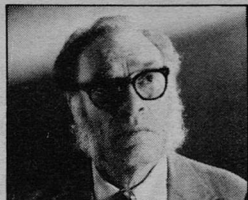
Now as for the ground rules. All submissions *must* be (neatly) typed and double spaced. As always, proper spelling, grammar, and punctuation *count*. Keep a copy of your essay for yourself, for the copy you send me *will not be returned*. (No, I'm not going to steal your ideas—I just don't want to have to spend the time stuffing 2,000 essays into return envelopes and sending them back to you.) Address them to: VIEWPOINT CONTEST,

ISAAC ASIMOV'S SCIENCE FICTION MAGAZINE, DAVIS PUBLICATIONS, INC., 380 LEXINGTON AVENUE, NEW YORK, NY 10017. The deadline for submissions is July 8, 1983. Any submissions postmarked after that date will not be considered. The winning essay will appear in the January 1984 issue of this magazine (yes, it really takes that long for something to get into print), and the winner will be notified by mail. No other entries will be acknowledged. The prize will be manifold: first, the extreme pride and pleasure you will feel upon seeing your name and essay boldly bannered across the page in our magazine; second, an autographed copy of *Foundation's Edge*; and third, the sum of \$50.00. You will then be able to tell your friends and relatives that you are a Published Writer: that you have received money from a professional publication in order that they might print your words. Which brings me to another rule: this contest is open to amateur writers only—if you have ever been paid to write for a magazine, newspaper, or book publisher, this contest is not for you.

If we're all clear on the whats, the whys, and the wherefores, *let the contest begin!* ●



EDITORIAL



by Isaac Asimov

UNREASONABLE!

Life is unreasonable in so many different ways—and there isn't much anyone can do about it.

I, at least, have a soapbox and can relieve my pent-up frustrations by talking about them and giving examples, which is good, and will, I hope, contribute to my remaining young and healthy for an extended period.

What got me thinking about this was a letter mailed to this magazine not very long ago. The writer was in a state of fury over the fact that our policy was to ask the enclosure of a stamped self-addressed envelope before we complied with certain requests.

"If I am not worth the investment of a 20-cent stamp," he wrote angrily, "then the hell with you!"

I instantly put a sheet of paper into my typewriter in order to answer him and give him the elementary explanation that would probably calm him down, but his unreasonableness extended to a failure to include a return address. I must therefore make the explanation here.

Were our correspondent the only one to request a mailing, he would, of course, be worth 20 cents to us—even perhaps a dollar or two. He is not, however, the only one, and I am truly astonished that this does not occur to him. We get many requests every day, and the cost in stationery and postage would be substantial. The salaried time spent in typing up addresses would be equally substantial.

To ask each person who would like to get something from us to invest money and time which, on an individual basis, is insignificant, is reasonable. To ask us to invest large amounts of money and time in order to show our regard for each individual reader is unreasonable (even though the regard does exist). To fail to see this is even more unreasonable.

This is not to say we don't sympathize with the strong feelings our readers have on many issues, even when we are fairly helpless to do anything about it.

The trouble is, of course, that this magazine (and most mag-

azines) are not vast money-making concerns. We operate on a strict budget and must economize where and when we can reasonably do so. We are not overwhelmed with delight at the nature of some of the classified ads that appear in the last few pages, but we receive payment for that, and if we gave up that payment, the price of the magazine would have to go up, and if enough of you rebel against the increased price we would have to shut down. If we could find alternate revenue, we would, but this is a hard world, and we can only sigh when idealistic readers complain about the classifieds. Surely it is unreasonable to ask us to risk suicide.

The price of the magazine does go up occasionally even so, but it is unreasonable to suppose that we do this out of greed for the reader's money. We are at the mercy of the cost of paper, printing, postage, and other things, which go up more or less steadily. We live in an inflation-ridden world, and to expect the magazine to keep its price fixed under such conditions is unreasonable.

We would like to send off subscription issues in wrappers rather than with unsightly address labels, but that, too, introduces a major cost that we would have to pass on not only to subscribers, but to news-

stand buyers as well, who would be unlikely to be overjoyed.

We would like to arrange to have the address label come off easily so that the reader can remove it as soon as he receives the magazine, but such a label is bound to come off once in a while *before* the reader gets the magazine, and off the copy will go to the dead-letter office, and in will come the irate mail over missed issues.

We would like to put the address label on the back cover instead of the front cover for esthetic reasons, but the post office employees tend to look at the front, and those who advertise on the back won't see the humor of having part of their message covered up and, on the whole, we are in no position to antagonize either the Postal Service or the advertisers.

We would very much like to please everyone with our editorial policies, but it can't be done. Every time there is a change in the nature of the cover, for instance, the disapproving letters come in. These changes are often merely experimental, and sometimes when we decide, on mature consideration, that the change does not represent an improvement and we change back to the situation as it was before—the disapproving letters again come in.

I am rather pleased and gratified that so many letters have

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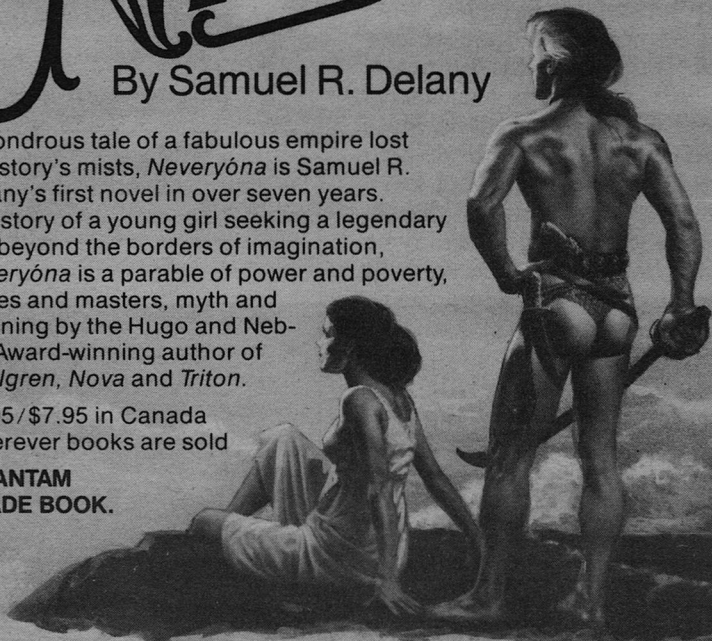
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arrived, over the months, mourning the loss of my cheerful and smiling face in the letter O of "Asimov's," but I know very well that if we allowed ourselves to be lured into putting my mug back on the cover, at least as many letters would arrive groaning over the visual pollution it would produce.

I might argue that readers' letters in these respects are unreasonable, but, then, to expect the world to be reasonable is itself unreasonable, and we will simply continue to do our best. If the time comes that we can wrap our subscription copies, we will. If we can ever lower prices, believe me we will. Most of all, we will continue to keep editorial policies we feel have proven successful, and to change them when we feel that may be an improvement. And we will depend on the readers, as a whole, being pleased with the results.

What's more, we will continue to welcome all your comments, views and complaints, reasonable or not, since we can never be sure, in advance, just what is reasonable and what not.

Nor do I wish to leave you with the impression that unreasonableness is confined to readers' letters.

Literary reviewers are sometimes unreasonable to the point of madness (ask any writer). For instance, Janet and I put

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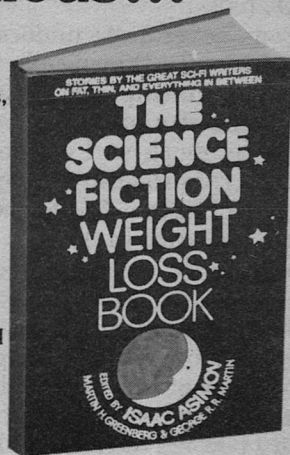
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together an anthology of humorous science fiction — including stories, verse, and cartoons — which Janet carefully arranged in an attractive manner. The publishers, Houghton Mifflin, spared no expense in producing an attractive package, and the title, if you are curious, is *Laughing Space*. We were very pleased with the result, and so were most of the reviewers.

Yet one or two reviewers scowled darkly and complained that in this anthology of humor, we had unaccountably included humorous items. Why did we not include the mordant, bitter,

and savage writings of so-and-so and so-and-so?

The proper and reasonable answer, of course, is that the anthology is ours, prepared in accordance with our tastes, and that we included what we thought of as humorous. Savage, bitter, and mordant writings are not what we think of as funny, though we cheerfully admit they are savage, bitter, and mordant. But then, it is not unheard-of for reviewers to berate a writer for writing a book according to his own taste, and not the book the *reviewer* would have written, if the reviewer were only capable of writing. It

would be unreasonable to expect anything else.

I have my own unreasonabilities, too.

I can never quite understand the difficulty that people have in appreciating the peculiar problems of a prolific writer. I write as much as I do, not because I rub Aladdin's lamp, but because I have a 70-hour work-week and stick to it.

Yet every once in a while, someone asks me to do something for them and says, as a way of showing how insignificant the request is, "It will only take an hour of your time." — And I become unreasonably furious.

The person speaking to me means no harm. He (or she) honestly thinks an hour isn't much, and yet it is all I can do to remain polite.

The other day someone phoned me to say he was writ-

ing an article on cities of the future and could I favor him with "a few moments" during which I would describe to him my views on cities of the future, their size, their economies, their social structure, and their functions. I suppressed my unreasonable fury and said, as gently as I might, "I think that would take more than a few moments" and asked him to call me another time, when I would have more leisure.

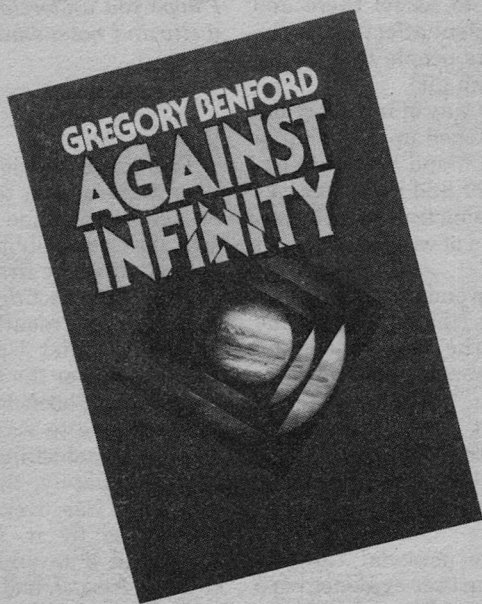
I hope he doesn't call, but I expect he will.

I occasionally get enraged over the fact that when someone asks for "a few moments" or for "just an hour of your time" in order that they might profit from the exchange, they never offer to pay me for the time I lose from my own work—time I can ill-afford to lose. Yet it is unreasonable of me to be surprised at that, so I try hard not to be. ●



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TIMESCAPE

LETTERS

Dear Doctor:

I lived in Canada for quite a few years. I went to school there and gained a sufficient affection for the country and its people that I married a Canadian girl.

That was by way of introduction. Now, if you picked up a Canadian magazine and found therein a letter to the editor and its writer was identified as being from, say, Texas, USA you'd kind of wonder, wouldn't you?

So I kind of wondered where Jennifer Wilding (the author of the lead letter in the December issue) lives, for you simply put it as "Ontario, Canada." I'm sure if you thought about it for a moment, you'd realize that Ontario (unlike that town in California) must be something around the same size as Texas, USA.

As a purely personal thing, I hate it when further evidence pops up that we here in "America" know so little of our neighbors to the north (who share that America with us) that we can identify a resident of that country simply as living in "Ontario, Canada." You got the rest of the addresses right.

You're still my favorite author, doctor.

M.B. Monahan
Paxton, MA

Our apologies. We perfectly understand how irritating it must be and I hope you understand that it was a slip and not a studied slight.

Isaac Asimov

Dear Dr. A:

Thank you for your special issue. It's always a treat to be able to get an additional issue of your magazine, but you doubled the ecstasy by including the first two chapters of *Foundation's Edge*. Needless to say, it set my mouth watering for more. Alas that I don't have the spare \$14.95 or the rest of it would already have been devoured. Guess I'll just have to wait for Santa to put it in my stocking.

Unfortunately, the rest of your magazine was overshadowed and out-classed by it. Pat Cadigan's story had a terribly predictable ending. Also, I had some trouble with *Destroyer City* by Mr. Take-sako. The general idea reminded me too much of "Escape From New York" and for some reason the protagonist kept reminding me of Clint Eastwood. And before you ask, No, I am not an Eastwood fan: hence the problem.

The rest of the issue I found quite satisfying and definitely up to your usual high standards. But it still couldn't help but be overshadowed

by *Foundation's Edge*. After all, how can you top a fourth Foundation novel? (HINT: how about by writing a fifth?)

Thanks again for the special issue and keep up the good work.

Jay Rairigh
Mountlake Terrace, WA

You must understand that I want everyone to buy the hardcover, but truth compels me to admit that in the Fall of 1983, a paperback edition of Foundation's Edge will be available at a fraction of the hardcover price—and I'd rather you bought that than nothing at all.

Isaac Asimov

Dear Dr. Asimov,

For a magazine with such magnificent science-fiction stories (fantasy too, I love 'em both), your new format is decidedly lacking in aesthetic value. Although the new lettering style of the magazine's name is very appropriate as well as eye-catching, your picture did and still could add a touch of class (not to mention your distinguished good looks), to whatever wonderfully bizarre painting is there (filling up the entire cover, please!)

The table of contents looks quite pleasant, in my opinion, with the page numbers on the left. (If, that is, you will accept the opinion of a self-indulgent southpaw?) Those miniature pictures, however, are too dark and blurred, not very helpful, and seem to detract from the artistry expected of such a splendid publication.

Speaking of pictures, I couldn't help but notice, in the March 15th, 1982 issue, that your editorial pic-

ture is *terrible*! Couldn't you at least *smile*? Especially to decorate an article entitled "We're Doing Well"?!?

But enough about art; the most important thing about your magazines is the stories. They are, as always, wonderful. The new "Foundation's Edge" issue, however, was very short on stories in order to make room for a promo article about your new book. Tacky, Dr. Asimov! Shame on you! The stories are the important thing!

Why is everyone getting upset about the occasional fantasy or ghost story? If the magazine restricted itself to solely science-fiction stories, we would miss out on many delightful articles, poems, mathematical teasers, those horrible Feghoot things, editorials, and, yes, the fantasy stories. Variety is the spice of life, fellows!

Dorothy Hickson
Mt. Airy, MD

Well, now, that's why my editorial picture is so grave and serious. I was expecting letters denouncing me for my "promo article." Yours is the only one so far, but even one is sufficient to puncture my smile. You wouldn't by any chance consider the "promo article" under the heading of spicy variety, would you?

Isaac Asimov

Gentlemen:

As a biochemist, the good Doctor should be amused to hear that the magazine bearing his name has snuck into that bastion of staid respectability, the Chemistry Ph.D. dissertation. In the soliton chapter

of my "Computer Studies of Molecular Vibrational Behavior" (Univ. of Chicago, December 1982) I was able to get by my committee an explicit (and footnoted, of course) quotation from J. P. Boyd's "Magic, the Sea, and Our Conference in Avernus" (3 Aug 81).

My greetings to Mr. Boyd, and my best wishes that his solitons flow more smoothly than mine did!
Tim Rolfe
Chicago, IL

You have done well and for that alone amply deserve your doctorate.
Isaac Asimov

Dear Editor:

Your editorial in the November '82 issue, "Collecting," was quite interesting but you didn't mention perhaps the best reason for buying and keeping old SF (as well as mystery) magazines.

It's always a thrill to come across 20 or 30 year old short stories by modern-day SF writers and to trace their emerging styles. Much of the time these stories are the best in those issues, almost as if they seem to say, "Hey, watch for me!"

A neighborhood bookshop came into many old copies of *Imagination* and *Fantastic Stories*. They contained tales by Harlan Ellison, Ursula K. LeGuin, Philip K. Dick, Frank Robinson, Heinlein, Van Vogt and need I mention the prolific Isaac Asimov?

I am always cruious about the writers of the 50's that I never seem to see anymore (and some deservedly so). Dwight Swain, Daniel F. Galouye, Rog Phillips, Kris Neville, Hal Annas . . . they

characterized a style which now seems juvenile but back in the 50's was the vogue.

I plan on keeping my issues around. Perhaps some day some future reader will peruse my more modern stuff and be thrilled to find a Stephen King, Tanith Lee or Alan Ryan.

Benjamin Gleisser
Cleveland Hts, OH

And I'll bet you never heard of Ed Earl Repp, A. Hyatt Verill, Harl Vincent, R. F. Starzl, and other greats of my youth.

Isaac Asimov

Dear "To Whom It May Concern":

I have just completed reading your December 1982 issue. I enjoyed the slice of *Foundation's Edge*, but, as I obtained a copy of the whole book twenty-five days before receiving this issue, I had already read and enjoyed the whole thing. (I kept giggling and whispering "Asimov has really done it this time" all through my reading of it. And he has.)

Of course, your issue had Asimov's commentary, and the little notes by other writers that weren't in the book. They made up for my having read the slice of the book before.

The rest of the issue was fine. Two stories—"Measuremen" and "Cutting Down"—were particularly fine, and would have been best of the issue if not for *Foundation's Edge*. The cover was not offensive to the eye. The remaining stories were all right.

Keep up the good work. Let's see

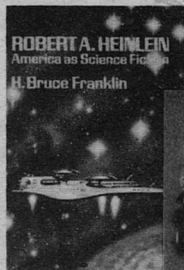
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Isaac Asimov

Dear Dr. Asimov:

I want to second Carol Renard's excellent suggestion in her letter in the December 1982, issue, that a technical consultation service for SF writers would be very useful. Your response—a bit flip, I felt—was that “. . . if you read all my books on science, you will have a running head start. They're not textbooks.”

I have read several of those; they're excellent for the lay non-scientist, and I don't hesitate to endorse them. I've also read a lot of hard science books that *are* texts. I feel I can hold my own in discussions about most areas of science and technology. But writing SF (I needn't tell *you!*) requires a precision of technical detail probably unmatched elsewhere in literature. Certainly SF *readers* are quick to jump on the kind of howling technical blunder that goes beyond “suspension of disbelief,” and properly they should.

It can be difficult and time-consuming for the writer to find and then wade through volumes of technical material at the library for some relevant scientific detail—and how many of us don't

have access to a good technical library? A short note (with appropriate check) to a listed expert, with a concise answer to the problem in response, would be well worthwhile.

How many excellent SF stories never get written because the writer is unsure of an essential point of science?

Such a consultation service would benefit writers with a professional scientific background as well as nonscientists. It would also aid established authors and newcomers to writing. Your magazine, with its policy of helping new writers in the field, would seem the best catalyst for organizing such a service.

Peter J. Benson
7441 Stoney Ridge Rd.
Marriottsville, MD 21104

If you don't mind my continuing to be a bit flip, I should say that in my rather large experience, no SF story ever gets not-written because the writer is unsure of an essential point of science. Somehow I think that if such a service were organized, it would virtually never be used.

Isaac Asimov

Dear Dr. Asimov:

I finally found a piece of your work that I've never seen in print anywhere. It was given to me by a friend of mine during my high school years. Here is what is on the card:

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charming eccentricities are dismissed as evidence of serious neurotic disorders. Our habit of sitting in a chair and carefully working out intricate and thoughtful story lines with our eyes closed is dismissed as a disgusting sign of feckless sloth, just because we snore a little in the process. Even among writers, generally, the science fiction writer stands out as peculiar. Writers may get ideas, but science fiction writers get *crazy* ideas. But, we like one another, and we get together at conventions; and, sometimes huddle together for security against a world that considers us queer because we have that rare and frightening characteristic: SANITY!"

Could you please tell me where you used this particular quotation? It's very interesting and right to the point!

When is your new book about Lije Bailey coming out? I am going to watch for it almost desperately! I love that series as much as Susan Calvin! Take care, Doctor Asimov, and keep on writing!

Mrs. Anna M. Manny
4570H Pickerel Circle NW
NSB Bangor
Bremerton, WA 98315

Okay, I know I wrote it, but I can't remember where. If any of you know the source, write to me directly c/o Source, Isaac Asimov's Science Fiction Magazine. The first one to

identify it correctly will get a personal five dollar check from me.

Isaac Asimov

Dear Dr. Asimov:

Each month I turn to your editorials first. I always enjoy them, but the ones I like most are those about the first Science Fiction Conventions, and the fandom back then. They fill me with nostalgia.

Such a glorious time that was when the Grand Masters of SF were having their first success, when the fans could mingle with their idols, when the fans and authors were often the same people.

I never attended one of these delightful gatherings. I was too young or my mother certainly thought so.

Still, when I read your editorials, I miss those times I never had. Isn't that what nostalgia is all about?

Ruth O. Beach
1235 Grant St. #622
Denver, CO 80203

Please! Don't give up. If you go to a world convention, you will find that fans and their idols still mix, and fans and authors are still often the same people. Conventions are larger now and harder to get around in, but they are also more numerous. If you come to New York to attend a convention, you may even meet me, and we can do some decorous mingling.

Isaac Asimov



Pope Leo I says:

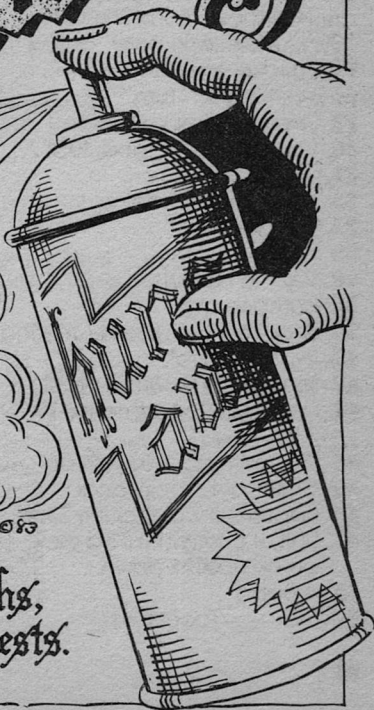
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with

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MAD SPOOFS

ACROSS

- 1 Home of sheik and bake?
- 7 Agri-vehicle, for short
- 11 Film of 1976, a la Mad magazine
- 13 Eva's half-sister?
- 16 With 35 and 53 Across, film of 1961, a la Mad
- 17 — Z
- 18 Power source, briefly
- 19 Character in Piers Anthony's "Om"
- 20 "— the Unbelievable," Japanese monster movie
- 22 "Double Indemnity" author
- 24 To take, to Thérèse
- 26 Words after "fum"
- 29 "Holy smoke!"
- 30 How the Earth stood, 1951
- 31 — la vie
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- 35 See 16 Across
- 36 Pike, to his pals
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- 39 Shockers from South America
- 40 Incan capital
- 42 Most like a Quercus plant
- 44 He draws "Apartment 3-G," Alex —
- 45 Places to go, things to do
- 46 Cosecant's reciprocal
- 47 Baptismal water of the Sikhs
- 48 Unit of energy that's a rock group upside-down
- 49 A Baba
- 52 Mai — (cocktail)

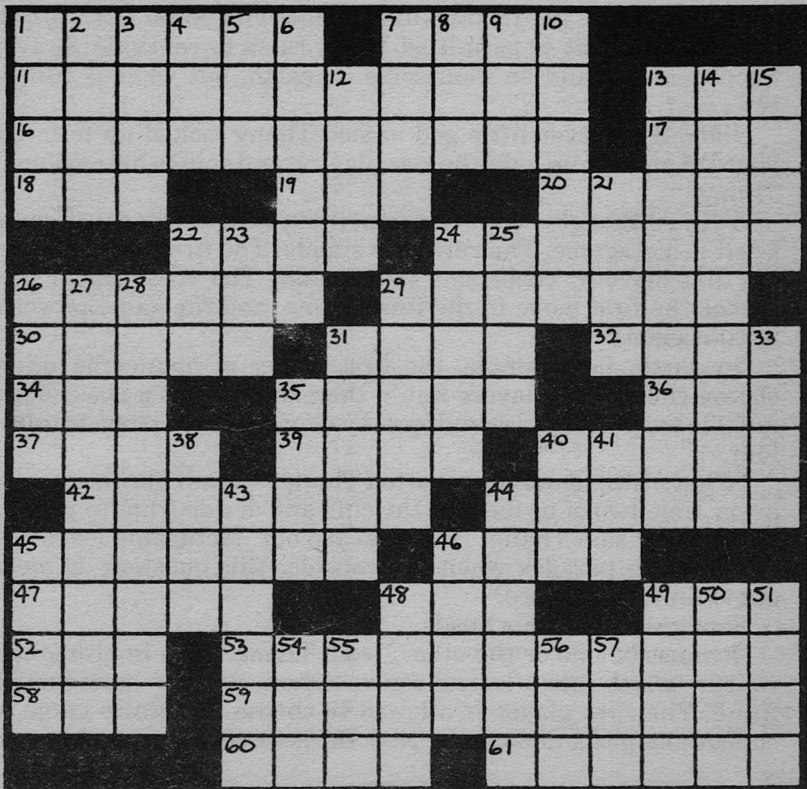
- 53 See 16 Across
- 58 — for effort
- 59 Film of 1954, a la Mad
- 60 Anthem start
- 61 Husband, in Hermosillo

DOWN

- 1 Inventor's middle name
- 2 Vanishing commodity on Earth
- 3 "What —!" (dupe's cry)
- 4 Report from "The Sheep Look Up"?
- 5 Like Mahler's Fourth Symphony
- 6 "... is — does"
- 7 Joan Crawford's last film
- 8 — in rabbit
- 9 Normal reaction to a nuclear reaction
- 10 Smart and then some
- 12 Call in the game Battleship, or prefix meaning "horn"
- 13 Film of 1974, a la Mad
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- 22 Animator's sheet
- 23 Word on either side of "in"
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- 25 Exterminator's concern
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- 29 Passed the cards
- 31 Game in Brunner's "Squares of the City"
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- 35 Marijuana

- 38 Competitor of Hitachi and Sony
 40 Big SF get-together
 41 Salt Lake player
 43 Entirely
 44 Girl's nickname
 45 "Do I dare to — peach?"
 46 "Purple People Eater" singer
 Wooley

- 48 See 29 Across
 49 — extra cost
 50 Movie locations
 51 "— Glad," Cream tune
 54 Org. for top students, in high school
 55 Drink at a Wonderland party
 56 Cockney's swine
 57 Type of dance



MARTIN GARDNER

THANG, THUNG, AND METAGAME

The gods, who live in a realm utterly beyond our spacetime, play a variety of intellectual games that are impossible to describe. One of the most popular is played on a grid in a space of 37 dimensions. There are more than a million pieces, and an average game lasts for about a thousand years of earth time.

The gods have found it convenient to divide their games into two broad classes: finite and infinite. A finite game is one that must always end after a finite number of moves, such as our checkers, chess, go, ticktacktoe, bridge, and so on. An infinite game is one that is permitted by its rules to continue forever. Such games would be wearisome on earth, but what is time to the gods?

One day a clever little god named Thang looked up from the board of an infinite game he was playing and said to his opponent, Thung:

"I've just thought, Thung, of something curious. It's a new game. I call it metagame. The rules are simple. The first player makes his first move by choosing a finite game. The other player then makes the first move in the finite game, and the game proceeds until it ends."

On earth, for example, the first player of metagame might choose chess. The players would then sit down at a chess board and the second player would open by moving, say, a pawn to queen four.

"What a stupid notion," snorted Thung. "We all play metagame every time two of us meet at the club and decide what to play."

"I know," said Thung. "But hear me out. Metagame leads into a marvelous paradox when you consider this question: Is metagame finite or infinite?"

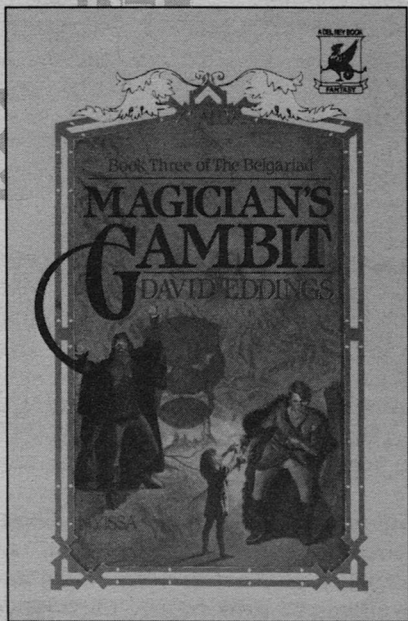
Thung scratched his heads.

"It must be one or the other," said Thung. "But in either case we run smack into a logical contradiction. Assume metagame is finite. The first player is allowed to choose any finite game, so suppose he picks metagame. Now the second player, making the

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Garion! He was nothing but a farm boy, totally unsuitable for an Imperial Princess. Then why did she have such an urge to teach him to brush back his tangled hair, and to comfort him?



cover illustration by Larry Schwinger

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first move in metagame, must pick a finite game. Suppose he again chooses metagame. Then the first player does the same. Obviously this can go on forever. Therefore the assumption that metagame is finite is false."

"Ye gods!" exclaimed Thung. "I see what you're getting at. If metagame is not finite, it must be infinite. Okay. Assume it's infinite. Now the first player *can't* choose metagame because it's not finite, so he has to pick a finite game. But all finite games end. Again our assumption is contradicted. Metagame can't be infinite!"

Thang and Thung are still debating this curious paradox while they play their eternal game. Who knows when or how they will resolve it?

In the meantime, let us consider a solitaire game played on the 4-by-4 grid shown in Figure 1. It can end in a finite number of

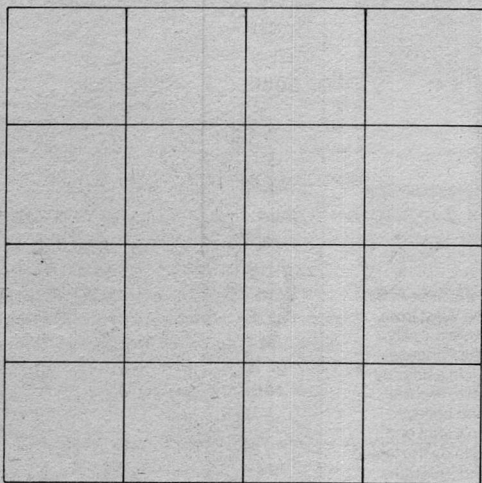


Figure 1

moves if you start with certain initial patterns, but will never end if you start with other patterns.

To play the game, put 16 pennies on the 16 cells. Each penny may be heads or tails in any pattern you like. The object of the game is to turn over the pennies, according to the rules, until all of them are heads. The rules are as follows:

You may turn any horizontal row or any vertical column provided you turn all four coins. You may turn any diagonal row. "Diagonal" here includes the two main diagonals of four coins, the four diagonals of three coins, the four diagonals of two coins,

and the four corner coins. Thus each corner penny is considered a diagonal of one. As before, when you turn a diagonal you must turn *all* its coins.

Try a few games with random patterns of heads and tails, and you will find that sometimes it is easy to get all the coins heads. (If you can get all heads, of course you can also get all tails by merely turning four rows.) However, with other starting patterns you will find yourself turning coins endlessly without ever achieving the goal.

There is a very simple way to glance at a pattern and know at once whether or not it is solvable. This makes for an amusing betting game. You can explain the game to a friend by setting up a few solvable patterns, and demonstrating how easy it is to change the pattern to all heads. Let him experiment with some random initial patterns of his own. As soon as he sets up an unsolvable pattern you can bet a thousand dollars against his dime that he can't solve it in an hour.

What's the secret? How can you tell so quickly whether a pattern is solvable or not? The secret is disclosed on page 49.

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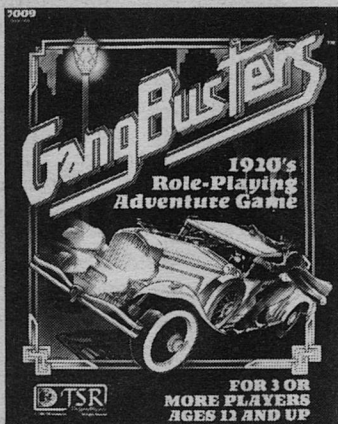
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GAMING

by Dana Lombardy

To see what makes a role-playing game, we'll examine the most popular science fiction-based game, *Traveller*®. Published by Game Designers' Workshop (Box 1646, Bloomington, IL 61701), *Traveller*® won a Game Designers' Guild Award (roughly equivalent to a Nebula Award) in 1978.

The game is set in a future interstellar society in which the players will assume the roles of specific characters for the purpose of acting out an adventure story. Using the rules as a guide, players can outline their own adventure or purchase additional detailed, illustrated adventures.

The rules for *Traveller*® provide the framework for conducting and resolving encounters, battles, negotiations, etc. A lot of flexibility is allowed for interpretation since *anything* can happen in an open-ended role-playing session. The final arbiter of interpretation is the referee.

The referee is the key person in the game. Only he knows all the details of an adventure; the players must discover these as they play. Since only the referee need be expert in the rules, anyone can sit down in an adventure and start playing immediately.

To play the game, you first choose a character, such as a trader or a mercenary, and then roll dice to determine your character's six at-

tributes: strength, dexterity, endurance, intelligence, education, and social class. These six abilities are numbers which are used at the appropriate time in the game.

Actual play starts with a group of players sitting around a table, including the referee who is at one end with the adventure, rules, charts, tables, and dice. In front of the players is placed a map, starship deck plan, or some information the players would know. Many gamers like to use small metal miniature figures to represent their character on the map.

The rest of the evening is spent in gaming give-and-take between the players and the referee. "What do we see, what do our sensors detect?" might be a typical question the referee would answer. When the players reach a point where specific rules are required, such as trying to blast an intruder, the referee or player rolls dice, modifies that roll by the player's attributes, the weapon in question, range, etc., and the outcome is announced by the referee after consulting the appropriate table.

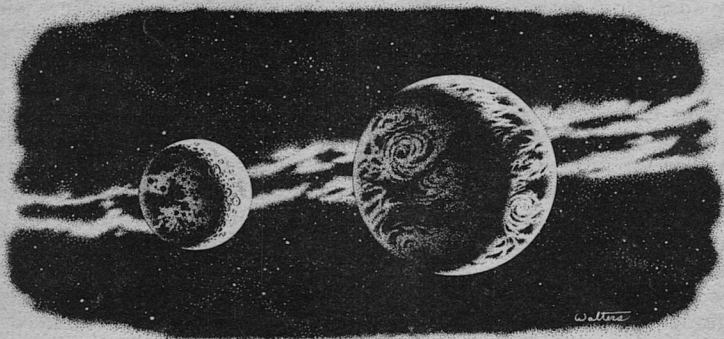
This continues until the players complete the adventure. Usually this can be done in one evening, although more involved adventure stories might take several nights of play. You don't really "win" in this game; there are just different ways of being successful. For ex-

ample, a mercenary would probably want to leave after looting a derelict alien spaceship of any pocketable valuables, but a merchant character might have more to gain in this situation by attempting salvage operations. Obviously, an adventure can be dangerous, and just surviving can be considered a "victory" by the players. If your character survives the adventure, he gains experience which can increase some of his attributes (and perhaps some monetary increase as well) for use in the next adventure.

Traveller® comes in four editions. *Basic Traveller*® is three 44-page rules booklets: *Characters and Combat*, *Starships*, and *Worlds and Adventures*. *Deluxe Traveller*® consists of these three rules booklets, plus a color map of the Spin-

ward Marches, two six-sided dice, a 32-page booklet with introductory adventures and notes for referees, and a 48-page introductory booklet for novices.

Six other firms market licensed products for *Traveller*®. Grenadier Models Inc. (Box 305, Springfield, PA 19064) makes 15mm metal miniatures, while Steve Jackson Games (Box 18957, Austin, TX 78760) produces 15mm full-color, paper "Cardboard Heroes." FASA (Box 6930, Chicago, IL 60680) publishes ship plans, adventures, and play-aids. Judges Guild (RR2, Box 9, Decatur, IL 62526) and Marischal Adventures (Box 237, Elk Grove Village, IL 60007) also provide adventures. Lastly, Avar Products (Box 17209, Denver, CO 80217) publishes referee and player boards and other play-aids. ●



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—by Robert Frazier

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VIEWPOINT

THE FEASIBILITY OF MIND- TRANSFER

art: Judy Mitchell

by Tom Rainbow

Tom Rainbow received his Ph.D. in neurobiology from the University

of Pennsylvania in 1979. He's currently assistant professor of pharmacology at the University, and is also an adjunct assistant professor at the Rockefeller University in New York. To his knowledge, he has never had a mind transfer. But then, according to his article, he wouldn't necessarily know, would he?

A standard concept in science fiction is the technique of *mind-transfer*, in which the conscious *you* is pulled out of your brain, and inserted

into another nervous system, organic or otherwise. This is usually done by advanced technology or by psi abilities of undefined origin. An example of this in science

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fiction would be in Roger Zelazny's *Lord of Light*, in which "karma" machines were used to transfer an individual's consciousness into the brain of a cloned body, thus endowing immortality. Another example would be in Robert Sheckley's *Mindswap*, where low-cost interstellar travel was achieved by switching bodies with extraterrestrials on distant worlds.

Are mind-transfer and its science-fiction applications really plausible? At first glance, it seems nearly impossible that a mind could be moved from one body to another. A mind is not a discrete physical entity, so it is hard to imagine what, exactly, would be transferred. It is easy to see how your brain, along with your mind, could be moved to another body, but this is a brain-transplant, a related science-fiction concept, true, but one which should be distinguished from true mind-transfer. (For the record, there is no conceptual obstacle to performing brain-transplants, only yet-unsolved technical problems in making the

transplant's brain cells re-grow into the host's body. It is only a matter of time before these problems are solved, however.)

Unfortunately, although brain-transplants are technically feasible, they are much more limited in their applications than are true mind-transfers. Your brain ages like the rest of your body, so true immortality cannot be obtained this way. There is also no way to achieve cheap interstellar travel with brain transplants, and mind-transfer has the additional advantage of allowing you to improve on your brain. With mind-transfer, your consciousness could be placed into an artificial nervous system, with more durability, more speed, and more raw intelligence than the organic human brain. It might also be possible to transfer your mind into a nervous system constructed out of the fabric of space-time itself, freeing you from a material body, and making you into a virtual god.

Sounds pretty good, huh? Like many science-fiction

readers, I have always felt that being omnipotent and omniscient would be the ideal solution to many of my petty personal problems. Let us join then in our mutual desire for apotheosis and the ability to transform our noisome neighbors into parking meters, and consider whether mind-transfer is indeed possible.

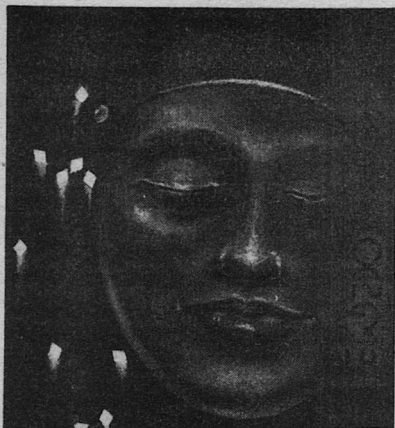
Brain and Mind

Before we can discuss mind-transfer, it is necessary to consider how the mind is generated by the brain. It is intriguing to realize that the most complex piece of matter in the known universe is located just behind your eyes. It is the existence of an extremely complicated cellular wiring within the brain that allows you to think. It is often stated that the intellectual functions of the brain result from the fact that it has a large number of cells (known as *neurons*). Actually, the number of brain cells is not substantially different from the number of liver cells

(roughly 10^{10}). The reason that your brain can play chess and your liver can't, is that the brain, unlike the liver or any other organ, has an enormously heterogeneous cellular structure. Each specific brain cell can connect with as many as 100,000 other specific neurons. This means that each cubic millimeter of the brain is very differently organized from its neighbors, whereas each part of the liver is much the same as the next part.

Superimposed on all this complicated microcircuitry is a very complicated temporal pattern of information exchange. Again, unlike liver cells, neurons can rapidly influence the activity of the cells with which they connect. This is done by the secretion of specific chemicals, known as neurotransmitters, across the nanometer-sized synaptic cleft which separates neurons. A neurotransmitter changes the electric potential of a neuron, which like most cells is -70 millivolts relative to the ground. The resting potential of a neuron is made either slightly more negative

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“It is not clear whether natural selection actually intended humans to be sentient, or whether self-awareness is an accidental by-product of the desire to create a brain that could build radio telescopes and fusion reactors. It may be that self-awareness is not a prerequisite to high intelligence, and that non-sentient technological species exist elsewhere in the universe.”

or positive by the neurotransmitter. If the sum of the positive changes exceeds the sum of the negative changes, and the resting potential of a neuron reaches -40 millivolts, there is a sudden reversal of its resting potential to $+40$ millivolts, causing an electric discharge known as an action potential. The propagation of an action potential throughout a neuron causes it to release neurotransmitter molecules at the synapses it makes with other neurons, thus modifying their activity. The excitation of neurons by other neurons is an extremely rapid process, with a time scale on the order of milliseconds; some neurons can have as many as a thousand action potentials per second. There is also a poorly understood action of neurotransmitters that allows the pattern of synaptic activities at a neuron to be encoded as a memory. This probably results from a long-lasting change in the efficiency of particular synapses.

One result of this neuronal complexity is your mind. By

some unknown process, the interactions of your brain cells produce the conscious you. It is not clear whether natural selection actually intended humans to be sentient, or whether self-awareness is an accidental by-product of the desire to create a brain that could build radio-telescopes and fusion reactors. It may be that self-awareness is not a prerequisite to high intelligence, and that non-sentient technological species exist elsewhere in the universe. (*More on this at a later date.* —*Ed.*) Whether or not self-awareness is an epiphenomenon or deliberate, it is certain that it results from specific interactions between specific brain cells. We currently don't know what these actions are, or where these cells are located in the brain, but it's again only a matter of time before this information becomes known.

Mind-Transfer

Let's assume that the neural basis for self-awareness has been

discovered, and we know precisely which of the 10 billion neurons in the brain compose the circuits that make us sentient. Let us also assume that we now have the technology to monitor in living human brains the activity of any single neuron at any synapse within this circuit. As we will see, there is nothing inherently impossible about this. We further assume that the molecular basis of memory formation is now understood, and that we also have the technology to analyze remotely the molecular architecture of any synapse in the brain, so we can re-create all of the memories possessed by someone.

We use this technology to make an exact copy of a person's brain. We make the copy non-sentient by temporarily inactivating the relevant circuitry. We also assume that we have the technology to influence the activity and molecular structure of any single neuron. We now go back to the original brain and gradually connect the

VIEWPOINT

synapses in the sentient circuit with the sentient circuit in the duplicate brain. Instead of communicating with its own neurons, the original brain gradually begins to send and receive synaptic activity from the duplicate brain. Since this brain is an exact copy of the original, no subjective difference would be perceived by the individual. We next imagine that as the original brain gradually begins to use its duplicate synapses in the copy brain, we deactivate the same synapses in the original brain. As more and more of the sentient circuit is used in the new brain, more and more of the individual's conscious awareness is transferred to this brain. When essentially all the synapses of the old brain have been replaced by synapses in the new brain, the individual's consciousness will now be located in the new brain.

This process works because our conscious awareness does not depend on any single neuron. We lose a few hundred neurons every day as a result of random cellular

processes. The circuitry for self-awareness probably involves at least 10^7 neurons. If we gradually delete a few neurons in this circuit, and replace them with long-distance tie-ins to identical neurons in the copy brain, we are not disturbing the sentient circuit any more than it is normally disturbed. Your unitary sensation of conscious awareness is actually a continuum of cellular processes. The cells in the sentient circuit die and are replaced by neighboring duplicate neurons for as long as the brain remains young and healthy. The subjective feeling of mental constancy results from the gradual nature of this process.

Now, unless the sentient circuit in your original brain is *permanently* deactivated, your former pattern of self-awareness will simply re-create itself in your old brain. The result of this would be *two* individuals that could claim your identity—you, now occupying a spanking new body, and the now-conscious person in your old body, who possesses all of your pre-

transfer memories, and undoubtedly thinks that the mind-transfer was a flop, since he's still in his original body. The only way to prevent this potentially embarrassing occurrence is to permanently delete the synapses in the original brain's sentient circuit, as your consciousness begins to occupy the homologous synapses in the new brain. This way, you'll not only end up with your mind in a new body, but there will also be the lucrative prospect of selling your useless, non-sentient old body to the organ banks.

Can we estimate the amount of information it would take to transfer an individual's consciousness to another brain? Information is usually quantified in binary numbers or *bits*, with each bit representing the amount of information needed to distinguish between two equally likely possibilities. It would take roughly seven bits of information ($2^7 = 128$ possibilities) to specify a particular printed character used in a sentence on this page. Each character could be

one of 52 upper or lower case letters of the alphabet, or one of 60 punctuation marks, text symbols or numbers. This amount of information would be fully represented by 7 binary digits.

To transfer someone's mind, we would need to monitor the activity of his sentient circuit for maybe 10 seconds. If there are 10^7 neurons in this circuit, each with 10^4 synapses, and firing at a rate of 10^3 action potentials per second, the activity of the sentient circuit over 10 seconds could be fully described with 10^{15} bits. As I discussed above, it is likely that there is a fair amount of redundancy in this circuit, so this number is probably an overestimate. The information content of the Library of Congress is approximately 10^{15} bits (2×10^7 books \times 300 pages/book \times 10^3 letters/page \times 128 bits/letter = 7×10^{14} bits). Even if this estimate is low by several orders of magnitude, it does not seem an impossible amount of information for even a moderately advanced computer technology to process. It is also necessary to

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include in this estimate the amount of information necessary to duplicate all the memories of the original brain in the copy brain. The estimates of the amount of information in human memory range from 10^{10} to 10^{20} bits. If we split the difference, we would have to insert 10^{15} bits of information in the copy brain to give it all the memories of the old brain. This merely doubles the amount of information over the previous estimate.

A Mind-Transfer Machine

Let's now consider the technology that could actually accomplish a mind-transfer. We assumed that to transfer a mind, it would be necessary to monitor and modify the activity of 10^7 neurons, each having 10^4 synapses. Ideally, we would want to manipulate the sentient circuit from outside the skull, so we don't have to implant millions of tiny electrodes via messy brain surgery. This would then require the ability to determine and affect the

electrical potential of roughly 10^{11} micron-sized objects through about a centimeter of bone and an additional centimeter of brain tissue.

A plausible, non-invasive way to locate the relevant neurons and synapses would be to use nuclear magnetic resonance (NMR) tomography. NMR tomography is an adaptation of NMR spectroscopy, which has been used for many years to determine the structure of organic molecules. In NMR tomography, a strong magnetic field is applied to the brain, aligning the magnetic moments of those nuclei that have an odd number of protons and neutrons, and thus have a net magnetic spin. Hydrogen is the most common such nucleus in biological molecules. A second, weaker magnetic field is applied at right angles to the first, tipping the spinning nuclei into a new equilibrium position, and causing the emission of a radio signal. The position of the emitting nuclei can be determined by tomographic analysis of the

radio signal, which is not attenuated significantly by the skull.

NMR tomography is an attractive technology for mind-probing because its theoretical spatial resolution is extremely high, depending only on the strength and uniformity of the magnetic fields applied to the brain. Although current NMR images of the brain have a resolution of only a few centimeters, the use of better magnets should permit the resolution of micron-sized neurons and synapses. In fact, there is every reason to think that NMR tomography could even resolve the nanometer-sized molecular components of an individual synapse, allowing the remote decoding of a person's memories. We could also use NMR tomography to locate the physiologically active neurons in the sentient circuit. The more a neuron fires, the more ATP it uses. The phosphorous nuclei in adenosine triphosphate have a net spin, so they are suitable for NMR imaging. Active neurons will appear to have a high

phosphorous content with NMR.

The electrical potentials of neurons and synapses could be manipulated non-invasively by a process I'll call *particle beam tomographic stimulation*, a potential consumer application of the military space program. Orbiting battlestations that fire intense beams of protons or electrons have been proposed as a possible defense against ICBM attack. The same technology could be used to shoot protons or electrons into a single neuron, respectively depolarizing or hyperpolarizing it. This would be done tomographically, with multiple particle beams, each too weak to have any effect individually, converging on one neuron to change its voltage. Tomographic stimulation would allow the manipulation of neurons deeply imbedded in the sentient circuit without affecting the more superficial neurons. Electron beams are already used to etch complicated, micron-sized circuit patterns for VLSI chips, so it is likely that

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further improvements in particle beam technology will permit the rapid, precise manipulations of neurons that would be necessary for mind-transfer.

It would also be possible to use particle beam stimulation to recreate in the transfer brain all the memories of the original brain. The failure to do this will cause the old consciousness to assume the identity of the new brain. If the new brain is a cloned duplicate of the old brain, and has no previous identity, the old consciousness would have the mind of a new-born baby. Memories could be inserted in a brain by using particle beam tomography to create particular patterns of neuronal firing. You have your present memories because particular experiences altered the activity of certain neurons, which in turn resulted in permanent changes in the efficiency of their synapses. If particle beam tomography is used to mimic the effects of experience on synaptic properties, then memories can be directly implanted in a

brain.

We can now outline the general form of a mind-transfer machine. There would be two elaborately wired cylinders or helmets, one for placement on the head containing the original brain, the other for use on the head of the transfer brain. Both helmets would contain the detection elements of an NMR tomograph and the effector portions of a particle beam tomographic stimulator. There would probably be superconducting magnets in the helmets, as both the imaging functions of the NMR and the aiming functions of the particle stimulator would require strong magnetic fields. Both helmets would be connected to an advanced computer that would control the actual manipulations of the mind-transfer. The datalink between the helmets and the computer would be made with fiber optic cables or some other technology that could process the very high (10^{15} bits/10 sec) rate of information exchange. Rates of information transfer as high as 10^9 bits per 10 seconds

have already been obtained with fiber optic cables, so it is likely that further increases can be achieved.

Our mind-transfer machine would be compact, would not consume excessive amounts of electricity and could probably be built sometime during the next thirty years. It is worth noting that the NMR tomograph could be used separately as a device to read minds, while the particle beam tomographic stimulator could be used independently to insert information directly into someone's brain, making the acquisition of a mind-transfer machine a real bargain. The limiting factor in building a mind-transfer machine is not the technology; it is the lack of knowledge about the neural basis of self-awareness and the molecular basis of memory. It is particularly difficult to obtain information about the sentient circuit from animal studies, since essentially only humans are self-aware. It may be necessary to build a lesser version of a mind-transfer machine to probe and manipulate human synapses,

so that we can acquire enough information about the sentient circuit to perform real mind-transfers.

Applications

Now that we have established a relatively sound theoretical and practical basis for mind transfer, let's consider the feasibility of some of its applications that have been used in science-fiction.

Immortality

This is an eminently sensible application of mind-transfer that has often been used in science-fiction (eg. Zelazny's *Lord of Light*, Robert Silverberg's *Shadrach in the Furnace*). Your consciousness could be transferred from the brain of your aged body into the brain of a young duplicate body. There is absolutely no reason why this wouldn't work. The only caveat is that the transfer process cannot be repeated indefinitely without losing some of your memories.

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The large but finite number of synapses in your brain strongly implies that there is only a limited number of memories you can store. This means that periodically some memories would have to be discarded to make room for new ones. You could perhaps sell these memories to a less-experienced person.

Heterotypic Body Switching

Heterotypic body switching is another commonly used application of mind-transfer in science fiction. Your consciousness is inserted into a different body instead of a duplicate of your own. The sex or species of this body might also differ from your own. A complication of heterotypic body switching which is frequently neglected in science fiction is that many facets of your conscious awareness are highly dependent on the cellular structure of your own brain. If your mind is moved to another brain without first modifying the brain to make its structure identical to your own, your subjective mental

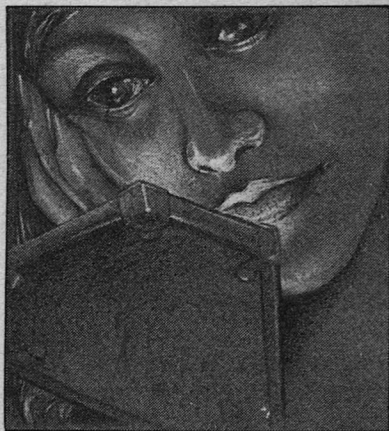
experience would be very different. For one thing, you would have all of the memories of the host brain, unless you took precautions to erase them. For another, it is likely that many differences in human behavior are due as much to differences in the hard-wiring of the brain as they are to differences in experiences. An interesting experiment to try would be to transfer Jerry Pournelle's mind to the brain of Ursula Le Guin, and see what his next novel looks like. My guess is that it would be substantially different from his previous books because of hard-wired brain differences in temperament. It would be necessary to duplicate the limbic emotional circuitry of the original brain in the transfer brain to avoid possible personality differences.

Similarly, there are differences in the cognitive abilities of individuals that probably result from differences in the circuitry of the cerebral cortex. Human intelligence is not a unitary entity; it is composed of

spatial, verbal, and less well-defined components, with individuals of the same overall intelligence differing radically in their aptitudes for specific abilities. Science-fiction writing might be such an aptitude. If I were to transfer my mind to the brain of Jerry Pournelle or Ursula Le Guin, I might become more militant or more pacific, but my science-fiction writing would certainly improve.

Instantaneous Travel

The problem with using mind-transfer for instantaneous (light-speed) travel is that it is unlikely that the necessary 200 million gigabits of information could be encoded as an electromagnetic wave without a significant loss of fidelity. This would limit the range of a mind-transfer to the length of a fiber optic cable, which in another 20 years, will essentially amount to the entire terrestrial phone system. Another problem with interplanetary or interstellar mind-transfer, *a la* Robert Sheckley's *Mindswap*, is that



“An interesting experiment to try would be to transfer Jerry Pournelle’s mind to the brain of Ursula Le Guin and see what his next novel looks like. My guess is that it would be substantially different from his previous books because of hard-wired brain differences in temperament. It would be necessary to duplicate the limbic emotional circuitry of the original brain in the transfer brain to avoid possible personality difference.”

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it is probably necessary for the sentient circuits of the two brains to communicate with each other at 10 millisecond intervals or less to effect the transfer. This would mean that the limiting distance for mind-transfer would be the distance that light moves in 10 milliseconds, which is 3000 kilometers. Even if the necessary 10^{15} bits of information could be encoded as radiant energy, mind-transfer at interstellar or even long terrestrial distances would still require a form of information transfer that was faster than the speed of light.

Computers as Host Nervous Systems

There is no reason to think that a computer with the capacity for self-awareness would be any worse a vehicle for human consciousness than is the human brain. In fact, there is every reason to think that it would be better. Not only is a computer essentially immortal, but it can be made to be much more intelligent than even the smartest human brain. The science-fiction

cliché of the superintelligent-but-emotionless sentient computer would be avoided by equipping our silicon avatar with an artificial limbic system. The computer brain would undoubtedly be housed in a mobile chassis, perhaps a cloned version of the original body with superior senses to make better use of the enhanced ability to process information. In many ways, I think this may be the ultimate destiny of mankind, and science fiction stories that postulate both mind-transfer and sentient computers had better have a good explanation as to why the main characters are only mere human beings.

Mind-Theft

A yet unexploited application of mind-transfer in science fiction is mind-theft. Consider the initial example of how mind-transfer might work. If we now make *two* duplicates of your sentient circuit, instead of one, and activate parallel synapses in both brains, while deactivating the sentient

circuit in your original brain, your consciousness will be transferred to two brains instead of to just one. Both brains would think they were you, and the one in which your consciousness would actually reside would probably be random—50% of the time you would be transferred to brain A, and the other half of the time, your consciousness would be placed in brain B. Similarly, if we only temporarily deactivate the sentient circuit in your original brain, and then re-activate it after the transfer was complete, there would now be three copies of your mind instead of two. We could make as many copies as we have duplicate brains.

In my opinion, the true utility of this application of mind-transfer would be to copy the minds of particular science fiction writers into a computer, so we could obtain really good stories whenever we want. I don't know about you, but frankly, I'm tired of haunting the newsstands and bookstores for new releases by my favorite writers. Let us say that as Larry Niven is

about to use the Los Angeles mind-transfer booth to attend BelterCon, we tap the transmission of his mind, and duplicate it in our sentient-capable computer. The real Niven goes on to receive his 112th Hugo award, and is unaware that his consciousness has been copied. We manipulate the limbic system programming of the computer so that the Niven copy is only too happy to provide us with stories. The superior intellectual facilities of the computer will insure that the quality of the stories will always remain high. We are happy with this arrangement for some time, but eventually, we decide that even a constant supply of Niven stories isn't enough, so we transfer our own minds into the computer, living the rest of our lives in his Known Space universe of Belters, Puppeteers and Kzin.

Hell, the rest of you can have immortality and omniscience. I'm going to hunt Bandersnatchi on Jinx, have *rishathra* with Teela Brown and numerous other hominid females on the Ringworld, and

VIEWPOINT

discuss the fiction of Ursula Le Guin with a kzin, a kdatlyno, a puppeteer, and Jerry Pournelle. ●

References

1). For more information about the central nervous system, I recommend the Scientific American book, *The Brain*, edited by David Hubel, W.H. Freeman and Co., 1981.

Of particular interest to those of you with speculative inclinations would be the article "Thinking about the Brain" by molecular biologist Francis Crick, who was awarded the Nobel Prize for determining the structure of DNA.

2). A good reference on NMR tomography is the article by Ian Pykett in the May 1982 Scientific American.

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SOLUTION TO THANG, THUNG, AND METAGAME

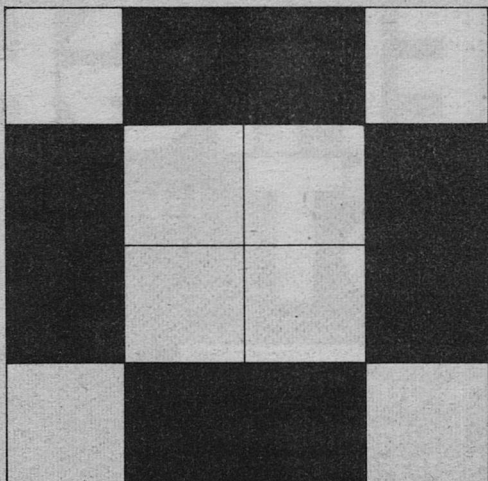


Figure 2

Glance at the eight coins that are shaded in Figure 2. If there is an even number of heads among the eight, the game is solvable. If the number of heads is odd, you can turn coins until doomsday without ever making them all heads.

Now see if you can prove why this must always work. The simple proof is on page 83.

STAR HUNGRY WORLD

Lone, star hungry world
in (protective) custody;
cruel gravity.

—Norma Gjuka



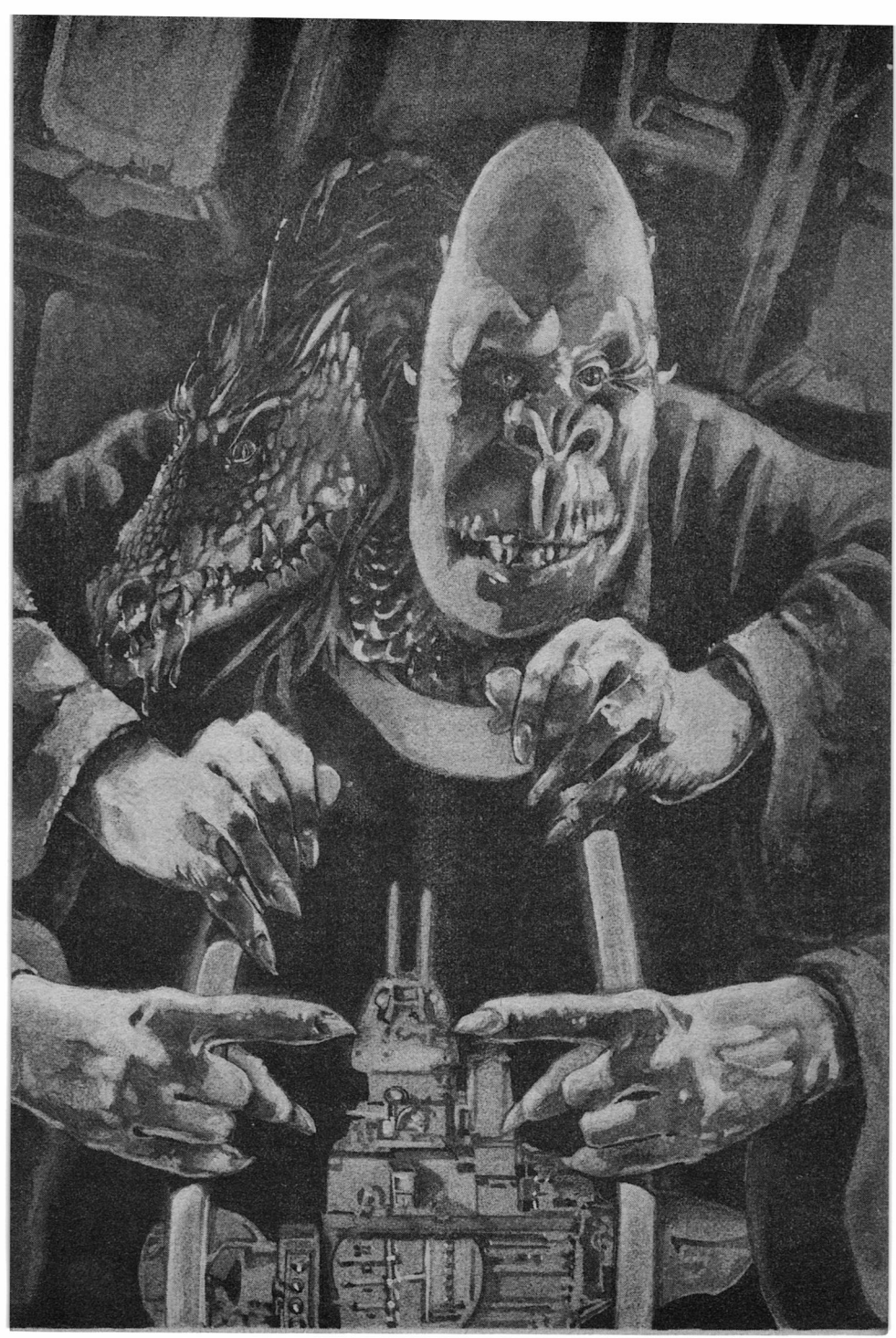
THE HIGH TEST

by Frederik
Pohl

art: Val Artifact

The author, one of
those science
fiction luminaries
who really
needs no introduction,
says of this story:

When I was about ten
or eleven years old I used to
daydream as kids do—often
about being a locomotive engineer,
or piloting an airplane. Those
weren't for me. What I daydreamed
about was flying a great big
marvelous interstellar spaceship
across the universe, something
like the *Skylark of Space*
or one of those other marvels I
read about in the recently discovered
amazing works of Dr. E. E. Smith.
Of course there never really
was a *Skylark*. Doc drove




his spaceships from the keyboard of a Woodstock office-model typewriter, square, black and solid; that was the typewriter he wrote the Lensman stories on, and *Skylark of Valeron* and *Skylark DuQuesne* . . .

And the other day, visiting Doc Smith's daughter, Verna, and her husband, Albert Trestrail, they brought out that old Woodstock for me and told me I could use it if I wanted to.

It was an offer I couldn't refuse.

So for the next two days, in between looking at Verna's fine collection of science-fiction art and helping to run Al's magnificent HQ model railroad layout and swimming in the pool and enjoying their fine cooking—this is the story I wrote.



2213 12 22 1900ugt

Dear Mom:

As they say, there's good news and there's bad news here on Cassiopeia 43-G. The bad news is that there aren't any openings for people with degrees in quantum-mechanical astrophysics. The good news is that I've got a job. I started yesterday. I work for a driving school, and I'm an instructor.

I know you'll say that's not much of a career for a twenty-six-year-old man with a doctorate, but it pays the rent. Also it's a lot better than I'd have if I'd stayed on Earth. Is it true that the unemployment rate in Chicago is up to eighty percent? Wow! As soon as I get a few megabucks ahead I'm going to invite you all to come out here and visit me in the sticks so you can see how we live here—you may not want to go back!

Now, I don't want you to worry when I tell you that I get hazardous duty pay. That's just a technicality. We driving instructors have it in our contracts, but we don't really earn it. At least, usually we don't—although there are times like yesterday. The first student I had was this young girl, right from Earth. Spoiled rotten! You know the kind, rich, and I guess you'd say beautiful, and really used to having her own way. Her name's

Tonda Aguilar—you've heard of the Evanston Aguilar? In the recombinant foodstuff business? They're really rich, I guess. This one had her own speedster, and she was really sulked that she couldn't drive it on an Earth license. See, they have this suppressor field; as soon as any vehicle comes into the system, zap, it's off, and it just floats until some licensed pilot comes out to fly it in. So I took her up, and right away she started giving me ablation. "Not so much takeoff boost! You'll burn out the tubes!" and "Don't ride the reverter in hyperdrive!" and "Get out of low orbit—you want to rack us up?"

Well, I can take just so much of that. An instructor is almost like the captain of a ship, you know. He's the boss! So I explained to her that my name wasn't "Chowderhead" or "Dullwit!" but James Paul Madigan, and it was the instructors who were supposed to yell at the students, not the other way around. Well, it was her own speedster, and a really neat one at that. Maybe I couldn't blame her for being nervous about somebody else driving it. So I decided to give her a real easy lesson. Practicing parking orbits—if you can't do that you don't deserve a license! And she was really rotten at it. It looks easy, but there's an art to cutting the hyperdrive with just the right residual velocity, so you slide right into your assigned coordinates. The more she tried the farther off she got. Finally she demanded that I take her back to the spaceport. She said I was making her nervous. She said she'd get a different instructor for tomorrow or she'd just move on to some other system where they didn't have benefacted chimpanzees giving driving lessons.

I just let her rave. Then the next student I had was a Fomalhautian. You know that species: they've got two heads and scales and forked tails, and they're always making a nuisance of themselves in the United Systems? If you believe what they say on the vidcom, they're bad news—in fact, the reason Cassiopeia installed the suppressor field was because they had a suspicion the Fomalhautians were thinking about invading and taking over 43-G. But this one was nice as pie! Followed every instruction. Never gave me any argument. Apologized when he made a mistake and got us too close to one of the miniblack holes near the primary. He said that was because he was unfamiliar with the school ship, and said he'd prefer to use his own space yacht for the next lesson. He made the whole day better, after that silly, spoiled rich brat!

I was glad to have a little cheering up, to tell you the truth. I was feeling a little lonesome and depressed. Probably it's because it's so close to the holidays. It's hard to believe that back in Chi-

cago it's only three days until Christmas, and all the store windows will be full of holodecorations and there'll be that big tree in Grant Park and I bet it's snowing . . . and here on Cassiopeia 43-G it's sort of like a steam bath with interludes of Niagara Falls.

I do wish you a Merry Christmas, Mom! Hope my gifts got there all right.

Love,
Jim Paul

2213 12 25 late

Dear Mom:

Well, Christmas Day is just about over. Not that it's any different from any other day here on 43-G, where the human colonists were mostly Buddhist or Moslem and the others were—well! You've seen the types that hang around the United Systems building in Palatine—smelled them, too, right? Especially those Arc-turans. I don't know whether those people have any religious holidays or not, and I'm pretty sure I don't *want* to know.

Considering that I had to work all day, it hasn't been such a bad Christmas at that. When I mentioned to Torklemiggen—he's the Fomalhautian I told you about—that today was a big holiday for us he sort of laughed and said that mammals had really quaint customs. And when he found out that part of the custom was to exchange gifts he thought for a minute. (The way Fomalhautians think to themselves is that their heads whisper in each other's ear—really grotesque!) Then he said that he had been informed it was against the law for a student to give anything to his driving instructor, but if I wanted to fly his space yacht myself for a while he'd let me do it. And he would let it go down on the books of the school as instruction time, so I'd get paid for it. Well, you bet I wanted to! He has some swell yacht. It's long and tapered, sort of shark-shape, like the TU-Lockheed 4400 series, with radar-glyph vision screens and a cruising range of nearly 1800 l.y. I don't know what its top speed is—after all, we had to stay in our own system!

We were using his own ship, you see, and of course it's Fomalhautian made. Not easy for a human being to fly! Even though I'm supposed to be the instructor and Torklemiggen the student, I was baffled at first. I couldn't even get it off the ground until he explained the controls to me and showed me how to read the instruments. There's still plenty I don't know, but after a few minutes I could handle it well enough not to kill us out of hand.

Torklemiggen kept daring me to circle the black holes. I told him we couldn't do that, and he got this kind of sneer on one of his faces, and the two heads sort of whispered together for a while. I knew he was thinking of something cute, but I didn't know what at first.

Then I found out!

You know that CAS 43, our primary, is a red giant star with an immense photosphere. Torklemiggen bragged that we could fly right through the photosphere! Well, of course I hardly believed him, but he was so insistent that I tried it out. He was right! We just greased right through that thirty-thousand-degree plasma, like nothing at all! The hull began to turn red, then yellow, then straw-colored—you could see it on the edges of the radar-glyph screen—and yet the inside temperature stayed right on the button of 40° Celsius. That's 43-G normal, by the way. Hot, if you're used to Chicago, but nothing like it was outside! And when we burst out into vacuum again there was no thermal shock, no power surge, no instrument fog. Just beautiful! It's hard to believe that any individual can afford a ship like this just for his private cruising. I guess Fomalhaut must have some pretty rich planets!

Then when we landed, more than an hour late, there was the Aguilar woman waiting for me. She found out that the school wouldn't let her change instructors once assigned. I could have told her that; it's policy. So she had to cool her heels until I got back. But I guess she had a little Christmas spirit somewhere in her ornery frame, because she was quite polite about it. As a matter of fact, when we had her doing parking orbits she was much improved over the last time. Shows what a first-class instructor can do for you!

Well, I see by the old chronometer on the wall that it's the day after Christmas now, at least by Universal-Greenwich Time it is, though I guess you've still got a couple of hours to go in Chicago. One thing, Mom. The Christmas packages you sent didn't get here yet. I thought about lying to you and saying they'd come and how much I liked them, but you raised me always to tell the truth. (Besides, I didn't know what to thank you for!) Anyway, Merry Christmas one more time from—

Jim Paul

2213 12 30 0200ugt

Dear Mom:

Another day, another kilobuck. My first student today was a

sixteen-year-old kid. One of those smart-alecky ones, if you know what I mean. (But you probably don't, because you certainly never had any kids like that!) His father was a combat pilot in the Cassiopeian navy, and the kid drove that way, too. That wasn't the worst of it. He'd heard about Torklemiggen. When I tried to explain to him that he had to learn how to go slow before he could go fast, he really let me have it. Didn't I know his father said the Fomalhautians were treacherous enemies of the Cassiopeian way of life? Didn't I know his father said they were just waiting their chance to invade? Didn't I know—

Well, I could take just so much of this fresh kid telling me what I didn't know. So I told him he wasn't as lucky as Torklemiggen. He only had one brain, and if he didn't use all of it to fly this ship I was going to wash him out. That shut him up pretty quick.

But it didn't get much better, because later on I had this fat lady student who just oughtn't to get a license for anything above a skateboard. Forty-six years old, and she's never driven before—but her husband's got a job asteroid-mining, and she wants to be able to bring him a hot lunch every day. I hope she's a better cook than a pilot! Anyway I was trying to put her at ease, so she wouldn't pile us up into a comet nucleus or something, so I was telling her about the kid. She listened, all sympathy—you know, how teenage kids were getting fresher every year—until I mentioned that what we were arguing about was my Fomalhautian student. Well, you should have heard her then! I swear, Mom, I think these Cassiopeians are psychotic on the subject. I wish Torklemiggen were here so I could talk to him about it—somebody said the reason CAS 43-G put the suppressor system in in the first place was to keep them from invading, if you can imagine that! But he had to go home for a few days. Business, he said. Said he'd be back next week to finish his lessons.

Tonda Aguilar is almost finished, too. She'll solo in a couple of days. She was my last student today—I mean yesterday, actually, because it's way after midnight now. I had her practicing zero-G approaches to low-mass asteroids, and I happened to mention that I was feeling a little lonesome. It turned out she was, too, so I surprised myself by asking her if she was doing anything tomorrow night, and she surprised me by agreeing to a date. It's not romance, Mom, so don't get your hopes up. It's just that she and I seem to be the only beings in this whole system who know that tomorrow is New Year's Eve!

Love,
Jim Paul

Dear Mom:

I got your letter this morning, and I'm glad that your leg is better. Maybe next time you'll listen to Dad and me! Remember, we both begged you to go for a brand-new factory job when you got it, but you kept insisting a rebuilt would be just as good. Now you see. It never pays to try to save money on your health!

I'm sorry if I told you about my clients without giving you any idea of what they looked like. For Tonda, that's easy enough to fix. I enclose a holo of the two of us which we took this afternoon, celebrating the end of her lessons. She solos tomorrow. As you can see, she is a really goodlooking woman and I was wrong about her being spoiled. She came out here on her own to make her career as a dermatologist. She wouldn't take any of her old man Aguilar's money, so all she had when she got here was her speedster and her degree and the clothes on her back. I really admire her. She connected right away with one of the best body-shops in town, and she's making more money than I am.

As to Torklemiggen, that's harder. I tried to make a hologic of him, but he got really upset—you might even say nasty. He said inferior orders have no right to worship a Fomalhautian's image, if you can believe it! I tried to explain that we didn't have that in mind at all, but he just laughed. He has a mean laugh. In fact, he's a lot different since he came back from Fomalhaut on that business trip. Meaner. I don't mean that he's different physically. Physically he's about a head taller than I am, except that he has two of them. Two heads, I mean. The head on his left is for talking and breathing, the one on his right for eating and showing expression. It's pretty weird to see him telling a joke. His jokes are pretty weird all by themselves, for that matter. I'll give you an example. This afternoon he said, "What's the difference between a mammal and a roasted hagensbiffik with murgry sauce?" And when I said I didn't even know what those things were, much less what the difference was, he laughed himself foolish and said, "No difference!" What a spectacle. There was his left-hand head talking and sort of yapping that silly laugh of his, dead-pan, while the right-hand head was all creased up with giggle lines. Some sense of humor. I should have told you that Torklemiggen's left-hand head looks kind of like a chimpanzee's, and the right one is a little bit like a fox's. Or maybe an alligator's, because of the scales. Not pretty, you understand. But you can't say that about his ship! It's as sweet a job as I've ever driven. I guess he had some extra accessories put on it while he was home, because I

noticed there were five or six new readouts and some extra hand controls. When I asked him what they were for he said they had nothing to do with piloting and I would find out what they were for soon enough. I guess that's another Fomalhautian joke of some kind.

Well, I'd write more but I have to get up early in the morning. I'm having breakfast with Tonda to give her some last-minute run throughs before she solos. I think she'll pass all right. She surely has a lot of smarts for somebody who was a former Miss Illinois!

Love,
Jim Paul

2214 01 03 late

Dear Mom:

Your Christmas package got here today, and it was really nice. I loved the socks. They'll come in real handy in case I come back to Chicago for a visit before it gets warm. But the cookies were pretty crumbled, I'm afraid—delicious, though! Tonda said she could tell that they were better than anything she could bake, before they went through the CAS 43-G customs, I mean.

Torklemiggen is just about ready to solo. To tell you the truth, I'll be glad to see the last of him. The closer he gets to his license the harder he is to get along with. This morning he began acting crazy as soon as we got into high orbit. We were doing satellite-matching curves. You know, when you come in on an asymptotic tractrix curve, just whistling through the upper atmosphere of the satellite and then back into space. Nobody ever does that when they're actually driving, because what is there on a satellite in this system that anybody would want to visit? But they won't pass you for a license if you don't know how.

The trouble was, Torklemiggen thought he already did know how, better than I did. So I took the controls away to show him how, and that really blew his cool. "I could shoot better curves than you in my fourth instar!" he snarled out of his left head, while his right head was looking at me like a rattlesnake getting ready to strike. I mean, mean. Then when I let him have the controls back he began shooting curves at one of the mini-black holes. Well, that's about the biggest no-no there is. "Stop that right now," I ordered. "We can't go within a hundred thousand miles of one of those things! How'd you pass your written test without knowing that?"

"Do not exceed your life-station, mammal!" he snapped, and

dived in toward the hole again, his fore hands on the thrust and roll controls while his hind hands reached out to fondle the buttons for the new equipment. And all the time his left-hand head was chuckling and giggling like some fiend out of a monster movie.

"If you don't obey instructions," I warned him, "I will not approve you for your solo." Well, that fixed him. At least he calmed down. But he sulked for the rest of the lesson. Since I didn't like the way he was behaving, I took the controls for the landing. Out of curiosity I reached to see what the new buttons were. "Severely handicapped mammalian species!" his left head screeched, while his right head was turning practically pale pink with terror. "Do you want to destroy this planet?"

I was getting pretty suspicious by then, so I asked him straight out: "What is this stuff, some kind of weapon?"

That made him all quiet. His two heads whispered to each other for a minute, then he said, very stiff and formal, "Do you speak to me of weapons when you mammals have these black holes in orbit? Have you considered their potential for weaponry? Can you imagine what one of them would do, directed toward an inhabited planet?" He paused for a minute, then he said something that really started me thinking. "Why," he asked, "do you suppose my people have any wish to bring culture to this system, except to demonstrate the utility of these objects?"

We didn't talk much after that, but it was really on my mind.

After work, when Tonda and I were sitting in the park, feeding the flying crabs and listening to the singing trees, I told her all about it. She was silent for a moment. Then she looked up at me and said seriously. "Jim Paul, it's a rotten thing to say about any being, but it almost sounds as though Torklemiggen has some idea about conquering this system."

"Now, who would want to do something like that?" I asked.

She shrugged. "It was just a thought," she apologized. But we both kept thinking about it all day long, in spite of our being so busy getting our gene tests and all—but I'll tell you about that later!

Love,
Jim Paul

2214 01 05 2200ugt

Dear Mom:

Take a good luck at this date, the 5th of January, because you're going to need to remember it for a while! There's big news from

CAS 43-G tonight . . . but first, as they say on the tube, a few other news items.

Let me tell you about that bird Torklemiggen. He soloed this morning. I went along as check pilot, in a school ship, flying matching orbits with him while he went through the whole test in his own yacht. I have to admit that he was really nearly as good as he thought he was. He slid in and out of hyperdrive without any power surge you could detect. He kicked his ship into a corkscrew curve and killed all the drives, so he was tumbling and rolling and pitching all at once, and he got out of it into a clean orbit using only the side thrusters. He matched parking orbits—he ran the whole course without a flaw. I was still sore at him, but there just wasn't any doubt that he'd shown all the skills he needed to get a license. So I called him on the private TBS frequency and said, "You've passed, Torklemiggen. Do you want a formal written report when we land, or shall I call in to have your license granted now?"

"Now this instant, mammal!" he yelled back, and added something in his own language. I didn't understand it, of course. Nobody else could hear it, either, because the talk-between-ships circuits don't carry very far. So I guess I'll never know just what it is he said, but, honestly, Mom, it surely didn't sound at all friendly. All the same, he'd passed.

So I ordered him to null his controls, and then I called in his test scores to the master computer on 43-G. About two seconds later he started screeching over the TBS, "Vile mammal! What have you done? My green light's out, my controls won't respond. Is this some treacherous warm-blood trick?"

He sure had a way of getting under your skin. "Take it easy, Torklemiggen," I told him, not very friendly—he was beginning to hurt my feelings. "The computer is readjusting your status. They've removed the temporary license for your solo, so they can lift the suppressor field permanently. As soon as the light goes on again you'll be fully licensed, and able to fly anywhere in this system without supervision."

"Hah," he grumbled, and then for a moment I could hear his heads whispering together. Then—well, Mom, I was going to say he laughed out loud over the TBS. But it was more than a laugh. It was mean, and gloating. "Depraved retarded mammal," he shouted, "my light is on—and now all of Cassiopeia is mine!"

I was really disgusted with him. You expect that kind of thing, maybe, from some spacehappy sixteen-year-old who's just got his first license. Not from an eighteen-hundred-year-old alien who

has flown all over the Galaxy. It sounded sick! And sort of worrisome, too. I wasn't sure just how to take him. "Don't do anything silly, Torklemiggen," I warned him over the TBS.

He shouted back: "Silly? I do nothing silly, mammal! Observe how little silly I am!" And the next thing you know he was whirling and diving into hyperspace—no signal, nothing! I had all I could do to follow him, six alphas deep and going fast. For all I knew we could have been on our way back to Fomalhaut. But he only stayed there for a minute. He pulled out right in the middle of one of the asteroid belts, and as I followed up from the alphas I saw that lean, green yacht of his diving down on a chunk of rock about the size of an office building.

I had noticed, when he came back from his trip, that one of the new things about the yacht was a circle of ruby-colored studs around the nose of the ship. Now they began to glow, brighter and brighter. In a moment a dozen streams of ruby light reached out from them, ahead toward the asteroid—and there was a bright flare of light, and the asteroid wasn't there any more!

Naturally, that got me upset. I yelled at him over the TBS: "Listen, Torklemiggen, you're about to get yourself in real deep trouble! I don't know how they do things back on Fomalhaut, but around here that's grounds for an action to suspend your license! Not to mention they could make you pay for that asteroid!"

"Pay?" he screeched. "It is not I who will pay, functionally inadequate live-bearer, it is you and yours! You will pay most dreadfully, for now we have the black holes!" And he was off again, back down into hyperspace, and one more time it was about all I could do to try to keep up with him.

There's no sense trying to transmit in hyperspace, of course. I had to wait until we were up out of the alphas to answer him, and by that time, I don't mind telling you, I was *peev*ed. I never would have found him on visual, but the radar-glyph picked him up zeroing in on one of the black holes. What a moron! "Listen, Torklemiggen," I said, keeping my voice level and hard, "I'll give you one piece of advice. Go back to base. Land your ship. Tell the police you were just carried away, celebrating passing your test. Maybe they won't be too hard on you. Otherwise, I warn you, you're looking at a thirty-day suspension plus you could get a civil suit for damages from the asteroid company." He just screeched that mean laughter. I added, "And I told you, keep away from the black holes!"

He laughed some more, and said, "Oh, lower than a smiggstrotfle, what delightfully impudent pets you mammals will make

now that we have these holes for weapons—and what joy it will give me to train you!” He was sort of singing to himself, more than to me, I guess. “First reduce this planet! Then the suppressor field is gone, and our forces come in to prepare the black holes! Then we launch one on every inhabited planet until we have destroyed your military power. And then—”

He didn’t finish that sentence, just more of that chuckling, cackling, *mean* laugh.

I felt uneasy. It was beginning to look as though Torklemiggen was up to something more than just high jinks and devilry. He was easing up on the black hole and kind of crooning to himself, mostly in that foreign language of his but now and then in English: “Oh, my darling little assault vessel, what destruction you will wreak! Ah, charming black hole, how catastrophic you will be! How foolish these mammals who think they can forbid me to come near you—”

Then, as they say, light dawned. “Torklemiggen,” I shouted, “you’ve got the wrong idea! It’s not just a traffic regulation that we have to stay away from black holes! It’s a lot more serious than that!”

But I was too late. He was inside the Roche limit before I could finish.

They don’t have black holes around Fomalhaut, it seems. Of course, if he’d stopped to think for a minute he’d have realized what would happen—but then, if Fomalhautians ever stopped to think they wouldn’t be Fomalhautians.

I almost hate to tell you what happened next. It was pretty gross. The tidal forces seized his ship, and they stretched it.

I heard one caterwauling astonished yowl over the TBS. Then his transmitter failed. The ship ripped apart, and the pieces began to rain down into the Schwarzschild boundary and plasmaed. There was a quick, blinding flash of fall-in energy from the black hole, and that was all Torklemiggen would ever say or do or know.

I got out of there as fast as I could. I wasn’t really feeling very sorry for him, either. The way he was talking there toward the end, he sounded as though he had some pretty dangerous ideas.

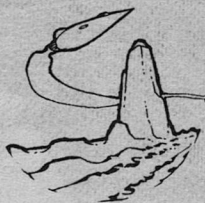
When I landed it was sundown at the field, and people were staring and pointing toward the place in the sky where Torklemiggen had smeared himself into the black hole. All bright purplish and orangey plasma clouds—it made a really beautiful sunset, I’ll say that much for the guy! I didn’t have time to admire it, though, because Tonda was waiting, and we just had minutes

to get to the Deputy Census Director, Division of Reclassification, before it closed.

But we made it.

Well, I said I had big news, didn't I? And that's it, because now your loving son is

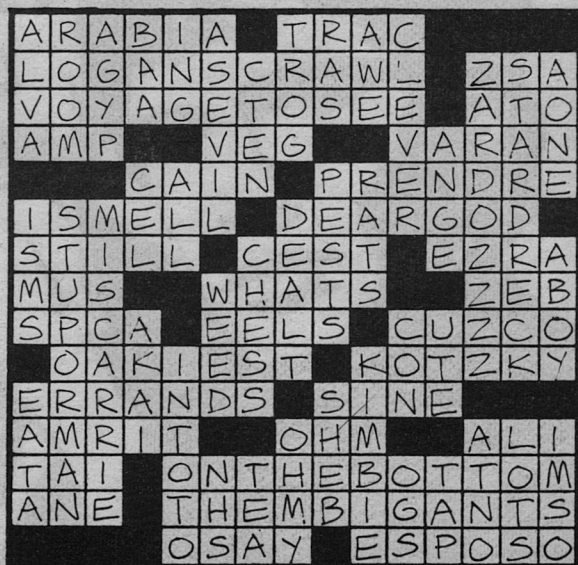
Yours truly,
James Paul Aguilar-Madigan,
the newlywed!



Asfm Puzzle #11

From page 23

Solution to Mad Spoofs





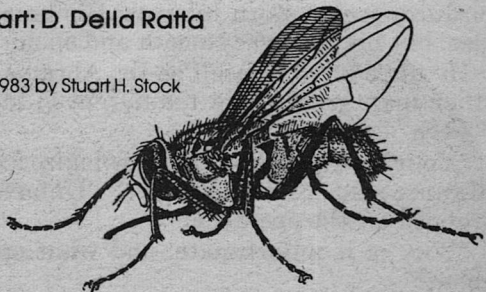
IN THE DESERTS OF THE HEART

by Stuart H. Stock

The author tells us that the title of this story comes from a poem by W. H. Auden: "In the deserts of the heart/Let the healing fountain start." His book, *20 All-Time Great Science Fiction Films* was published this fall by Crown/Arlington.

art: D. Della Ratta

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The building was huge, white, and antiseptic, spreading out along the edge of the Arizona desert like a barrier against the arid waste beyond it.

I paid off the taxi and walked up the gravel drive, suitcase in hand. By the time I reached the white double doors, the paper-dry heat had already wrung the sweat from my body, and I was glad to stop and catch my breath.

A plaque near the door announced that I was confronting the Charles Martin Lawrence Institute for Neurophysiological Research—the same Lawrence, I assumed, who'd given his name to the town I'd just paid five dollars to leave. If Lawrence's habits resembled those of the people in the town named for him, it was no wonder he could afford to build this place.

On the other hand, Lawrence had to be dead. They only name Institutes after dead people.

Inside, air conditioning wiped away the sweat with a sudden chill. The white-uniformed receptionist looked as antiseptic as the building. When I explained who I was, she escorted me to an office and said the doctors would be right with me.

We exchanged plastic smiles as she left, and I sat down in a stuffed leather chair. A sign on the panelled wall asked me not to smoke. I smiled at it and lit a cigarette.

My brother's letter had been unexpected; I hadn't seen Paul in nearly ten years, and in that time we'd heard from each other exactly three times. I still didn't know what he wanted from me.

I didn't have time to wonder about it. The door opened and I squashed out my cigarette, rising to meet the two men who entered.

The first was dressed precisely in a gray three-piece suit that neatly matched his graying hair. His bearing was so militarily rigid I knew it couldn't be military in origin.

The second man looked more relaxed, shirt collar open, brown corduroy jacket worn in spots. His hair was streaked with gray also, but his face was smooth and open.

He introduced himself as Dr. Abrams, as we shook hands. The other man greeted me indifferently, identifying himself as Dr. Styers.

"Your brother asked me to apologize for not being here himself," Abrams said as we sat down. "Unfortunately, he's still being prepped for the operation."

"Why is it unfortunate, and what operation are you talking about?"

He didn't seem to hear the first part of my question. "You mean Paul didn't explain?"

I shook my head.

Abrams looked at Styers, but the other's face was blank.

"This may be hard to explain to someone without the proper background. Do you know anything about the nervous system, Mr. Faulkner?"

"A little."

"Yes. Well, I'm not sure . . ."

"Listen, Doctor, I'm too tired to sit here while you make up your mind and your pal there pretends he's the only one in the room. Now, I'd appreciate some straight talk, or maybe you can tell me how to get a cab back to town."

I'd expected Styers to get angry, but he actually relaxed a bit, his lips quirking toward a smile.

Abrams smiled too, but with more sincerity. "We deserve that, I guess." He shook his head as if to clear it.

"All right," he began. "I'm a psychologist, your brother a physiologist, and Dr. Styers is a neurosurgeon—but we're also what some people rather colorfully call 'dolorologists.' We study pain."

He glanced at Styers for encouragement, but the latter had resumed his disinterested expression.

Abrams frowned, then continued. "Charles Lawrence made a fortune in the plastics industry, Mr. Faulkner, but he was, well . . . cursed. He was a victim of rheumatoid arthritis, which became increasingly painful with age. Worse than that, he was afflicted with a condition known as trigeminal neuralgia, or *tic doloureux*."

"I've never heard of it."

"You're lucky. It's barely understood and there's no real cure. Your head becomes so sensitive that just shaving or brushing your teeth can send excruciating, needle-like pains shooting through it—or the pain may erupt for no reason at all. The only relief comes from massive doses of narcotics or by severing the nerve, which till recently was highly dangerous.

"Lawrence had too many responsibilities to spend his time doped up, so he put up with the pain. He died ten years ago, at the age of 58." Abrams's eyes softened, as if he were feeling Lawrence's pain himself.

"I knew him at the end," he said. "You never met a more brilliant man—or a more miserable one. His will established this place for research into neurological disorders, but mainly to investigate the mechanism of pain."

"Now recently, we've made some progress. We've found it's possible to 'jam' the pain response by applying electrical stimulation to appropriate areas in the spinal column."

"It seems to me I've read about this, Doctor, but what's it got to do with Paul?"

Abrams smiled. "Up to now, this pain-jamming's been accomplished by implanting a device like a small radio receiver over the spinal cord. When the sufferer feels pain, he uses another device, about the size of a transistor radio, to send impulses to the implant, which in turn jams the pain.

"But the jammer works only on the specific area of pain it's been implanted for, and the whole system is clumsy and inefficient. What we've come up with is a device that can be implanted just below the brain stem, powered by the body's own small electric current, which can control *all* pain. That's the goal Charles Lawrence wanted us to reach."

"And Paul is going to be the guinea pig," I said.

He seemed startled that I'd guessed. "That's right. We've tried it on animals, of course, but we're limited in what we can learn from them. Paul volunteered, though Dr. Styers or I would gladly have done so. But from the standpoint of age and physical condition, Paul is the best choice. And he refused to let us ask for other volunteers."

I didn't doubt Abrams's sincerity, but I wondered about Styers. As for Paul, it was completely like him to take all the risks himself.

"One thing, Doctor," I said. "It's my impression that pain is a vital part of the body's warning system. Wouldn't it be dangerous to eliminate it?"

Abrams nodded. "We've taken that into account. The implant will act more like a safety valve. Normal sensations won't be lost, and small amounts of pain will still be experienced. But at a certain point the implant will cut off the pain, and Paul should feel only an unpleasant tingling that will provide the usual warning."

I was quiet, considering what Abrams had said. Then, startlingly, Styers spoke.

"There are two things Dr. Abrams neglected to mention, Mr. Faulkner." His voice was solid and filled with self-assurance.

"You may know that the body often compensates for its disabilities—a blind man's hearing may improve, a deaf man's eyesight become more acute. It's also possible that altering your

brother's tactile sense will produce a heightening of his other senses. That's on the positive side."

He paused, a calculated note of menace entering his tone. "But the operation will be long and delicate, involving new techniques. I'll perform it myself, and of course we have the best staff and equipment available. But I can't guarantee your brother won't leave the operating room paralyzed, or dead—or worse—with his mental abilities impaired."

"You mean he might wind up a vegetable?" I said slowly.

"Yes," Abrams answered gently, before Styers could. "How do you feel about that?"

"Very nice," I said.

Abrams's expression barely changed, but he leaned forward, as if to get a better look at me. "You have an unusual attitude, Mr. Faulkner," he said.

"I've been told that."

"Yes," he said. "I imagine you have. Well, I'll go and see if Paul is ready for you yet." He rose and left the room.

Styers's face held the same half-smile I'd seen earlier. "You don't like your brother very much, do you?" he asked.

"Does anyone?"

He shrugged. "I don't know—and I don't really care. The Institute pays me a great deal of money to do whatever I want. If this project succeeds, I'll be able to do even more of whatever I want—if you understand me."

"Oh, I understand you all right," I said.

He looked around as if we might be overheard. "I think you and I might become better acquainted," he said.

"Don't count on it," I said, standing. "Can I see Paul now?"

He shrugged again. I wasn't worth his time, so he resumed his apathetic expression and led me down a succession of endless white corridors till we reached Paul's room.

The door was opened by a woman who obviously wasn't a nurse. She had dark hair and gray eyes, and a kind of intensity I guessed was very attractive to my brother.

For an instant our eyes locked in confrontation; there was challenge and concern in hers, but I made an effort to ignore them.

Paul sat on the edge of the bed. He was eggshell bald and it had been ten years, but there was no mistaking those strong, even features; it had been said more than once that we could have been twins if it hadn't been that Paul was fair while I was dark. It was a twist that had the aptness of life.

Paul stood and grasped my hand before I could even raise it. "Hello, Mark," he said. "How are you?"

"Not bad," I said. "And it doesn't look like you've done too bad yourself." I looked at the woman, who had moved to the end of the bed.

Paul reddened. "Of course," he said, holding out his hand; she glided forward to meet it. "Mark, this is my fiancée, Lisa Shepard," he explained, looking at her, not me.

We shook hands and said the words, but the tension in her grip told me she was already wary of me.

We stood there stupidly for a second, with no place to go, so I took the initiative. "I wonder if Paul and I could be alone," I asked.

Styers, near the door, left immediately. Lisa hung back, but Abrams slowly urged her from the room.

I sat on the bed, taking out my cigarettes. "You're not supposed to smoke in here," Paul said.

I lit one, watching him steadily. He turned abruptly and walked to the window, pushing aside the heavy drapes to reveal a desert scene that looked like the inside of a terrarium.

"Just explain it to me," I said. "Explain why you wanted me to come here."

His voice drifted back to me. "You're my only living relative. If anything happens, it seemed only right that you be here."

"Nothing's going to happen."

He looked at me then, suspicion in his eyes. "What do you mean?"

I almost smiled. "Things don't happen to people like you. You only succeed. You plow through life like it was made for you—you always know where you're going and you always get what you want."

"You don't really believe that?"

"Why not? If it isn't true, it certainly looks that way, and that *makes* it true, doesn't it?"

Paul shook his head. "You haven't changed," he said.

"Not much." Suddenly, I felt uncomfortable. "When is the operation?"

His face darkened, clouded by the uncertainty of what might happen to him—and of what to do about me.

"Tomorrow morning," he answered, steadying. "You can leave now, you know. You don't have to stay."

Not "Get out" or "Go to hell," I thought. "My goodness," I said. "I couldn't leave now; it wouldn't seem right."

My brother was always a great guy—the kind who makes his bed, does his homework early, and is unfailingly polite. In school he was always first—in grades, sports, popularity, everything.

Once, when we were kids, we swiped a toy car from the local five and dime—and got caught at the door by the manager. Paul, being older, insisted on taking the blame. We'd been let go with a warning—the manager clearly impressed by Paul's sense of responsibility. For some reason, I recall feeling vaguely cheated.

I didn't try to be Paul's opposite; it just turned out that way. My father, a deacon of the local church, urged me endlessly to be more like Paul, and my mother wondered constantly (aloud) why I never made her happy the way Paul did. For a while I even worried about it myself.

I was suspended from school three times. Twice the police delivered me to my shamefaced family after picking me up in one of the town's more unsavory spots. There were other incidents, but eventually I stopped caring.

I don't know if I acted the way I did because my parents favored Paul, or if they favored Paul because of how I acted. By then it didn't matter. It's surprising how quickly you can learn to live without love when you know you're not going to get any.

When I finally managed to graduate from high school, Paul already had a fellowship in neurophysiology at the University. I spent one night trying to make him understand me. Instead, we quarrelled, and the next day I took off for good.

His letter about Mother's death caught me in Japan. Two years later I got another in Australia saying Dad was gone. Four years passed before the third found me in Bolivia. There was a mysterious, frightened tone to it that was unlike my brother. I was intrigued by it—so I'd agreed to come home.

We waited near the operating room in a lounge which Charles Lawrence had thoughtfully provided for his victims' relations. Lisa alternated between trying to read and staring out the window. I glanced up from my magazine at her from time to time, and finally she caught me at it.

"What are you looking at?" she said. She'd reached the point where her anxiety was about to overflow and she needed someone on which to dump the excess. Since I was the only one available, I'd have to do.

"A magazine," I said.

"That's funny. Simply hysterical. Paul told me about you, you

know. Oh, he made excuses for you, because that's how he is, but you're not fooling anyone."

I felt like a child being scolded by the teacher. "I'm not trying to fool anyone," I said.

She shook her head, throwing off my words. "You don't give a damn about anything or anyone but yourself, do you? You don't even care that your brother might wind up paralyzed or dead. It doesn't scare you, or worry you! It doesn't even make you happy!"

She hovered over me, hands clenched to fists, waiting to see if her anger could affect me. Her own fears for Paul weren't enough; she needed mine also. But I had nothing to give her.

"What makes you think I'm not happy?" I said.

She raised her arm as if to strike me—then rushed from the room. I didn't see her again till Abrams called me to the recovery room. She looked away when I came in, but I ignored it.

Paul looked small and weak in the middle of all that hospital plumbing of tubes and wires. He was unconscious, but there was a smile on his face. It could have been a smile of peace or the smile of an idiot. Well, at least he was alive.

We didn't see much of him after that. He slept a lot and didn't make much sense when he was awake. Styers said it was the result of the drugs they were giving him.

Lisa and I avoided each other, and I didn't have much to say to Styers or Abrams. I tried getting friendly with some of the nurses at the Institute—unsuccessfully—but mostly I spent my time in my room or walking in the desert.

They finally allowed Paul to get out of bed, and Styers said they'd start testing the implant in a few days, but Paul decided his last day as a patient demanded some kind of gathering.

"How is he?" I asked, when Abrams came to collect me.

He seemed mildly surprised by my concern. "Fine. You'd hardly know he'd undergone a difficult operation. Of course, we won't know about the implant for a while."

"Of course," I said.

Paul was sitting up in bed, chatting with Styers and Lisa. He looked all right—less drawn and more animated. He still wore bandages around his head, but they were crisp and clean. The whole room had a freshness to it, the freshness of new beginnings.

Paul smiled when he saw me. "Hello, Mark," he said, extending his hand. "Aren't you going to congratulate me?"

Then I slapped him across the face.

When you slap someone, the person's head will normally snap back—not just from the force of the blow, but from reflex action

as well; it's simply the body's way of getting itself out of the way of the pain.

Paul's head barely moved. He sat there looking blankly at me. You could still see the reddened fingermarks where the slap had connected.

"Hey," I said calmly. "It works."

There was an icy, stunned silence. Even Styers looked shocked.

Then Paul said, "That was a very stupid thing to do, Mark." His tone wasn't angry—merely hurt and reproving.

I suddenly felt angry and ashamed. I started to answer, but Abrams put a hand on my shoulder, pressing it so hard I winced.

"John," he said to Styers. "I think you'd better check Paul thoroughly. Mark, I'd appreciate it if you'd come with me. Lisa, please stay with Paul."

He dragged me out of there before I could do anything. The last thing I saw was Paul's face—still blank, but with something starting to burn in his eyes—something I couldn't put a name to.

Abrams propelled me back to his office, like a cop hustling a prisoner off to jail, shoving me into a chair. For some reason I didn't resist.

He stood over me and, while he wasn't a big man, he seemed like a giant in his anger. I thought of my father.

"All right, you son of a bitch," he said, "give me one good reason why I shouldn't kick you the hell out of here."

"I can't."

"That's good," he said. "Because it would be too damn easy to let you walk out now."

"Your problem is that you've got a brother who's a genuine humanitarian—not a do-gooder, mind you—just someone who cares enough about other people to sacrifice something for them. And for some reason you can't stand that."

"Go ahead and analyze me, Doc. I love it."

"I'm sure you do. But I'm not interested in playing games. From now on I expect you to clean up your act and keep it that way."

"You're assuming I plan to stay."

"You'll stay," he said. "You came here to get something from your brother, and you'll stay till you get it."

I stood up. "Maybe I'm just waiting to see my dear brother fall flat on his face for once."

"If that's what you want to believe," he said, and walked out.

Styers told me Paul was all right. His attitude was mildly

scolding, though I thought his concern more like that of a breeder whose prize bull has been molested.

Paul ignored the incident and I found out later he'd asked the others to forget it also. As usual, I found my brother's forbearance oddly frustrating.

The implant tests began with a battery of standard physical examinations. Abrams also conducted a series of psychological tests which Paul came through with distressing stability.

The implant appeared to work perfectly. Paul's body became a mass of bruises, blisters, and cuts, where Styers and his assistants struck, scorched, and slashed. They worked him over so thoroughly, I began to imagine I could feel the pain he didn't. But Paul felt only the predicted tingling sensation.

The only problem was that there was no way to test the limits of Paul's immunity, since they couldn't inflict any real damage on him. I offered to break his arm if it would help, but all I got for my effort was a forced laugh from Paul and a set of sharp glances from Abrams and Lisa.

Styers's one disappointment was that his sensory compensation theory didn't pan out, since Paul's other senses didn't improve one bit. Paul and Abrams were surprised, but Styers shrugged it off. He wasn't the type to draw attention to the fact that he'd been wrong.

Unsurprisingly, Paul remained enthusiastic about his job as human pin cushion and about the test results in general. But from time to time his brows would knit and a shiver would chase across his body. I wasn't sure if anyone else noticed, and I was sure he never said anything about it.

I sensed he was avoiding me. He was always pleasant, but he seemed uneasy in my presence, and I had no desire to force myself on him.

Lisa was with him constantly, and I guessed she was glad the worst was over. She even spoke to me, though our conversations were confined to "Good morning" and "Pass the salt."

In spite of myself, I'd become interested in the work, even helping out when an extra pair of hands could be useful. And I did my best to stay out of everyone's way. To be—well—good.

I was lying on the bed in my room, smoking a cigarette and ignoring the music from the radio, when there was a knock on the door. It was Paul.

"Can I come in?" he asked.

I sat up. "Sure," I said, shutting off the radio. He took a chair

across from me. With the two of us so close, the room seemed suddenly tight and airless.

"I've been wanting to talk to you," he said. "I think you know I've been staying away from you lately."

"I know it."

He looked at me quickly, expecting more, but went on when he saw that was all.

"I wanted to say I'm sorry. But you haven't made things easy. This project means a lot to people here, and your behavior hasn't helped. I know you, so it doesn't matter much to me. But other people . . . I mean, you can be so . . ."

"Obnoxious?"

His face broke into a rueful grin. "I was going to say unpredictable." He paused. "Dad used to do that—fill in other people's thoughts, I mean."

He leaned back, relaxing. "I always admired that—the way he could beat people to the punch. And he was always right, too. Not just about the words, but everything.

"I remember when Mother died." His voice was heavy with the past now, ignoring me. "She just faded away one night, holding his hand. I remember asking 'What do we do now?' and he said, 'We never forget her; we bury her and we don't look back—but we never forget her.' And he was right about that too. He was a remarkable man."

I stubbed out my cigarette in the ashtray on the night table. "He was a plaster saint," I said.

Paul's head snapped up. "What?"

"I said he was a plaster saint. Saying the 'right' thing came easy to him, but nothing's ever that easy. He wasn't always right. He just *thought* he was—and he had a rare talent for convincing other people of it."

Paul rose, shaking his head. "I'll never understand you," he said. There was real anger in his voice now—and something else. "It's like their deaths meant nothing to you. Sometimes I think *my* death would mean nothing to you."

"Don't be silly," I said, reaching for my cigarettes. "I'd never forget you; I'd bury you and never look back—but I'd never forget you."

When I looked again he was gone.

Paul remained civil to me—but that was all. I still wasn't sure what was keeping me there, but I suspected Abrams was right.

I wanted something from Paul. All I had to do was figure out what it was.

A few days later I wandered into one of the testing rooms. It had a control console with a one-way mirror which looked into the next room, where Paul was seated in one of those scientific barber's chairs I'd gotten used to seeing. They were going to try and get an idea of the extent of his immunity by giving him electric shocks of increasing voltage—short of physical harm.

Abrams looked me over without expression. Styers smiled thinly and went on conferring with his assistant, who ignored me. I picked a spot in the back and occupied it.

Styers spoke into a microphone on the console. "Ready, Paul?"

Paul's voice came back over a speaker on the wall. "Go ahead," he answered.

"All right," Styers said. "When you see the light go on just tell us what you feel." He nodded to his assistant, who turned a dial and pressed a button.

I couldn't see the light, but a second later Paul said, "Normal." Styers nodded again, the assistant reset the dial and pushed the button. Paul's response was the same.

Styers whispered to his assistant, then ambled over to me. "You enjoy torture?" he asked, grinning.

"You're the one smiling," I said. "Don't you have to keep an eye on things?"

"Abrams can handle it. Besides, things are going so well, why shouldn't I smile?"

"When is it finished?" I asked. "I mean, when do you write it up, announce it, or whatever?"

"When I'm satisfied," he said. "The longer the project continues, the better for everyone."

I assumed he meant the better for him, but I didn't say anything.

The assistant turned. "Dr. Styers? We're at the limit."

"Very well," he said, turning to Abrams. "Howard, will you get Paul? He'll want to see the results." Abrams nodded and went out.

"Suppose something happens," I said.

Styers looked at me sharply. "What do you mean? What could happen?"

"I don't know. I'm asking."

His good humor vanished. "I don't know what you mean, but if you're thinking of interfering somehow . . ."

Paul came in with Abrams. "I'm not thinking about anything," I said. "I was just curious." I brushed past Paul as I left.

But before I got very far I felt a hand clamp down on my shoulder. I expected to see Styers or Abrams, but it was Paul.

"What did you say to Styers?" he demanded.

"I asked him a question." I tried to go, but Paul wouldn't let me.

"I won't permit you to annoy my friends." His tone was formal, as if that might control his anger.

I thought of telling him about his "friend" Styers, but I bit it back. "I don't care what you 'permit.' Besides, I wasn't 'annoying' anybody."

A whine had crept into my voice, and I felt the way I had when my father bawled me out for getting into trouble. Suddenly I was very angry.

I shoved Paul's hand away, and with that the anger seemed to flow out of him. He shrunk back, hands held defensively in front of him.

"I didn't mean . . ." he began—then his face went chalky and he swayed as if about to collapse.

I stepped forward to catch him, but the dizziness must have passed because he straightened, though his eyes were still wide and glassy.

"Do you want me to get Styers?" I asked.

He shook his head. "I'm all right," he said. He pushed past me, his body taut—like a steel wire being stretched to its limit, the tension rising steadily with every moment.

At breakfast, Styers harangued us with test results. Lisa and Abrams listened politely, while I paid attention to the food on my plate. Paul was absorbed in the morning paper.

The clatter of dishes brought me up short. Paul had risen so violently he'd sent his dishes crashing to the floor. He hurled the folded newspaper across the room, barely missing Styers, and stomped out.

Abrams went after him and Lisa started also, but Styers held her back. I got up and followed both of them, finding them a little ways down the hall.

Paul stood there, his back against the wall, breathing rapidly. There was a fury in his eyes I'd never seen before. Abrams was trying to calm him.

"What the hell happened?" I said.

His rage subsided a little. "It was the paper." He grimaced. "Did you see the damn thing? Every page was the same—war,

murder, hunger, poverty, disease!" His face was an ugly mixture of anger and disbelief.

"It was horrible," he said. "Horrible . . ."

"The papers have been full of that since life crawled out of the sea," Abrams soothed. "It's nothing new."

Paul stared at him as if he were lying. "I know," he said weakly. "I know. But something should be done about it." He put his head in his hands.

"Yes," I said, looking at Abrams. "Something should."

Paul apologized. He was just tired, he said—but Abrams asked me to keep an eye on him.

I laughed. "Don't you think I'm the last one to play brother's keeper? Why don't you ask Lisa?"

"I don't have to ask *her*. Besides, it'll give you something to do."

I felt a bit patronized. "What do you think is wrong?"

"I don't know. Paul checks out physically, and aside from the one outburst he seems calm. It may simply be the strain of the work, so I'm recommending he take it easy for a while."

But Paul resisted the suggestion. He compromised finally by agreeing to take the afternoon off if Abrams notified him when they began evaluating the final test results.

The Institute's roof had been designed as a sundeck. In the late afternoon, when the sun took its weight off the desert, it was fairly pleasant. Paul asked Lisa and me up there for a game of cards. And there was a phone on which Abrams could call him. I agreed half-heartedly.

His mind wasn't on the game. He was nervous, and that steel wire inside him seemed stretched near its breaking point.

He was studying his hand. For some time a fly had been buzzing back and forth, landing on my hand and cheek. Maybe Paul's tension was getting to me because when it landed on the table, I raised my hand to swat it. Paul's hand darted out and caught mine.

"Don't," he said thickly. "You'll kill it."

"I know," I said, tearing my hand from his grip—but the fly was gone. Paul's face seemed limp, his eyes beginning to glaze over. The ringing of the telephone snapped him out of it.

"It's Styers," he said. "He needs me, but I'll be back." He managed a wan smile for Lisa and left.

"What was that all about?" she asked after a moment. I realized suddenly we were alone for the first time since the operation.

"All what?" I said.

"That business with the fly."

"What fly?"

She winced and tried again. "What do you think is wrong with Paul?"

"Is there something wrong?"

She got up and went to the railing that surrounded the deck, staring out at the desert. "You don't let anything past that wall of yours, do you?"

"Maybe I have reasons."

She didn't seem to hear. "There is something wrong, and I know you can see it, too." She turned to face me.

I went to the rail, looking past her to avoid the truth in her words. In the distance I could see heat waves rising from the town of Lawrence. The only thing between the town and the Institute was the desert, with a few bits of rock and scrub to connect them.

"If you think there's something wrong, tell Styers or Abrams, Or ask Paul."

"He won't tell me, and the others can't see it. It doesn't show in the tests; it's in his eyes, in the way he talks . . ."

She stopped abruptly. I turned to see Paul, his face twisted into a mask of rage. He looked back and forth at us, like he was trying to figure something out. Then, before I could move, he hit me, actually lifting me off my feet for an instant. He started to come after me, and I struggled to my knees, getting ready for him.

He froze in midstep, his face white, agonized; then he spun and plunged back down the stairs.

Lisa knelt by me. "Are you all right?"

I swallowed hard. "Sure," I gasped, reaching up to wipe away the blood trickling down my face.

Styers's assistant patched me up. Then I took a long walk into Lawrence for a drink and some privacy, to think. It was late when I got back to the Institute.

The place was silent, comatose—the nurse at the reception desk barely noticed me. I wandered the empty corridors, not knowing what to do next.

I recalled what Abrams had said about my wanting something from Paul. There was an edge of truth in it that wouldn't go away—yet I couldn't shake the feeling that from the beginning Paul had also wanted something from me.

I realized I was in front of his door. I assumed he was asleep and started to leave. Then I heard a muffled noise, like a moan. Impulsively, I pushed the door open.

Paul lay face down on the bed, a low keening coming from him like a dirge for the dead. He seemed unaware that I was in the room.

A book had fallen open on the floor next to him. When I picked it up I saw it was an expensive, leather-bound edition of Shakespeare's *Tragedies*. There was an inscription on the flyleaf I was careful not to read. I took my hand from the spot where it had fallen open and looked at the play Paul had been reading. It was *King Lear*, and the last few pages were tear-stained.

Paul sobbed several times. I stood there a few seconds, watching. Then I laid the book carefully back on the floor, went to my room, and tried to sleep.

There was an explosion in my nightmare and a flood of light. Then I realized the light and sound were real. Someone was in my room.

I couldn't see clearly for a moment, but I knew it was Paul. He was still in pajamas, his eyes red and swollen, face glistening with sweat, his chest heaving violently. He tossed something on the bed.

A pistol.

He stood there shaking, as if his body had been gripped by some kind of awesome fever.

I got out of bed and faced him, confused. And then, all at once, I understood. I was mute for a second, stunned by the insanity of it, and a wave of absolute horror raced through me.

"Wait," I said. "Just wait and I'll get Abrams."

"Damn you," he whispered. "Damn you!" He grabbed the chair by the door and came at me, cursing wildly. I tried to get out of his way, stumbling back onto the bed. He raised the chair and started to swing it down. I groped for the gun, watching the chair falling swiftly toward my face . . .

I shot him twice. In the tiny room the explosion was deafening.

The chair dropped aside and Paul fell on top of me. I lay there for a moment, held down by my brother's weight, his arms around me. I took a deep breath and heaved him off, his body sliding to the floor. I realized there were people milling around in the hall. Dimly, I recognized Abrams.

"Get rid of them," I said. I touched my chest and felt the wet blood on it, raised my hand to see it, as Abrams pushed people away through the redness, till the only ones left were Abrams, Styers, and Lisa.

Styers knelt over the body. "My God, Faulkner," he said. "Do you know what you've done? He's . . ."

"Shut up!" I said. I realized suddenly I was still holding the gun. I laid it carefully on the bed.

"Paul tried to kill me," I said.

Abrams's face was disbelieving. "Where would Paul get a gun?"

"It's mine," Styers said. "I keep it in my office, but anyone could have found it there."

I saw their accusing faces, and I laughed. "You still don't get it, do you?" I felt detached from everything, almost clinical, but I could hear the frenzied edge in my voice.

"It was the compensation theory. Take away one sense and the body compensates for it. You were right, but you were looking in the wrong place. Paul's body knew pain is too vital a part of any human being—you can't live without it. So it compensated for his loss with *emotional* pain—with anxiety, melancholy, worry—with pure, endless, paralyzing mental anguish."

Styers looked confused, but Abrams was starting to nod his head. Lisa's face was white, and I knew she understood.

"All the hurts, the minor miseries we take for granted, the little deaths we suffer every day and learn to live with, were magnified for Paul a million times.

"He couldn't stand to see anyone or anything hurt—not even a stupid fly. If the people he cared for were hurt, so was he. That's why he attacked me; he thought *I* was hurting Lisa. When he realized what was happening, he ran away.

"By tonight it was just too much for him. I don't know what's in *King Lear*, but it hit Paul so hard he actually wept over it."

"Just a minute," Styers interrupted. "If what you're saying is true, why didn't Paul tell us?"

"How could he? He was afraid you'd be upset, and then you'd be hurt, and if he hurt anyone he hurt himself—and his hurt was a million times worse than anyone else's!

"And when he couldn't bear it anymore he found a solution—but he couldn't do it himself. That would cause pain afterwards, and that was too horrible to even imagine. He had to find the way that would cause the least pain, so he came to the one person he knew didn't care . . ."

My mouth was suddenly dry, my throat thick, but I made myself keep talking.

" . . . didn't care what happened to him. When I refused, he forced me. And I did it."

I stood there, breathless, my mind trying to run away from itself. Styers's voice brought me back.

"Then the whole project is a failure," he said. "We'll have to call it an accident. If anyone found out the truth it could ruin the Institute."

Abrams turned on him. "You son of a bitch! You mean *you* could be ruined. Paul's dead and all it means to you is that the project's a failure?"

Styers said nothing; he seemed to cringe under Abrams's attack, but I hardly noticed.

My past was suddenly reaching out for me, but I didn't want it. I didn't want the legacy of pain and terror and anguish my brother had left me, and I struggled desperately to force it out of mind.

I saw Lisa sitting on the edge of the bed, staring down at Paul, tears streaming down her face silently.

Something seemed to break inside me then, and a relief that was more like sorrow washed over me. I felt myself accept my past and my brother's legacy, knowing they would echo inside me till I found some way to lay them to rest. There are some things you cannot go around—only through.

I looked at Styers. "Don't worry," I said. "You didn't fail. Now he can't feel anything." But the words sounded hollow and bitter, even to me. ●

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SECOND SOLUTION TO THANG, THUNG, AND METAGAME

Each time you turn a row or column, or a diagonal of three or two coins, you must reverse exactly two coins in the shaded set of eight. And if you turn a main diagonal of four coins, or a corner coin, you will reverse *no* coins among the eight.

At the start, if there are an even number of heads among the eight, there will also be an even number of tails. (Zero counts as an even number.) To make all eight coins heads you must, therefore, reverse an even number of tails in this set. Because your moves allow you to turn over pairs of coins in the set, it is a simple matter to make all eight coins heads. A good strategy is to first make the four central coins heads. Then turn diagonal rows of two, or outside borders of four, to make all the shaded coins heads. Finally, if need be, turn corner coins.

Consider now a starting pattern in which the number of heads (or tails) in the shaded set is each an odd number. Because every move you make must reverse either two coins in this set, or none, there is no way to make all eight coins the same. If two coins that you reverse are alike, you will lose or gain two tails, and the number of heads will remain odd. If the two coins are heads and tails, each changes its face and the situation remains the same as before.

Mathematicians use the word "parity" to describe structures that can be identified with odd or even numbers. The set of eight coins has even parity if it has an even number of heads, and odd parity if it has an odd number of heads. The rules of the game are such as to "conserve the parity" of this set. If the initial parity is odd, there is no way to change it to even.

I found this game in a Russian magazine of popular science. Metagame is explained by Raymond Smullyan in his latest book, *5000 B.C. and Other Philosophical Fantasies* (St. Martin's Press), a book of dazzling speculations that should interest any science fiction fan.



PERCHANCE TO DREAM



art: Garry Freeman

by Norman Spinrad

Norman Spinrad is best-known,
of course, for his novels.

Bug Jack Barron, for example,
which is soon-to-be-a-major-motion-picture,
directed by Costa-Gravas. Or *The Void Captain's Tale*,
just out from Timescape. But here he
offers a rare short story. Or is
it a story? You tell us.

A huge, canted movie screen, like a great bed sheet clumsily erected between two trees. On it, in black and white, jagged, stylized, attenuated shadow-figures like hunters painted on a cave wall, frozen in attitudes of fleeing terror.

I stand before it, explaining:

"The night before D-Day, a detachment of Nazi troops was shown an R&R movie in which European victims suffered terrifying paralysis and death from king cobra bites. The next morning, they unexpectedly encountered an inferior Allied force and were badly defeated because of the chance death-fear engram implanted in their psyches by the film of the night before."

I woke up.

Everything I will herein account actually happened to me, in a sense. Nevertheless, I'm not sure whether this story is fiction. I'm writing it to find out. I will be asking you, the reader, for collaboration. This is a story. This is also an experiment. It is about a dream.

Do dreams have any connection with waking reality? Or are they simply the cerebral computer clearing itself of random noise during sleep? Do they express private internal imagery and obsessions or are they somehow connected to a kind of collective unconscious? I have no fixed belief in this area. I will report the subjective experience and give *you* a chance to tell *me*.

I woke up. I remembered the fragmentary dream image, and, strangely, at least for me, the whole little speech I had made with such weird authority and assurance within the dream. Something moved me to do something I have never done before: I went to the typewriter and wrote out the two paragraphs you have just read.

As a writer of fiction who, like all writers of fiction, has had fertile periods, and periods when the mind and the paper in the typewriter remained adamantly blank, I have always had a self-interested curiosity as to where stories come from—that moment of "inspiration" when an "idea" for a story comes into a blank mind.

And those two paragraphs, I knew, represented a core "idea" for a story. But where did the idea come from? Had a fragment of something I had read somewhere surfaced from my subconscious memory-banks; was what I had said in the dream true? If

not, then even more weirdly, I had begun writing a story, *this* story, in my sleep!

Sometimes I have what are called "lucid dreams." In a lucid dream, you know that you are dreaming, and, for me at least, there is a certain ability to rewrite the dream from within it. Occasionally, I have woken up in the middle of a nightmare, gone back to sleep after deciding on a better ending, re-entered the dream where I left off, and made it come out according to my own script.

This probably has something to do with being a writer of fiction, though it's hard to say which is cause and which effect. Indeed, dreaming and creating fiction have something ultimately fundamental in common. In a dream, images, events, and even storyline arise spontaneously out of some occluded interior void. The same thing must happen in writing fiction. Blank paper. Blank mind. And then something begins to take form out of nothingness.

I decided to try an experiment. I decided to treat the two paragraphs of dream transcription as a "lucid dream" out of which I had awoken. I decided to try to re-enter the dream, not by going back to sleep, but at the typewriter, to see if I could actually observe imagery and meaning arise out of the void.

As I re-read what I had written, the dream-image itself came back into my mind—lucidly, with something like total sensory recall. The process of creating fiction, so like dreaming in the first place, seemed to merge with the dream process itself; in a sense, I think, I had actually re-entered the dream, only it was coming out through my fingers, into the typewriter and onto paper. I seemed to be both dreaming and writing automatically while another part of me was observing the process. As I wrote, I was watching details emerge out of the void, a story taking form, not as I wrote it, but as I read it. Not linearly and logically like intellection, but hologrammically, imagistically, mysteriously, like a dream. I felt physically strange, mentally bemused. I did not at all feel that I was making up finer and finer detail. Rather I seemed to be remembering things I had never known, could never have known, with the impossible certainty of historical hindsight. . . .

I *knew* that the Allied troops who had surprised the German detachment were Americans. Something imagistic, something cinematic, about the moment in which the Americans had attacked the Germans, had activated the paralysis-fear engram

implanted in the minds of the Nazis by the film of the night before. There was nothing rational about their terror; they were somehow frozen by a dream-image recurring in reality, a moment of animal fear that paralyzed them long enough for the Americans to seize and hold the initiative and win a totally unlikely victory.

After all, they should have defeated the Americans easily. These were elite Nazi troops encountering Americans for the first time, encountering a smaller force of green troops in the bargain, airborne troops dropped behind the lines on the morning of D-Day; by all reasonable military calculations, they should have been annihilated by the Germans.

I began to feel sweaty, light-headed, passingly strange; the room seemed to fade around me as something moved through me that *couldn't* be moving through me, as this waking dream wrote itself onto paper through my fingers. I had never done this kind of thing before. I had never believed in this kind of thing before. I was both conscious and asleep, dreaming and awake, actually watching something arise out of nothing without knowing what was coming next, observing both an unfolding dream and the process of fictional creation itself. Perhaps in some way I was discovering that the two are somehow the same thing.

Learning, with ever-greater clarity, detail, force, and certainty that I *knew* what had happened to those German troops. . . .

When the Italian Fascist government collapsed under the pressure of Allied troops advancing up the boot of Italy, Benito Mussolini was taken prisoner. Mussolini was held in an isolated house in northern Italy, where he became the object of perhaps the most daring, dramatic, and unlikely military feat of World War II.

A small German commando unit under the command of one Otto Skorzeny silently pounced on this stronghold in gliders, overpowered the guards, and succeeded in rescuing Il Duce and spiriting him back to Germany. Hitler used the rescued Mussolini to set up a Fascist puppet regime behind German lines in northern Italy. Only later was Mussolini recaptured by partisans and hung by his heels like a carcass from a meathook.

The dashing Skorzeny and his men became the heroes of the hour in Germany, the epitome of Nazi intrepitude, skill, and daring, no doubt in their own minds as well as in the tales of the Nazi propaganda apparatus. And not without justification, since they had unquestionably performed an incredible feat of dramatic derring-do.

One or more of Skorzeny's commandos was serving in the Waffen SS detachment that had been surprised by the airborne American troops on D-Day. Maybe the commander. Maybe Skorzeny himself was there when the American gliders blundered into the German camp. It was therefore partially rational for these haughty Waffen SS elite troops to be terrified by the sudden appearance of American glider commandos. Believers in their own mystique, accustomed themselves to pouncing from the sky like silent deadly eagles, knowing how effective such a surprise attack could be, utterly inexperienced in defending against their own sort of attack, they naturally assumed that such an attack was well-nigh irresistible, that troops assigned to execute such a daring tactic must be an elite force like themselves.

The Americans, though, in reality had no experience in these tactics, and the last thing they had planned was to come down in the middle of a stronger concentration of Waffen SS elite troops. They were a small force whose mission was to land quietly in secret and then move up to take a small key bridge.

But they drifted off course in the air, and didn't see what they were coming down into until it was too late, until they were just about out of glide. . . .

Jeez! It's crawling with Krauts! We're coming in!

Just enough warning to go into full adrenal reaction, and come swooping in over the tree tops with all guns blazing. . . .

But the venom of the cobra was already sapping the will of the Waffen SS mystique.

Because of the film of the night before. It had been a black-and-white movie made in the 1920s, in the pre-Nazi, nouveau-gothic Weimar style. A grainy old German movie set in India, with the European characters menaced by some Indian Kali Cobra Cult as imagined by the German mind—nasty, stylized, graphic images of the audience-identification characters dying at the fangs of the treacherous, insane, evil *untermenchen*, a terrible death of cobra-bite paralysis, while a leering Hindu menace babbles triumphantly of how horrible your death is going to feel as the cobra venom slowly extinguishes your life in self-examined agony for the greater glory of Kali.

Just the sort of evil these troops enjoyed inflicting on themselves; but in the movie, the roles were reversed, keying into both unconscious lusts and subconscious guilts, creating nightmare dreams of Thuggees creeping over the compound wall towards your sleeping paralyzed body, a huge cobra in the foreground, drops of venom glistening off razor-sharp fangs—

—A thin segment of orange sun peers up over the forest wall, casting long, ominous shadows in the semi-darkness as gliders slip silently over the treetops like Thuggees, spitting sudden machine-gun venom as they come in straight at your sleeping face, flashing you suddenly out of a nightmare of leering Hindus and deadly striking snakes into—

—a nightmare of chaos, noise, and confusion, the man beside you already screaming his life away, the dark rearing shapes with cobra heads painted on their fuselages, bellying in towards you spitting fiery death, grim figures pouring out of them like assassins from the Temple of Kali, leering death and vengeance in the ghastly pre-dawn; you hardly have time to scream before lead fangs pierce your frozen flesh and the dream of your life fades into darkness. . . .

And I awoke from my dream of those Waffen SS troops waking from their dreams of terror into yet another dream of death, sitting there at the typewriter breathing heavily, wondering from whence it came.

Do dreams have any connection with waking reality? With the creation of fiction? I wrote out the dream. I have now reported the subjective experience. At the time, though, I had no thought of letting this story see the light of day. I have said that I had no fixed beliefs in this area, but somehow, this experience violated every one of them, and I put it aside, unwilling to commit such mystical claptrap to public print under my name.

Until I had another dream which convinced me of one thing: that dreams are *not* simply the cerebral computer clearing itself randomly during sleep.

I stood on a vast, bleak plain of ash. The nuclear holocaust had come and gone, leaving only a few survivors and a world of ruin. About twenty yards in front of me was a rude hut. Between me and the hut, laid out in neat geometric rows on the bare burnt earth, were about a hundred books, which I knew were all that remained of the collective knowledge of mankind.

Thunderheads appeared in the gray sky. It began to rain. I knew that the books would be soaked, destroyed, obliterated, lost forever: I had to—

I woke up. It was about 4:00 A.M. I felt the need to urinate. Not wanting to shock my eyes, I stumbled into the bathroom in the

dark, and stood before the toilet.

Above the toilet was a cabinet. In the cabinet I had stored about a hundred books.

As I stood there, I felt a drop of water hit my head. And another. And another.

I turned on the light. Droplets of water were slowly leaking from the bottom of the cabinet above the toilet tank. I opened it. The interior ceiling and one interior wall of the cabinet were just beginning to sweat water from what I later learned was a plumbing leak on the floor above.

So I wrote this. The subjective facts are as reported. If this story *is* fiction, then at the very least I have witnessed the congruence of dreaming and the creative process with my conscious mind. If it is not fiction, then I have experienced something I am powerless to understand.

I'm not sure whether this story is fiction or not. This question is part of the story and part of an experiment. The part where you, the reader, may enter the story.

I admit to prior knowledge of the rescue of Benito Mussolini by Otto Skorzeny and his glider commandos. But I know nothing of the films of Weimar Germany, the disposition of German units on D-Day, the prior service of any of their personnel, what films may or may not have been shown to them the night before, actions of American glider units on D-Day, or whether any of them included a cobra in their insignia.

But maybe some of you out there do.

Was there an American glider unit in World War II which had a cobra as part of its insignia?

Did an American glider unit engage and defeat a force of Waffen SS troops behind the lines on the morning of D-Day?

Was Otto Skorzeny, or any of the men under his command on the Mussolini rescue mission, serving in such a unit?

Were any German units shown films the night before D-Day?

If so, was one of those films about an Indian cobra-cult?

Is this story pure fiction emerging out of the mysterious void of the imagination? Or are dreams somehow keyed into some kind of unconscious collective memory?

You tell me.

Please.

Editor's note: Readers wishing to comment on Mr. Spinrad's experience can write to him care of this magazine.

by Pat Cadigan

NEARLY DEPARTED

This is the author's second appearance in *IASfm*. Her first was "The Sorceress in Spite of Herself" in our December 1982 issue. She and her husband Arnie Fenner won a 1981 World Fantasy Award in the "Special Achievement, Non-Professional" category for their magazine *Shayol*. In addition, she's a judge for this year's World Fantasy Award and chairwoman of the Nebula jury for this year's Nebula awards.

art: Odbert

"Thrèe things," I said, and held up a matching set of three fingers.

Nelson Nelson looked tolerantly amused. "Run 'em."

"One—" I curled my index finger. "I don't do empaths. Two—" I bent my ring finger. "I don't get physical. Three—" I pointed the remaining finger at the old fox on the other side of the desk. "I don't rob graves."

The couch creaked as NN rolled over onto his back and folded one arm behind his head. "Is that all that's bothering you? Kitta Wren hasn't been buried."

"I don't do dead people. If God had meant me to pathosfind dead people, he wouldn't have invented the Brain Police."

A broad smile oozed over NN's saggy features as he reached for a cigarette. He was smoking those lavender things again. They smelled like young girls. "What's the matter, Allie? Are you scared of a dead person's brain?"

"I'm scarerder of some live ones I know. Fear isn't the issue. I just have certain beliefs and this job you're asking me to take goes against every one of them."



OSBERT



"Such as?"

Sighing, I shifted position on my own couch and scratched my forearm. The vulgar gold lamé upholstery NN was so enamored of was giving me a rash. You can dispute taste but you can't stop it. "Such as, death is the end. The end means there is no more. Dead people should be allowed to rest in peace instead of having their brains plundered and looted for any last bit of—of treasure, like Egyptian tombs."

"Eloquent. Really eloquent, Deadpan," NN said after a moment. "You're probably the most eloquent mindplayer this agency has ever employed. Someday you might talk yourself out of a job, but not this time." He winked at me. "Actually, I respect your feelings. Those are good feelings, especially for someone who trades on the name Deadpan Allie."

"Being deadpan doesn't mean you don't have feelings. You just don't show them."

"I personally don't share them. I feel there's a lot of validity in, say, going in and getting the last measures of unfinished music from a master composer who dropped dead at the harpsitron, or mining the brain of a gifted writer for the story that was unwritable in life. Postmortem art is highly regarded and a large number of artists, including Kitta Wren, signed postmortem art contracts. It's a sort of life after death—the only one we know about for sure."

I scratched my rash some more and didn't say anything.

"Kitta Wren *wanted* a postmortem. It's not grave robbing. If she hadn't signed the contract, it would be different."

"Kitta Wren was a five-star lunatic. She had a psychomimic's license and when she wasn't writing her poetry, she was bouncing off the walls."

"Ah, but she was brilliant," NN said dreamily. I blinked at him, astounded. I'd had no idea he liked poetry. "When it came to her work, she was totally in control. Somehow I always thought that control would bring her down. In a thousand years, I never would have guessed anyone would kill her."

I wanted to tear my hair and rend my garment. "NN," I said as calmly as I could, "I *hate* murder. I am *not* the Brain Police. If they want to find out who did her, let them send in one of their own to wander around in her mind."

"Oh, they will," Nelson Nelson said cheerfully. "Right after the postmortem." A cloud of lavender smoke dissipated over my head as NN flipped his cigarette into the suckhole in the center of his desk. "The Brain Police can't do anything until that's taken care

of. Otherwise whatever poetry is left in there could be fragmented and irretrievably lost."

The rash had crept up past my elbow. I kept scratching. "There are mindplayers who postmortem for a living."

"I'll pardon the expression. Wren's manager hired you. Come along, now, it'll take you somewhere you've never traveled."

"I've never been to the heart of a white dwarf star and I don't see why I should go."

NN exhaled with a noise that was almost a growl. "Do you want to work for me?"

"I'm thinking."

He gave me that oozy smile again. "Deadpan, this is important. And you might learn something." He raised up on one elbow. "Just give it a chance. If you can't do it once you're in, fine. But try it."

I sat up, scrubbing my arm through my sleeve. "Don't make a habit of signing me up for postmortems."

My eyes popped out. I held them in my palms until I felt the connections to my optic nerves break and then lowered them gently into the bowl of solution. The agency's hypersystem would have removed them for me, but I've always preferred doing that little chore myself.

I lay down on the slab and felt it move me head first into the system. Even blind, I could sense the vastness of it around me as it swallowed me down to my neck. It was the size of a small canyon, big enough to spend the rest of your life in just wandering around. All I wanted at the moment was some basic reality affixing and reassurance. If I was going to run barefoot through a dead lunatic's mind, I needed all the reinforcement I could get. After an hour of letting the system eat my head, I almost felt ready.

I hadn't been gassing Nelson Nelson as to how I felt about postmortems just to cover a corpse phobia. To me, you ought to be able to take something with you—or at least make sure it goes the same time you do—and if it's your art, so be it. Hell, there were plenty of living artists with a lot to offer. Stripping a dead person's mind for the last odds and ends seemed close to unspeakable.

I supposed the appeal of postmortem art was partly what Nelson Nelson had said—life after death. But there seemed to be more than a little thanatophilia at work. Art after death made me think of sirens on rocks, and I wasn't the only one who heard them

singing. Occasionally there'd be an item in the news-tube about some obscure holographer or composer—holographers and composers appeared to be particularly susceptible—found dead with a note instructing that an immediate postmortem be performed because the person had been convinced that the unreachable masterpiece he/she had been groping for unsuccessfully in life could be liberated only by the Big Bang of death.

So there'd be the requested postmortem and the mindplayer who hooked into the brain, which was all wired up and floating in stay-juice like a toy boat lost at sea, would come out not with a magnificent phoenix formed of the poor deader's ashes but with a few little squibs and scraps from half-completed thoughts that had turned in on themselves, swallowing their own tails for lack of substance, vortices that had gone nowhere and never would. Some people aren't happy just with being alive. They have to be dead, too.

At least Kitta Wren hadn't been one of those. The information Nelson Nelson had dumped into the data center in my apartment was freckled with little details, but rather sketchy taken all together. I punched her picture up on my screen and sided it with her bio.

She'd been a very ordinary woman, squarish in the face with a high forehead and medium brown untreated hair. Her only physical affectation had been her eyes. Since the advent of biogems, everyone had at least a semi-precious stare. Jade and star-sapphires had always been popular choices and moonstones proliferated among entertainers of the more mediocre stripe. I hadn't seen very many people with my own preference for the shifting brown of cat's-eye and it takes a certain coloring to carry off diamonds effectively, but Kitta Wren had gotten herself something I'd never seen before.

Her eyes seemed to be shattered blue glass, as though someone had deliberately smashed the gems before putting them in. Her pupils were spiderwebbed with white cracks. I enlarged them for detail and paused, staring at them. I was wrong. Her eyes weren't spiderwebbed with cracks—they were spiderwebbed with spiderwebs, thickened as though coated with dew or frost. "Come into my lunatic parlor," I muttered, wondering if the webs had been a manifestation of her psychosis, or some kink she'd always wanted to indulge, or if there was any way of separating her own ideas from her psychosis.

She'd gotten her psychomimic's license at nineteen and spent the five years after that almost continuously crazy, with a few

months off here and there for extended periods of writing. Later she had begun limiting her psychotic times to summers while she worked on a cycle of poetry. The result, a long series called *Crazy Summer* had given Wren her first major recognition. From there, she'd gone to being crazy only at night, then only during the day, and once she'd spent six months orbiting the moon in high mania.

When she died, which had been—I punched for the date—just the day before, she'd been a week into a general schizophrenia no one seemed to know anything about. Cause of death—I blanched a little—disembowelment. There was a photograph of her office where she'd gotten it. She'd been strong all the way to the end, going clear across the room before collapsing. Dead just under an hour when her manager had found her. Not too bad—five hours was about the limit for an untreated brain. After that, it's not worth trying to hook in with it. No suspects and no murder weapon; the Brain Police were holding off their investigation of her brain until after the postmortem was performed. Standard procedure—their technique tended to wipe a mind clean.

Under Miscellaneous, I found a small picture of Wren's manager, a gold-skinned androgyne named Phylp with fan-shaped eyebrows. The request for a pathosfinder was entered as well. It seemed Phylp wanted someone who wouldn't treat her like just another deader. Sounded to me as though Phylp were hoping Wren hadn't left behind as little as he/she suspected.

A morgue is a morgue is a morgue. They can paint the walls with aggressively cheerful primary colors and splashy bold graphics, but it's still a holding place for the dead until they can be parted out to organ banks for burial in the living. Not that I would have cared normally, but my viewpoint was skewed. The relentless pleasance of the room I sat in seemed only grotesque.

The other two people in the room didn't see it that way. One had introduced himself as Matt Sabian, postmortem supervisor. The other was unmistakably Phylp. He/she overshadowed Sabian despite the latter's silver hair, garnet eyes, and polished skin. Phylp was the flashiest androgyne I'd ever seen—most of them preferred no higher an appearance profile than anyone else, but Phylp handled major talent. It was probably advantageous to have such a memorable manager. If anyone could remember the talent after seeing the manager, the talent must be pretty major. Show biz.

"I understand this is your first dead client," Sabian was saying.

The absurdity of the statement made me want to laugh, but they don't call me Deadpan Allie and lie.

"Up till now, I've worked only with living minds, yes." I sneaked a glance at Phylp, who was more arranged in a chair than seated in it.

"You shouldn't have any trouble," Sabian said. His voice had an odd hint of disappointment. "Your own mind will have to provide a good deal of visualization, except for her memories and the like, so I hope you're not given to bizarre symbolism. Other than that, everything in a living mind is present in a dead one. Except life, of course. We leave this world as we come into it—without thoughts, personality, memories, talent. When life fades, it leaves these things behind, just like any other material item we have. You'll have to actively stimulate the mind to obtain any of them. It can't offer you anything voluntarily. It takes life to do that." He pulled his left ankle up onto his right knee and played with the elastic cuff of his pants. "It'll be very much like hooking into a computer program of Kitta Wren's identity, actually."

I sat up a little straighter. "But it's not really that simple, is it?"

Sabian opened his mouth to answer but Phylp spoke up for the first time. "That's why I wanted a pathosfinder for her."

"Pardon?" I asked.

"Someone who would understand that it's not just a matter of searching out data." The throatiness I had momentarily taken for emotion was Phylp's normal speaking voice. "I want whatever it is that comes out to come out sounding alive. Because she was alive when she created it."

Sabian pointedly did not look at Phylp, who returned the favor. It clicked for me then. Sabian, postmortem supervisor. If Phylp hadn't insisted on hiring a pathosfinder, Sabian would have been doing this job. A nice sweet plum of a job, too, doing a postmortem on someone of Kitta Wren's stature. I did a sight reading of his Emotional Index, but I couldn't tell who he was angrier at, me or Phylp. I supposed I could understand how he felt, but it was still extra stress I didn't need.

"How well did you know Kitta Wren?" I asked Phylp.

"Not at all. I managed her, but she was a stranger to me."

That was a lot of help. "What about family?"

"Only two brothers. One is at the South Pole. The other is under the Indian Ocean in a religious trance."

"Do you know anything about her early life?"

Phylp almost looked sheepish. "Only that her parents gave the children to the state and vanished." He/she spread his/her hands gracefully. "That's all anyone knows. In the five years I've handled her, she never showed the slightest inclination of opening up to me or anyone else. It was a major disclosure if she told me she liked her contracts."

"That sort of self-isolation isn't exactly normal behavior for a poet, is it?"

"Nothing about her behavior was *normal*." Phylp frowned at me. "She was crazy. All the time she was crazy, and when she wasn't, she wanted to be. God knows what she got out of it. I don't."

Her poetry, apparently. I turned my attention back to Sabian. "What about the psychotic dead mind? Is the psychosis still operable?"

"Very much, though in a strictly mechanical way. And it probably doesn't know it's dead."

I hesitated. "Which do you mean—the psychosis or the mind?"

"Both, I would think."

"How does a mind not know it's dead?"

Sabian's chin lifted defensively. "How does yours know it's alive?" I didn't answer. "It's the same question, really." Not the way I saw it, but I let him go on. "Minds contain information, but it takes the presence of life for it to *know* anything. What does a computer program *know*?" The polished skin stretched in a tight, triumphant smile, as though he'd given me a glimpse of Big Truth.

"And where is the brain?" I asked after a moment.

"Here." Sabian pointed his toe like a dancer and pressed a panel in the floor. A section of the far wall slid back and there it was. What had waited behind Kitta Wren's spiderwebs in life now hung in a tall, clear canister of stay-juice, trailing wires like the streamers on a Portuguese man-of-war. The wires went down through the bottom of the canister to the maintenance box, which kept a minimum number of neurons firing. Two more wires leading from the visual center were coiled on top of the canister.

"We're still within the optimum time to go in. In another day, the neurons will begin to cease firing efficiently and after that deterioration will be rapid. I hope you'll be able to get everything on the first try."

I hoped so, too.

They left me alone so I could set up my portable system. As-

sembling the three large components and five smaller ones was a kind of busy work. There are comparable systems that need no assembly, but there's a lot to be said for the ritual of preparation as relaxation therapy. I never needed it more than I did just then.

I worked in silence, rolling the system over to the brain and then fitting the pieces together until I had the familiar unbalanced-looking but actually quite stable quasi-cubist structure. Nothing showed in the way of circuits, wires, or guts of any kind. Good equipment, NN was fond of saying, doesn't have to show its guts.

Pulling out the drawer with the connections and thermal tank for my eyes, I paused. A living client I would have hooked into a relaxation exercise such as making colors, building landscapes, or running mazes, but what could I do with a dead one? It couldn't get much more relaxed. Or could it? I wouldn't have thought. On the other hand, I wanted it functioning a little more than minimally when I made contact.

In the end I decided on some abstract moving visuals since I would be connecting directly with the visual center anyway. I dragged over one of the chairs and made myself comfortable.

Despite the apprehension I'd felt about the job from the beginning, something like professional reflex took over. It didn't take any longer than usual to calm myself into a smooth, alert state of receptivity. I had positioned the thermal tank on the maintenance box next to the canister, where I could reach it easily. When I was absolutely sure of its location, I thumbed my eyes out and let them down into the solution. It never ceased to amaze me how well I could function blind, but most mindplayers had superior short-term eidetic memory.

I had only to hold the system connections under my eyelids; they crept in and found their way to my optic nerves by themselves. After a few moments, awareness of my body faded and I was through the system and in Kitta Wren's mind.

Every mind is different. Every mind is the same. Those are the first two laws of mindplay. Recognition in an unfamiliar land always came as a surprise to me no matter how often I met clients mind-to-mind. I was even more surprised to find that the initial impressions and sensations of contact with Kitta Wren's mind were not dissimilar to those I associated with living minds.

Normally I would have made my presence felt gradually so as not to startle my client by bursting in like an invader. But this client couldn't know that trauma and I was coming directly into

the visual center instead of the less abrupt route through the optic nerve. After the usual slight disorientation of passing through the barriers of personality and identity, I found myself in the thick of random pictures and arbitrary memories. Around me, the mind seemed to tense as it felt the addition of something new and unpredictable. Then it ground on as before, accepting me as just another thought.

The abstract visuals program was still running and I was awash in lazy spiral rainbows and harlequin rivers. I set it for gradual fade-out. The program's wane uncovered more of the brain's own pictures, some of them mundane objects remembered for no reason, some of them vignettes from Kitta Wren's life. I let them swirl around while I decided on the best way to go about the postmortem. Hitch a ride on a memory? Follow a random thought? Get hold of some false starts or blind alleys and reconstruct them?

I had caught a false start when the mind tried to think me. There was almost no warning. The false start was in my grasp and I was receiving multiple over- and undertones accompanied by the memory of its creation and the frustration Kitta Wren had felt before finally giving up on it. A walk in the rain in the middle of the night during late summer. Taste of rain dissolving on lips and tongue and the first line. *Do I drink the rain or does the rain drink me . . . drink? think?* I was searching it for possible salvage when the mind clamped down on me and Kitta Wren's old, unfinished poem together.

It thought the poem piece by piece, starting with the memory. It remembered the night and then the season (why not the season and then the night, I wondered), and then moisture, pausing to associate it with varieties of wetness. I was overwhelmed by the smell of the ocean, followed by a brief image of a coffin covered with barnacles lying on the sea bottom. The taste of rain returned more strongly, eradicating the picture of the coffin (*my brother, that's all*) but not quite managing to suppress a fleeting thought of snow. *Do I drink the rain . . . I drink the rain and the rain drinks me . . . Drinking the rain I am drunk and am drunk by drunken rain . . .* The mind niggled and gnawed out each variation from the original line (what was it about rain that fascinated poets, anyway?). When it was through, I was next.

I made a mask of my face and then took it off. The mind reached down for me in its purely mechanical probing and I threw my face into its processes. Traveling at the speed of thought, my face was everywhere as the mind tried to find the correct association for it. Curiously, I saw it materialize on the smooth, blank surface

of a writing slate before I slipped through a half-remembered dream—images of cold stone carvings on a cathedral wall and a quick impression of *I should write about a mad cathedral*—and found myself down in Kitta Wren's back burner.

There isn't a mind in the world that doesn't have a back burner and it was usually a lot more difficult to get a client to open it up. Sometimes the incomplete puzzlements and notions stewing there were capable of growing into full-fledged ideas; other times they changed into false starts or shrank away into un-existence. Kitta Wren's back burner was so full of images that some of them were teetering half-dissolved on the edge of forgotten, as though she had deliberately pushed every idea that occurred to her to the back of her mind and then tried to forget all of them. Not the most productive way to work. I propelled myself through them to see what I might be able to salvage, which, I thought, would yield more results than looking at material she'd given up on. I was learning.

It was like holo-collage, the self-indulgent beginner's exercise for holographers who aspired to feature-length work, with her inner voice fading in and out where she had found words to go with the pictures. In quick turn I was looking up from the bottom of a deep, narrow hole at a circle of innocent blue sky, staring across the surface of a bed at eye level, watching two people, their faces in shadow, touch hands and listening to the indistinct murmur of their low, womanly voices (each was Wren). I was caught in a storm in the desert with rare rain beating straight down (there was that rain again, she seemed to return to it over and over), observing a street scene populated only by machines with my cheek pressed against the pavement, tasting an empty cup and pretending there was something in it. I went back and reviewed that last one to see where she'd gotten it.

Something from nothing, Kitta Wren's intelligent inner voice said. *Something from nothing*. I saw a chrysanthemum in the bottom of the cup; it metamorphosed from live to painted on. The center of the flower was an eye. *Something from nothing*. *I fill me with something from nothing*.

I had almost focused on what she had meant to taste in the cup when I began to get the feeling I wasn't alone. Which was absurd—even *she* wasn't there anymore. I turned my attention from the cup and waited. Possibly what I had felt was the mind reaching out for me again. Lowering my energy level as much as possible, I moved in among the jumble of unfinished ideas and waited. Rain

punched dents in the sand. The sideways view of the street shimmered in the soggy desert sky like a mirage.

The mind spasmed. I had given it a new combination of thoughts to think by the way I had juxtaposed her old fragments. It fixed on me just as the madness hit.

That was what I had felt approaching, her psychosis, and it struck like a concentrated, highly localized storm. I thought my perception of it had been colored by my exposure to the desert scene, but it remained stormlike even after the mind separated me from its own familiar concepts, and I realized the nature of what Kitta Wren had done to herself.

Had she still been alive, I would have been witnessing a localized psychotic episode, a variety of seizure meant to produce not a convulsion but an altered state of consciousness. Except there was no consciousness. The seizure tore into her ideas and images and they flew up, dropped, rose again and fell flat with no one to pick them up and use them. The rest of the mind seemed to come to a standstill while the storm raged on. She'd been hoping for a literal brainstorm, a creative madness that would tear through her mind, stirring her thoughts into new and better patterns, giving her the stimulation she had refused to seek outside of herself. The mind seemed to shimmer and its perception of me grew vague. I slipped away down to an area of learned reflexes and automatic behavior to wait things out. As soon as the seizure had passed, I would go back, collect her ideas, memorize them and get out. Phylp had been wrong. I would have to treat this strictly as a data retrieval operation, I couldn't deal with the mind as though it were living—

Reaching for a cigarette with only a dim awareness of the act I/she felt the first pain. I/she looked down at the slate on the desk and the stylus in my/her hand. It gleamed like a knife. (Memory run; it was a go; humans keep memories packrat style, who would have thought this one would be in Habits and Mannerisms?) But it couldn't cut away the blankness of the slate to reveal the words that should have been there. Stuck in my/her brain.

Then I was past the memory pocket and the mind had me again. Tropism. I should have known. Minds were meant to live and be conscious. Except there was no consciousness but mine. And if mine was there, then the mind must be alive.

Alive. It pulled at me and I passed through the psychosis like a kite in a high wind. The madness clutched at me, searching for a way in almost as if it were a separate, living intelligence as alien as I was. I tasted anger and spat it out; it came back to me

distorted, a sea of strange faces registering disappointment, confusion, and hate. Kitta Wren's view of the world, vinegar laced with poison. The mind dragged me onward and I went, trailing the madness and the memory and the madness of the memory through the fireworks display of her emotional life.

Something from nothing. I looked to see who she was speaking to but there was no one. Just an affirmation. *Give me nothing, I take nothing. Offer me nothing; thank you. His eye may be on the sparrow but the Wren looks out for herself.* She had worked hard for her unhappiness and her mind showed her efforts to me as though they were trophies and prizes. A coffin under the Indian Ocean, something she'd never seen, an image invented and embellished for her own meditation. A silhouette in a blizzard at the bottom of the world. Empty pedestals labeled *Mother* and *Father* and an arena of thick, sweaty faces demanding a show, their greedy voices orchestrated by a golden-skinned androgyne. *Give them what they want. Something from nothing. Give me nothing. You take something.*

In her office, she faced the invisible, hungry multitude. Her mind tried to push me back into the memory but I clamped down and kept out of her perspective. The seizure had leaked into her visual center and the slate on the desk swelled to enormous size. She backed away from it, hallucinating patterns on the slate. Faces again. *Give them what they want.*

The pain doubled her over. She straightened up slowly, both hands on her belly. There was a dark stain on the stretchy material of the secondskins, just below navel level. *Something from nothing. Give them what they want.* Her fingers gripped the cloth. Psychotics frequently displayed extraordinary physical strength. And then there were those with a touch of telekinesis, unusable until a moment of crisis. It didn't matter if the crisis took the form of an hallucination brought on by an anxiety attack.

Her hands fell away. She didn't explode, or convulse, or even scream. She simply opened up and thirty years of misery poured out.

The memory went black, along with everything else. Then the mind stirred itself again and wrapped around me. Kitta Wren may have died, but her mind wanted life. Any life. Mine would do just fine.

Listen, she said. The memory was so worn only her words remained. *All they want is the show. Give them what they want, but never ask anything of them. Something from nothing. The Wren looks out for herself.*

I pulled back, preparing to withdraw. The mind flexed and the feel of it was almost plaintive now. Without warning I was face to face with the image of Kitta Wren as she had been, spiderwebs glistening. They still looked like shattered gems at first glance and they always would. I concentrated on that thought, sending it toward the image in steady waves. After some timeless interval, new lines appeared in the webs, running like fissures. The mind fought, trying to maintain solidity, but I was right. The cracks crept over her face slowly. I had to strain to keep them going, but they went, dividing her forehead into a myriad of little territories, fragmenting her cheeks, sundering her mouth. The image shuddered, almost held, and then just came apart, every piece sailing away from every other piece. When they were all gone, I withdrew without difficulty.

The first thing I saw after I put my eyes back in was the brain in the canister. The stay-juice looked milky now, a sign of imminent decay. Without really thinking about it, I leaned forward and shut the maintenance box off.

Nelson Nelson held up an official-looking chip-card. "This is a lawsuit."

I nodded. He put the card down on his desk and picked up another one.

"And *this* is a lawsuit."

I had my own card and I held it up. "And *this* is a countersuit. In case anyone actually has the nerve to go to court."

NN looked tired. "Everything's already being settled out of court. The agency took your side, of course. No one can say I don't back my people, isn't it so?"

It was so. But I could tell by the way that puckered old mouth was twitching that he'd probably thought about filing against me himself for taking it upon myself to shut off the maintenance box. If the morgue laboratory had not come out and said that the composition of the stay-juice had indicated degeneration beyond the point where the mind could be re-entered, I would most likely have been signing my next thirty years of salary over to Nelson Nelson.

"Why'd you do it, Deadpan? What got into you?"

"She was dead. And nothing at all got into me."

"Sabian says the brain couldn't have deteriorated so quickly between the time you went in and the time you came out. Could it?"

I didn't attempt an answer right away. The brain had been a

lot deader when I came out than it had been when I'd gone in. I kept thinking in the back of my mind that had something to do with it even though I couldn't have proved it one way or the other. Was there telekinesis after death as well as art? I didn't know and didn't want to know. "Maybe the solution was defective," I said after a bit. "Or hadn't been changed often enough." That was the argument in my countersuit anyway, that Sabian had allowed me to hook into an unstabilized brain which caused me to act in an irresponsible manner by shutting my client off instead of calling for him so he could do it. Sabian was just bitched because it meant he couldn't enter the mind after I was through to do his own little postmortem, figuring he could sell Phylp all the stuff I'd missed. He wasn't gassing me. Nobody filed a lawsuit over a protocol violation.

NN shrugged. "Phylp's charge is more serious."

"Seriouser and seriouser. It'll never hold up. He/she got all the postmortem fragments I could find. I had them all memorized. I did my job. It's not my fault he/she thinks none of them were worth the effort. And he/she can't sue me for the wrongful death of someone already dead."

"It's a little more complicated than that, Allie."

"But that's what it amounts to. He/she's charging that before I broke contact—"

"*Prematurely* broke contact."

"—I dissolved her Self and killed her a second time, compounding that by turning off the box."

"That's the way it looks in the transcript of your report."

"That's the way it was."

I thought Nelson Nelson was going to choke. I sat up, rubbing the small of my back with both hands.

"Just between you and me, NN, yes. That's exactly what I did."

He reached down and fiddled with something on the side of the desk facing him. Of course; he'd been recording. He was always recording. This one would have to be doctored.

"You know how a dead body will twitch when you send a current through it? A dead mind'll do the same. It takes more than current, but it's a good comparison. They had the neurons firing so well, it forgot it was supposed to be dead, and it tried to use me to come back."

"Could it have?"

"I don't know. It didn't work. I killed it."

"But what do you think?"

I sighed. "Possibly I might have ended up incorporating ele-

ments of her personality and some of her thoughts and memories. Then you'd have had to have me dry-cleaned to get rid of her."

NN raised his invisible eyebrows. "Now there's an interesting situation."

"Not for me. I wouldn't want any of that woman in me."

"I mean in terms of the legal definition of existence. If such a thing had happened and the agency did have you dry-cleaned, would we, in fact, have been killing her all over again?"

I glared at him. "No. She was already dead."

"But if she returned to life in you—well, never mind, Allie. It's just an intellectual exercise at this point." He waved the subject away. "All this aside, tell me. Did you learn something?"

From a bitter woman who had literally torn herself apart? "I learned she shouldn't have been buying psychoses. She was already fogged in."

"No, now really, Allie. Wasn't there anything in there at all—some insight, or a vision beyond—ah, any final knowledge of any kind?"

I lit a cigarette by way of stalling. How old was Nelson Nelson anyway? And how old was he expecting to get? I wanted to tell him that if there was an answer—or an Answer—it wouldn't have been in a dead mind because you couldn't ask the right questions in there. If you don't know now, you can't know then. Instead, I lay down on the couch again and blew smoke at the ceiling. "Life's a bitch. Then you die."

I could almost hear NN's mouth drop. There was a long, thick moment of silence and then he began to laugh. "That's a good one, Deadpan," he said finally, wiping his eyes. "You almost had me there."

I'd almost been there myself, but I just grinned as though he had caught me out. For his own sake, I hoped he always thought it was funny. Just to be on the safe side, I put myself in for dry-cleaning as soon as the lawsuits were settled. Just to be sure. ●



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IN THE SHADOW OF HEAVEN

By the time I'd finished vomiting and had gotten my shaking under control and my freezing body back in the relative warmth of the drafty stone igloo, the Dutchman was practically green.

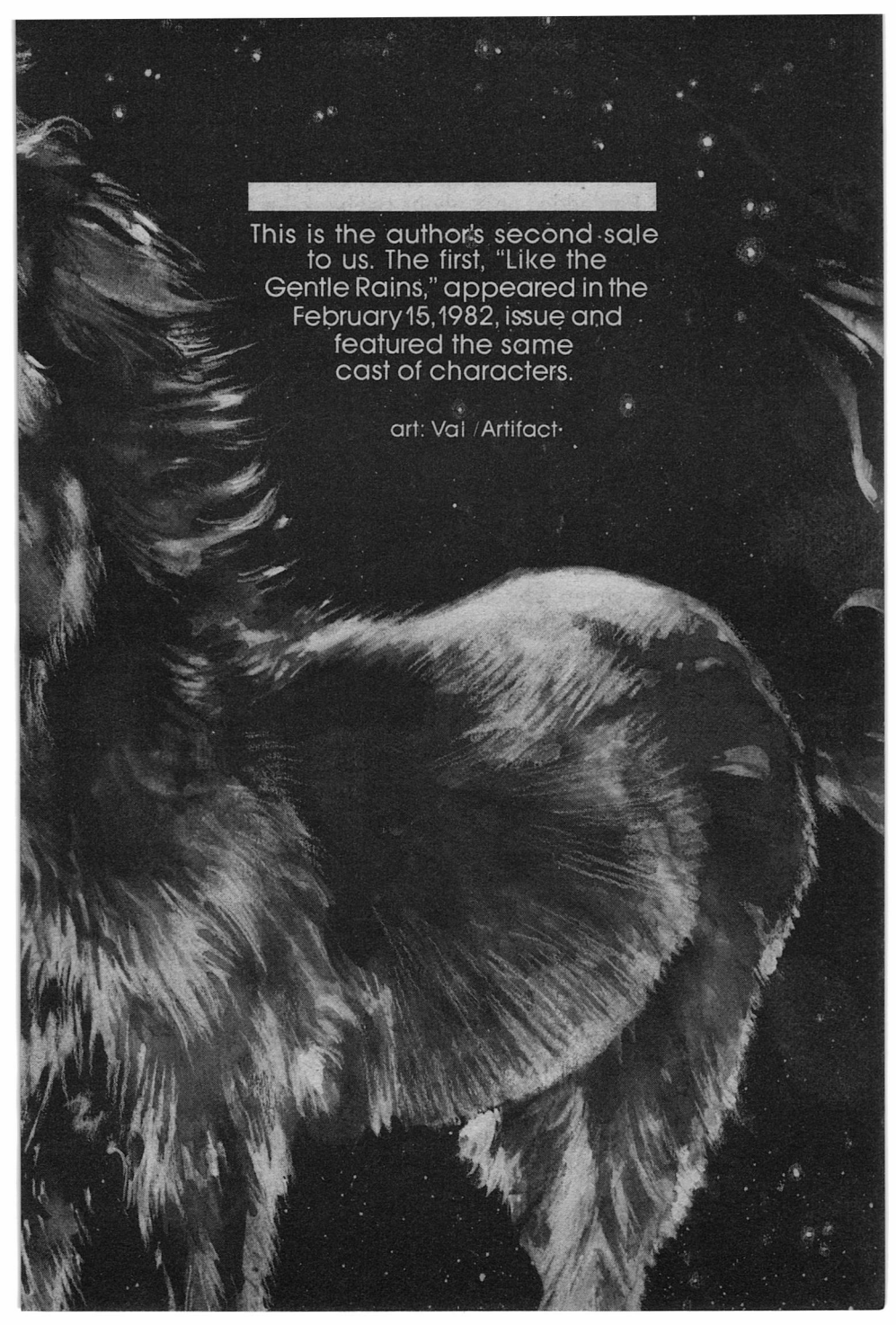
Not with envy; while the pureed-root gruel that was the mainstay of the poncharaire diet wasn't poisonous—quite—it did contain a compound or two that was, for humans, a powerful emetic.

"Nice of you to return," Major Alonzo Norfeldt, the Dutchman, said in the guttural local language, then switched back to Basic. His tone was calm, even friendly—that was for the benefit of the two poncharaire in the single-room hut with us. "But keep a hold on that glass gut of yours, Emmy—"

"My name is *Emile*. Emile von du Mark. Not Emmy."

The Dutchman's smile broadened, his tone becoming even more affectionate. "If you raise your voice again," he nodded and smiled, his jowls and extra chins waggling in syncopation, "I'll choke you

by Joel Rosenberg



This is the author's second sale to us. The first, "Like the Gentle Rains," appeared in the February 15, 1982, issue and featured the same cast of characters.

art: Val / Artifact

to death with your own small intestine, *Lieutenant*. Understood?"
"Yessir."

The Dutchman settled back into his wooden chair. If I didn't dislike him so much, I would have had a bit of sympathy, even admired him for the way he was holding up. The twenty-percent-above-standard gravity of Pon added only about twelve kilos to my weight; it added a full twenty-five to his, and made his muscles work much harder carrying his already ample bulk around. Even sitting up must have been a chore.

The larger of the two poncharaire raised its head from where it knelt beside the low table, then froze into position. That's one of the things I'll never get used to about them: holding perfectly still for a moment's contemplation before speaking is strictly *pro forma*. They think humans are impetuous.

K'chat's body was of the hexipedal, centauroid form so common on high-gee planets, at least among sapients. On worlds with gravity greater than Earth's, creatures with only four legs never seem to free the front pair from the task of fighting gravity.

Centauroid was a simplification, though. Neither K'chat nor Ahktah looked like a mix of human and horse. A poncharaire's long body is all of one piece, covered by soft brown fur from the top of its cloven hooves to the wrists of the six-digitated hands with their paired, opposable thumbs.

I couldn't read K'chat's lupine face. I'd had enough trouble learning the language, and I'd yet to make much of a dent in their non-verbal cues.

K'chat reached out a thick hand, conveying a smidgen of gruel from the bowl on the table to his mouth.

"In thy absence, Ehmilfundoomark, we accomplished little. Have thy moments of contemplation brought thee much insight?"

I'd never thought of vomiting as contemplation before, but it was a polite excuse. "K'chat—"

"There is no insight to be gained." The other poncharaire didn't bother to acknowledge us as equals by eating. "None at all, leader-of-the-clan-of-clans."

"There had *better* be." K'chat waved his left arm—the non-eating one—around in a circle. "If we do not find a way in which it will be permissible to deal with yoo-mans, soon there will be no more village. No more of us. No more offerings to the gods. Will that please them, priest?"

Ahktah stroked the center of his face. "The gods will tell this one what pleases them. Perhaps they will cheaply give permission, sell their blessing. Perhaps not."

The Dutchman kept his face flat and emotionless as he tasted the gruel before speaking to Ahktah. "This is understood. What, if anything, can we do so that thy dealings with the gods will bring the result thy people need?"

"This one . . . does not know. The gods are . . . conservative, unliking of change. It may take more wood and food to buy their blessing than can be spared."

The little hypocrite. "More wood and food than can be spared," indeed. It wasn't the *gods* that were conservative; it was the little priest. I was sure that the reason that the gods' blessing might prove too expensive was that Ahktah was afraid that any change in their society would endanger his power.

K'chat turned to Ahktah—speaking to someone one is not facing is one of several things the poncharaire consider a deadly insult. An offer of charity is another—which was part of the Dutchman's and my problem.

"Thy sledge is loaded, is it not?"

"It is."

"Then, let this one ask thee this: when will thee go next to bargain with the gods of Heaven?"

"Tomorrow. But this one doubts that he will be able to purchase their blessing. The gods are hard trade—"

"*You're a pious little fraud!*" The words, jumped out of my mouth. In Basic, thank God.

Ahktah turned slowly toward me. "What did those words mean?"

I couldn't help it; I *liked* the poncharaire. And Ahktah's prohibition of extensive dealings with humans meant their extinction.

"*Emmy.*" The Dutchman smiled kindly as his pistol seemed to appear in his fist. "Now, sit down, please. We're not going to make any progress with you venting your spleen all over the place—if it needs venting, I'll do it. Understood?" He switched to the native tongue and turned to Ahktah without waiting for an answer. "This one's . . . friend was expressing his hope that thy doubts will be mistaken, though he also said that he greatly respected thy sincerity, as well as thy skill as a bargainer-with-gods."

K'chat's eyes twinkled as he tasted the gruel, then spoke to me. "So much meaning in so few words! This one hopes that thy wishes are fulfilled; it would be a pleasure to learn such a . . . compact way of expressing oneself." He gestured at the black, thumb-sized heaters scattered around the room. "As well as having such wonders, not having to suffer so in the cold of this time of freezing."

Which did *not* mean winter; we were in the middle of summer. But Pon was a thousand-or-so years into an ice age, and the pon-

charaire, who had evolved in warmer times, were unprepared for it. Which is why they had shrunk, from covering the southern continent like a blanket, to one last settlement of a mere ten thousand or so.

Probably out of respect for K'chat, Ahktah took a taste of the gruel and stood.

"There is no point in further talk." He pointed his chin toward the door, and beyond it, toward Heaven. "Tomorrow, this one will deal with the gods. And then the matter will be settled."

He left, not bothering to latch the door behind him, his hooves shuffling along the bare dirt.

K'chat sighed. "This one does not blame Ahktah for being nervous. He is new to his priesthood—his mother, Ehlat, froze on her way back from Heaven just this past winter."

"Major—"

The Dutchman nodded, his hands empty. "Go ahead," he said in Basic. "You may have blown it already." He shrugged. Norfeldt sagged back in his chair.

"K'chat, this *priest* of thine—"

"Is young, and a bit . . . impetuous. Somewhat like thyself, no?"

"No. This one is trying to help thy people—" damn, that sounded like an offer of charity, "that is, trade with thee and thine, to our benefit, for thy survival. Ahktah can't be allowed to interfere. The poncharaire will die."

K'chat stroked the center of his face, both thumbs trembling slightly. "If the gods so will . . ."

"It's already happening. This one has been part way up the slopes of Heaven, seen the old poncharaire there, freezing slowly to death."

"It is a matter of choice. There is wild root up on the slopes. Wood is harder to find—they are closer to the gods. Would thee prefer that the old ones live down on the plains with us, gathering almost enough wood—but with their rootbins empty?"

"But it is not *necessary*." I cut myself off as the Dutchman raised a palm.

He was right. It wasn't my job to explain that it was well worth it to the Thousand Worlds to trade ten-for-a-quad heaters for mineral rights. It would have sounded like I was making an offer of charity; explaining that it wasn't was a job for a Trade team from the Commerce Department, not the Contact Service. All we were supposed to do was pave the way for their mission.

And we were not having much success. I tried another tack. "K'chat, do thee know what would have happened if we had arrived in another few sixes of years?"

"Thee would have found but our bones, my friend. This one knows."

Which would have been too bad, even from the Dutchman's point of view. It's almost always cheaper to hire native labor than to import it.

"Correct. But if we can't persuade thy priest to let us walk among thy people, teach them of our ways, trade with them, value for value—"

"Then we die." K'chat rose. Since I was sitting, our eyes were on the same level; his seemed to cloud over. "This one knows that, Ehmilfundoomark. For our sake, and for thine, it would be best that thee persuade Ahktah that we should deal with thee, so that he goes to deal with the gods knowing that dealing with yoo-mans is best for us, the last of the poncharaire. No?"

K'chat didn't wait for an answer; he gestured a goodbye and left. Just in time for the Dutchman's explosion.

"*You stupid, brainless greenie*—you came *damn* close to threatening Ahktah just now. And then you talk reasonably with K'chat."

"What's wrong with that?"

Norfeldt propped his forehead on his hands. "Because he's reasonable—you were just preaching to the converted. You coulda blown the whole play, yelling at Ahktah."

I walked over to my cot and stretched out. Maybe the extra weight didn't bother me as much as it did the Dutchman, but that didn't make it a treat.

I stared at the rough curving walls overhead. "But I can't stand the little bugger, Major—let's see what the gods say—the little hypocrite."

Norfeldt chuckled, hollowly. "Hypocrisy, kid, is a fine social lubricant, suitable for many squeaky situations.

"So you don't believe in their gods?"

I didn't bother answering.

"Right. Neither do I." The Dutchman lit a cigar and blew a smoke ring in my direction. "Think about this one: does K'chat?"

"He seems to."

"Precisely. But has he ever seen them?"

"No, only Ahktah—oh."

"Oh, indeed. Ahktah is the priest; Ahktah climbs Heaven, trading the village's tithed wood and food—"

"Not tithed. It's one-twelfth. Base six, remember?"

The Dutchman dismissed the distinction with an airy wave. "The point is he trades a *portion* of their harvest to the gods, in return for their blessing. Makes a lot of sense, given that their culture used

to be a vigorous trading society, before the freeze.”

“It does not make sense, giving away hard-earned food and wood—for *what?*”

Norfeldt shrugged. “Don’t ask me. I’m not a believer. The question is, is Ahktah?”

“I suppose so.”

“My *god*, but you’re dense! You really think he hands over the stuff to the gods in person?”

“No.”

“A bit of sense, at last. Of course he doesn’t, ’cause there ain’t no gods—he must stash it up there. Probably lights himself a nice fire, has himself a good feed every trip.” Norfeldt slowly got to his feet, rummaged around the area of his cot for a wine bottle. “Aha!” He opened it and drank deeply. “Shot?”

“I don’t drink that swill.” Not that I’d turn my nose up at a nice Moselle, but the Dutchman seemed to think that the cheaper a wine is, the better it is. I could almost taste the tannin with my nose. “But I don’t get your point, Major. You just confirmed what I’m saying, that he’s nothing but a hypocrite.”

“Right. And you, you little jerk, you keep threatening his power.” He waddled over, dragging a chair with him, and sat. “Not,” he shrugged, “that it would’ve made much difference if you’d shown half a brain, tried to wheedle him instead. Shamans always have to resist change; any change in their society *has* to threaten their power, their position, because eventually it’ll lead their people to the notion that ‘there ain’t no gods so what the hell we paying for?’” He took a slow swallow from the bottle. “It would have been a lot easier if these folks were either warlike or psi-positive. In the first case, we coulda flattened ’em—and to hell with the economics of bringing in offplanet labor. In the second, a good Comm officer like Ari McCaw could have persuaded them that the gods wanted them to deal with us—hell, probably without them ever knowing.”

“But they aren’t warlike; they are psi-neg, and . . .” I stopped at the Dutchman’s glare. I’d been about to mention that Aristotle McCaw, our team’s Comm Officer, was dead, killed in the line of duty—more or less. We hadn’t had a permanent esper Comm Officer assigned yet—one of the reasons we were chosen for Pon, where the locals were psi-negative and an esper was superfluous.

But it’s a custom in the Contact Service—more like an unwritten law—that you don’t mention the dead. Odds are, it’ll be your turn soon enough.

“So, Emmy, we use more . . . primitive means.” The Dutchman’s gunbelt landed on my chest with a thump. “If you can’t reason with

him, well, I'm sure you can figure out a way to keep Ahktah out of our way."

"Now wait a minute!"

"Tomorrow, you follow the bugger up to Heaven, watch him stash his haul, and confront him with the fact that you know he's a fake. If he doesn't give in and agree to report that the gods favor dealings with humans—"

"No."

"—the gods get themselves a four-legged sacrifice." The Dutchman wrinkled his brow. "What's the matter, you squeamish?"

"How about *you* doing it?" I don't like killing, particularly when it's not self-defense.

Norfeldt shook his head. "God save me from greenies. Look, if we don't deal with the locals, they die off, right?"

"Yes, but—"

"But *nothing*. I've got a few years and more than a few pounds on you, kid. I can't follow him; my heart probably wouldn't take it. The only thing that's preventing us from dealing with the poncharaire is Ahktah. You neutralize that obstruction. And that's an order, Lieutenant von du Mark." The Dutchman stood, wobbly. "And now, if you'll excuse me, I've got to go empty my gut. Something around here seems to disagree with me. Maybe it's that damn gruel; or maybe it's a greenie whose first objection to a killing was that he was gonna do it."

At the door, he turned back. "I didn't hear you acknowledge that order. Either you come to terms with Ahktah, or you blow him away."

"Aye, aye, *sir*." I tried to load my voice with sarcasm; either the Dutchman didn't hear, or he didn't care.

It's easy to tell when it's the morning of a Heaven Day, as the poncharaire call it. On other days they spend as much time as possible indoors, huddling around their fires, coming out only to gather wood from the stunted forests, reap a twelvedays' worth of food from the *akla* fields, or check their traps and deadfalls for the small animals they use for leather and for food.

But on Heaven Day, everyone comes out: to make mud to fill the cracks in their houses, to carry clay wastepots out to the fields, to sweep the seemingly endless village streets with a local brush that looks much like a tumbleweed—and generally to pretty-up and repair the town. The notion is that a prosperous looking village gets a better deal from the gods, in the same way that a rich trader always seems to come out on top in dealings with others.

As I plodded through the center of the village, adults and children alike skittered out of my way. It wasn't that I looked all that prepossessing; in fact, I was almost stumbling with the effort of carrying the extra weight around. Rather, it was that this was the Heaven Day that Ahktah was to climb Heaven to ask the god's blessing on dealings with humans, and most all the poncharaire were expecting a no.

I was, too. Too bad that—

"Hey, Major?" I kept my voice low; we didn't know what the local opinion was on somebody talking to himself.

It took a moment for him to respond. "What the hell is it?" His voice was slightly slurred. Strange—I thought that he'd polished off the last of his wine the night before.

"Maybe there is a simpler way to do this—without Ahktah's cooperation. You remember how we fixed the problem with the t'Tant?" Those were nasty creatures—but only in the dark.

"Don't be silly." An overloud snort sent my hands flying toward my ears, reaching for the 'phones. I stopped myself and thumped twice on my chest to turn down the volume. "That was fine for keeping a small area bright, day and night. Take a look north. What do you see?"

I craned my neck. "Just the mountain."

"And beyond that?"

"The glacier—oh."

"Get it? We orbit some mirrrors to heat things up here, we're gonna flood out the people we're trying to save. I thought *you* were the xenophile; I don't particularly like these folks—" the Dutchman didn't particularly like *anyone*—"and even I wouldn't want to shoot craps with their ecology."

"But maybe if we used smaller orbital mirrors, just warmed up the local area, and—"

"Quit trying to wiggle out of it, Mister. Even if we could do it that way, how's that gonna persuade the locals to work for us? No, we do it standard: sell them heaters and the suits to go with them for outdoors, and they'll want to work for us. Then we bring in some analytical medicians, introduce the poncharaire to the concept of medicine—"

"—and video, and euphorics, and stims, and they'll do whatever the hell the Thousand Worlds wants, like a bunch of four-legged puppets dancing to our tune. Right?"

As I rounded the much-larger-than-normal, slightly-less-shabby-than-normal stone igloo that I thought of as the mayoral palace, the Dutchman chuckled.

"My word, the kid's got hisself a bad case of scruples." A belch followed, then the disgusting sound of him slurping more wine. "Where are you now?"

"Just about a quarter-klick from Ahktah's house." I looked up at the huge red sun almost directly overhead. It was redder than Sol, and actually smaller, although Pon's tight orbit around it made it look twice the size. "And if he sets out at noon—"

"He has to. It's tradition."

"As I was saying, I should be able to follow him without being spotted."

"If you don't stumble over your own big feet."

A cold wind blew up from the west. The heater in my skin-tight coldsuit compensated, sending rivulets of warmth through the wires imbedded in the black, rubbery fabric. But my face was bare and quickly getting numb.

The northward trail ahead of me went first past Ahktah's stone igloo, then up the slopes of Heaven, through the old ones' settlement. There the scattered houses were inhabited by aged poncharaire who lived partway up the slopes, trading freezing on the lightly forested land for the ability to gather wild *akla*. Of course, the tradition was that they lived there because it was closer to the gods; like most traditions, it made a virtue of necessity.

I rubbed a gloved hand across my face and quickened my step, resenting the weight and the pressure of the gun belt inside my suit, the butt of the pistol carving a hole for itself just over my hipbone. A Service automatic masses just over a kilo, and the thin issue belts are uncomfortable even under the best of circumstances. I would have kept the pistol and belt outside my suit, but you've got to be careful in cold weather; parts tend to seize up when they get too cold.

Smoke rising over a hill showed me that I was nearing Ahktah's house; a clattering in front of me suggested that I might have cut it too close. As I topped the hill, Ahktah, his heavily laden sledge hitched to his midsection, was puffing up the trail away from me.

Back at the Academy, I always got top marks in Orienteering; as I followed Ahktah up the trail, hiding behind stunted trees, ducking momentarily behind boulders, he would have needed bat's ears to hear me.

You follow the little bastard up to Heaven, watch him stash his haul, the Dutchman had said. And then you confront him—

"And become a murderer."

"What was that?"

I hadn't realized that I'd spoken out loud. A bad thing to do when you're on a stalk.

"Nothing," I whispered back, taking cover behind a bush by the side of the trail. Ahktah had stopped his sledge a few hundred meters in front of me, next to a particularly rickety igloo. His head spun around, searching.

"What is it, Emmy?"

I didn't answer; Ahktah was still looking around. I hadn't made much noise, but he had to be looking for me; all the poncharaire, even the old ones, were down in the village, prettying it up for Heaven Day.

When Ahktah started unhooking his harness, I lowered myself even further and answered.

"He may have spotted me, Major." I kept my voice low. Let the Dutchman turn up the volume on his end; if Ahktah *hadn't* seen me, I wasn't going to risk it further. "He's loosened his sledge."

"Dammit, you musta spooked him. Get the gun out."

"I don't need—"

"You do so. He's used to this gravity, and you aren't. I don't want you to let him get close to you, Emmy. If he gets any nearer than springing distance, you blow him away. Understood?"

Officially, I didn't hear that; my comm unit must have broken when I ducked down. It only took three sharp blows with a rock to make sure that I wouldn't have to disobey an order. I'll kill in self-defense, as *I* define it, not because some creature's within springing distance.

When I raised my head, panic flooded through me. I couldn't see Ahktah. His sledge was still parked on the trail, the empty straps of his harness lying on the ground. But *where was he?*

I pulled my 'phones off, and closed my eyes. The only sound was the wind blowing through the bush.

It was time to move. If he was stalking me, I might be able to lose him.

An old principle in *Evade & Escape* is to go in the opposite direction you're expected to, but *not* to take much time working out what that direction is; I headed for the igloo, hoping Ahktah would figure I'd run away. Besides, it offered the best cover around.

I paused at the door, debating whether or not to go in. If I had to make a stand, best to do it with my back to a wall. I swung the door open and dived inside.

I crashed into a dark shape and sent an armload of wood and roots flying in all directions.

"*Ehmillfundoomark.*" Absently, Ahktah mimed eating. "You

know." His arms extended with strange slowness.

I jerked the front of my suit open and snatched the pistol out.

Ahktah cringed, kneeling in front of me.

"What the *hell*?" He couldn't be afraid of the pistol; we'd never showed the poncharaire what they were for.

"Do not tell anyone. Please." Ahktah's voice quavered, his head lowered, not meeting my eyes.

He had been carrying an armload of wood and food. The hypocritical little bastard was stealing from the old ones' bins, as if the tithes from those below wasn't enough.

"Thou *thief*. Nothing but filth."

"Yes. This one is a thief." Ahktah raised his head. "This one deserves to die. That is why thee came here, is it not?"

I didn't answer. Someone who would steal from old, starving people didn't deserve an answer.

"But there was no choice." Ahktah's arms were extended, pleading. "They were suffering. And this one is not as . . . as devout as his ancestors were."

"Cease the nonsense. Gods don't suffer."

"Of course not. But the old ones do." He buried his wolfish face in his hands. "They suffer so *much*."

"He wasn't bringing food and wood out, Major; he was bringing them *in*." I lay back on my cot, my head pillowed on my hands. It was good to be horizontal.

"Very clever, Emmy." The Dutchman's tone of voice suggested that a halfwit could have figured it out, and that one had. "And how does that do us any good?"

Reluctantly, I got to my feet and reached for my coldsuit. "You don't understand. What he was doing was denying the gods their tithes—"

"One-twelfth. Base six, remember?"

"—spending Heaven Days splitting up the food and wood among the old ones, sneaking it into their bins."

The Dutchman had finished donning his suit. He took a longing look at the dregs of his last bottle of wine before walking to the door. "So what?"

"So," I turned the heat control on my belt up to full. It was wasteful of power, perhaps, but I deserved a treat. "So, the reason that Ahktah couldn't ask the gods' blessing for dealing with humans, well, it was that he'd been cheating them—by his lights, anyway—denying them their rightful due. That's why he didn't think they'd give their blessing for dealings with humans. Instead of burning the offering on the

altar, up at Heaven's top—which is what he's supposed to do—he was . . .” I held the door for the Dutchman, then followed him out into the darkening street.

“Giving charity?”

“Right. A double sin.”

We started to walk toward the mayoral palace.

“Better hurry, Emmy. We're going to be late for the feast. And try to keep the stuff down 'til the ceremony's over. If I can do it, you can.”

“Damn. Makes me nauseous. Almost as bad as your cigars. And what are you grinning about, Major?” I didn't like the self-satisfied smirk on the Dutchman's face. If anyone had a right to be smiling, it was me.

“I'm just basking in your reflected cleverness. But you still haven't told me how you blackmailed him. From the way you've been glowing since you got back, I'm assuming it was something cleverer than 'either geek or I'll tell on you.'”

As we approached the palace, a crowd of poncharaire of all ages looked curiously at us, keeping a respectful distance.

“Yes, sir. Just a bit cleverer. I told him we were gods.”

Norfeldt's jaw almost dropped. He tilted his head and peered at me. “He didn't believe that.”

Going inside, we took our seats among the clan leaders. Ahktah readied a huge, disgusting looking bowl of gruel, stirring it with his hands.

“Well, yes and no. It's an absurd proposition—but he *wants* to believe it. It gives him an out. If we are gods, then the reason I gave him for humans landing here—that we want to increase the number of worshippers, so that our offering will be bigger—begins to make sense. If he believes that we heard his prayers for forgiveness as he sinned by giving charity, and that's why we've come, well, then he isn't going to offer a whole lot of opposition to the Trade team, is he?”

K'chat stood beside Ahktah. “Today our priest has returned from Heaven, where he has traded with the gods . . .”

I leaned over and whispered to Norfeldt. “I told him that we didn't want it generally known that we're gods, that his prayers and . . . sinning brought us. Might make it look like we're too easy to trade with. A god has to be a tough trader, no?”

“Cute. And that means that you promised him you wouldn't tell anyone about him sinning—or at least implied it. Which makes it easier for him to swallow the line. You're becoming quite a hypocrite yourself, Emmy.”

"Emile."

"... And since our priest has returned, and since he has traded with the gods, we have earned the right to know of their blessing. . . ." K'chat's words were formal, almost a singsong ritual.

I suppressed a chuckle. "I seem to remember somebody telling me that hypocrisy was a useful social lubricant. Now who said that?"

"I did. So we're gods, eh?"

"Just to Ahktah. We gods like to keep our secrets."

The Dutchman studied my face for a moment. "But I don't understand why you didn't ruin him. Sounds like you had him pretty much broken up there. He wouldn't have had the guts to deny it if you'd done it the simple way, told the locals that their priest was a sinner, stealing from the gods, giving charity."

"They would have torn him apart. Literally."

He shrugged. "So? I thought you didn't like the little hypocrite."

Oh, hypocrisy isn't always bad, I thought. Depends on what you use it for and who benefits. Most people lie to themselves and others to line their own pockets. Ahktah did it to feed and warm the hungry and cold.

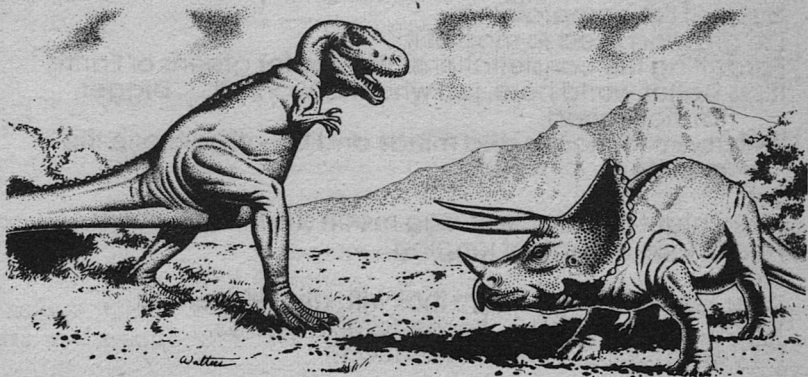
Ahktah rose. "Today, this one has climbed Heaven . . ."

Or higher, my friend. Even higher.

I turned to the Dutchman. He wouldn't have understood. If I told him the truth, he'd just snicker at me.

"It . . . just seemed more convenient this way."

If I didn't know better, I would have sworn that the Dutchman smiled. Like he meant it, I mean. ●





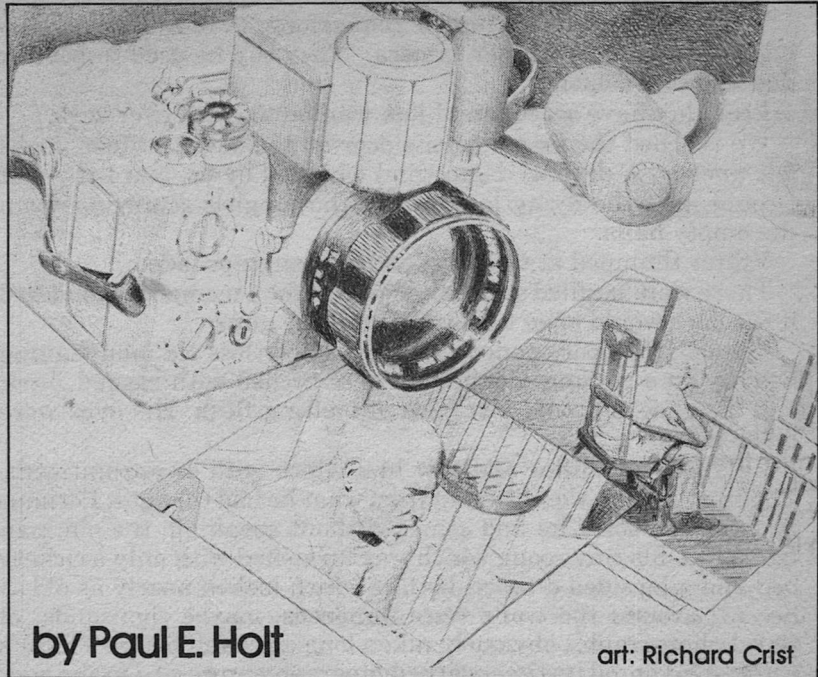
THE COLONIST

I miss the ancient, familiar face.
This world's moon wears none at all,
Not even the dapples of craters and seas.
A myriad of lines web it instead—
Colossal thing, hypertrophied—
So that hanging there in velvet blackness
It looks like nothing so much as a great ivory egg
With a badly cracked shell.
Is some cosmic fledgling inside fighting for birth?
I can almost see it . . . jewel-eyed,
Sturdy and low-slung as the animals and trees,
Blithely heedless of the gravity
That flattens the copper bowl of sky
And drags us down against the plains, vast seas of yellow-
green grasses.

I wonder . . . would it find us as curious as I do this world?
Not that I'm complaining . . .
I'm growing used to most of it,
Forgetting the constellations and cooler greens of Earth.
It's a better world here, just what we wanted . . . bigger,
far-horized,
With room for hearts and minds and breath, despite the
gravity.

But . . .
Every night this cracked-egg moon startles me anew
And brings a pang of longing.
Odd.
Who would have thought that with all I left behind,
World, animals, job . . . home, family, friends,
I'd yearn for the Man-in-the-Moon?

—Lee Killough



by Paul E. Holt

art: Richard Crist

SUNLIGHT

The author, whose story "Good as Gold" appeared in our July 1982 issue, says: "I am a full-time writer. I also have a full-time job. In addition, I teach nearly full-time at a nearby college, and I am a full-time single parent. In my spare time, I sleep."

The inside of the notorious hotel was worse than the outside. The elevators were out, and all the windows to the third floor were broken. Fragments of glass on the rickety stairway crunched underfoot, and our footfalls made gray dust clouds jump from the frayed carpet.

"I appreciate your letting me come along," Viktor said, adjusting gadgets on his warper camera. "They say he used to bootleg and knew Al Capone."

I couldn't have cared less. I just wanted to get it over with.

We reached the ex-gangster's door on the seventh floor, and I felt uneasy. A draft of damp wind whistled by us, and I thought I could hear the dying laughter of chorus girls scurrying down the empty halls.

Viktor thumped at the door, and the laughter faded.

There were muffled sounds inside, and for a moment I wondered if the door would open to blazing machine guns.

Instead, the door opened slowly on a shirtless old man leaning heavily on a walker. His brow was scratched with ragged lines, and his cheeks drooped in folds of melting flesh. His eyes were black holes.

I glanced at Viktor and saw him wince with disappointment. The story, if any, was different from what he had thought. Perhaps now he was sorry he had come. Without speaking, the old man let us into his tiny room, which was furnished with only a rickety bed and a lopsided dresser, both of which looked nearly as old as he. All around the walls were hundreds, maybe thousands, of taped photographs, obviously taken long ago (well before Viktor's rag had invented its time-warp photography process). On the wall near the balcony hung a shoulder holster with a snub-nose handgun.

He just stood there, his hard eyes passing between Viktor and me, waiting for one of us to speak. Right then, I really hated my job. I hated business and progress and greed and all the other things that made this unpleasant task necessary. And I hated that I had to be the one to do it.

"I'm with the demolition company," I mumbled. "This is Viktor. He's with *The Time Warp Review* . . . doing a story."

On cue, Viktor exploded a warperlight in the old man's face. I cringed with embarrassment, but the gangster did not budge.

"Yes, I know," he said, his voice a deep rumble. "You're here to tell me I got to go."

I nodded yes.

"Want a drink?"

I shook my head no.

We stood quietly again, he on his side of the room, we on ours. Viktor continued to explode his warperlights, insensitive to the possibility that the old man might object.

"I can't leave, you know," the old man's voice rolled. "You see, Julie and Maxine, we lived here a long time."

"Your wife and daughter?" Viktor asked, getting out a pad and pencil. *Blending the past into the future*, that was the unique slant of Viktor's rag.

Slow, rumbling laughter came from his throat, and I noticed ancient scars across his chest. "Julie was my broad. Maxine was my parrot." His smile faded, and he brushed something from his black eyes with a trembling finger. Then he pointed his arthritis-damaged hand at the ancient photos tucked around the dresser mirror.

"Tell me about her," Viktor said.

"Dancer," he said. "Singer. Like an angel."

I could see then that many photos in the room were of Julie in her youth. She had long light hair and a pretty smile and was dressed in scanty, feathery costumes. But her sparkling wide eyes gave her face a lot of class.

"How long have you lived here?" Viktor was scribbling on his pad.

"Off and on. Place was full of crooks like me back then. She snuck away from home to visit me here." Painfully, he struggled with the walker and gestured with his knotting, shaking hand for us to follow him to the balcony. "Her father hated me," he added, and I noticed his feet were also swollen and damaged.

On the balcony were two wooden chairs and a decaying parrot cage on a pole. He touched the chair nearest the balcony retaining rail and looked westward toward the setting sun. His white hair was brilliant in the light, and a breeze caressed it softly. "We sat here for years, me and Julie and Maxine. Sometimes we sat here yackin'. Sometimes we came out here and didn't say nothin'." The sun was setting, and the dying light made a brief spark in his black eyes. "The sun was better when I was young, before the smog, but I want to see the sun like this 'til I die." He flashed his hard eyes toward me. "And I want to see it from *this* balcony."

I started to reply, but I couldn't. His dark gaze was penetrating, unbearable. Viktor popped warperlights from every angle. The process was far from perfect; a reporter usually had to take a lot of pictures to get one or two he could use.

The gangster gestured feebly at the two wooden chairs and the parrot's cage. "One day, we was yackin' and watchin' the sunset like we did a thousand times—back when you could see the sun without looking through all this filth. Then she got quiet, and the old broad just died without a flinch. She just sat there, with all

that orange and gold and blue in her eyes—she had blue eyes, you know. Wasn't 'til she was dead that I first saw all that light in her eyes."

"I'm sorry," I mumbled.

"You can't get sunlight in your eyes like that these days, just smoke and chemicals." He wheezed to get his breath.

It must have been nice, I thought, living at a time when the sun was so bright you'd have to squint to look at it.

"I don't blame you," he rumbled when he caught his breath. He and his bumping walker led us back into the other room. "But I ain't leavin'."

We did not sit. We all knew Viktor and I were going.

"But exactly what do you expect to do?" I asked. "We're going to destroy this building Friday."

"You sure you won't have a drink with me? I got some fine Chateaufort, but it's all hot now. Electricity's off, you know."

"No, thank you," I said. "We don't need a drink. But . . ."

"Nothin' for you to worry about, squirt," his scarred chest rumbled. "It ain't your fault; I just ain't leavin'."

"Today is Wednesday, old man." I wrinkled my brow and tried to sound tough. "I'll be back for you tomorrow."

"Nope." He shrugged, destroying my toughness with one word. He knew how to handle tough guys, and I was an amateur. He straightened himself and raised his square chin. "You won't take me out of here."

At the door, I glanced back at the photos on his wall, his antique furniture, and the sinister shoulder holster and pistol. He was trying hard to live in the past, when Julie was alive and the sun was bright.

As soon as we closed the door and had started down the dusty stairs, I said I did need a drink after all. Moments later we were in the Wrong Number Lounge across the street. I ordered a Fuzzy Bear, a strong one. Viktor ordered the same thing but insisted on calling it a Colorado Bulldog.

Viktor raised his fingers to frame an imaginary headline in the air: "EX-GANGSTER WILL PLUNGE TO DEATH IN DEMOLISHED BUILDING." He shrugged. "Still not much of a story."

"Did you notice the gun on the wall? It must be eighty years old."

"No, I didn't. But maybe I got a warphoto of it." He thought a moment, then raised his fingers again. "NUTTY EX-GANGSTER WILL BLOW OUT BRAINS IN DINGY APARTMENT."

"That's not funny, Viktor."

"No, but it's a slightly better story."

"And he's not a nut."

"Of course he's a nut, like a million other old coots. Nobody but a nut would insist on living in that dump long after everyone else is gone."

"Oh, I don't know. He's old, and he remembers the past, which was better for him. He'd like to go back and be with Julie and his old buddies in the '20s."

Viktor ignored me and emptied his processor of the warpfotos he had just taken in the gangster's apartment. "Nothing," he said. "Nothing at all. They're just normal photos. Here he is just inside his door; here he is going out to his balcony; here he is on the balcony. There's no warp."

That's the way it was with those new warpfotos. Photographers never knew for sure what they were going to get, if anything. If there was a warp at all, it would show the subject in future time warp. No one understood it, not even *The Time Warp Review*, which had invented and patented it more than a year before, and who stubbornly refused to let anyone else use the technique. It was a whole new field of journalism, they said. That's what they said, but in my opinion, these "journalists" were no more than sensation vendors.

"I guess that means the old man has no future. When we drag him out and tear down his home, he'll die."

"Not necessarily," Viktor mumbled, fiddling with his equipment. "I myself have sometimes taken hundreds of shots before I get a single warp, and usually it takes a lot of warpfotos before we get something newsworthy."

"How am I supposed to get that poor old guy out of there? What am I to do tomorrow, go in there with tear gas and a mask?"

"That's not much of a story either. Nobody out there cares if you blow up the building with or without him. I think I could get more of a story out of it if the parrot were still alive. People care about dogs and cats and parrots. Nobody cares about old people.

"Of course, the hotel itself is a bit of a story. All those wild parties in the '20s, all those mobsters holed up in there in the '30s. But everyone's done it already. As for the demolition, the TV people will have it on the six o'clock news; and I'll have some no-warp pictures of the old place for the evening edition. But that'll be the end of it."

"Maybe you'll be lucky and get a warpfoto of the building," I said drily.

"One can always hope. But of what? Maybe I'd get a picture of

a skyscraper that somebody will build on that spot fifty years from now. So what? That's not interesting." His brow remained knotted in thought. "EX-MOBSTER WILL GO DOWN WITH BUILDING IN BLAZE OF GUNFIRE." He shook his head. "No, it'll never happen. I'll get some warpfotos of him as they drag him out. Sometimes we get a better result shooting someone when they're most emotional. Nobody knows why."

I was tense about tomorrow and was drinking too fast. "I figure he's bluffing anyway," I mumbled.

"He didn't seem like a bluffer to me. No, the old crook means it. He won't come out of there unless you drag him. He might even kill himself—or you. IDIOT DEMOLITION WORKER GUNNED DOWN BY MANIACAL EX-MOBSTER."

"You're not giving me much encouragement." I sipped at my Fuzzy Bear. "And those black eyes and deep voice—they scare the hell out of me."

I was getting smashed and restless. "Take a warpfoto of me, will you, Viktor?" I suggested.

"I'm not supposed to. The *Review* don't like it. I've never taken one of myself."

"I'm already so drunk I don't care. Go ahead."

Viktor reluctantly popped a warperlight in my face, and we waited a few moments for the picture to develop. "Not much," he said, handing me the warpfoto.

It was a picture of me riding in a new car. "So I'll get a new car some day. Lord knows I want one. That blasted Chevette has only four cylinders, and two of them don't fire."

Viktor shrugged. "Or maybe you borrowed somebody else's car. Or you got desperate and stole one. Who knows? Anyway, congratulations."

"I wish I didn't have to force him out. What would you do if somebody made you move out of your house so they could blow it up?"

"I never really thought of it." He scratched his chin. "I guess I'd move out to Scarsdale."

"Well, the old crook can't just move out to Scarsdale," I said, taking another deep gulp. "Vik, did it ever occur to you that what *The Time Warp Review* does is unethical?"

He looked at me blankly, confirming he had never thought of it.

"Your paper knows that it's an imperfect process," I continued. "Even you people don't know how it works. So sometimes you get

a picture of something in the future, but the problem is you make up a story about it that's probably untrue."

"Life is imperfect," Viktor said. The remark was too profound to have been thought up by Viktor himself. It must have been a stock answer his paper had fed him to use in moments like this. "With our limited senses," he continued mechanically, "we probably experience only a millionth of life."

"So?" I wondered what that had to do with a paper making up stories. "How about that 'famous' warpfoto one of you fellows took of the five-year-old boy which showed him maybe forty years later in the East Room of the White House?"

"What about it?"

"Your paper made a big deal out of it, said it proved he would be president some day."

Viktor continued to stare blankly at me, obviously unconcerned.

"And your idiot readers believed it! Did you know that kid is already selling his autographs?"

"So the paper did him a favor." Viktor drained his class and held it up high for the bunny-suited lady to see and refill.

"Vik, lots of people at some time in their lives stand in the East Room of the White House. It's part of the White House tour, for heaven's sake!"

On Thursday, I waited until noon to walk over to the condemned hotel. Viktor met me in the lobby and followed me up.

"Viktor, exactly what do these warperlights do, anyway?"

"Nobody really knows, but once in a while . . ."

"Vik, you know that car in my warpfoto? It was locked neatly in my garage this morning."

"Congratulations."

"I'm serious, Vik."

Viktor blinked. "You trying to tell me you got your new car already?"

"I didn't get it; it just showed up in my garage. You know what those warperlights do? They don't just show people in the future, they give people what they *want*. Me, I wanted a new car; I'd been driving that wreck around with two missing and couldn't afford to get it fixed. No wonder your rag won't let anybody else use the process."

"What's that got to do with the old man? The only thing that'd make him happy would be to go back to his rum-running days."

The door was open, and we let ourselves in. It was so quiet I

was apprehensive. I glanced at the wall to be sure the antique gun and holster were still hanging there.

"Well, squirts. You came back!" The roar startled me as he and his walker struggled in from a back room. "Why don't you two have a drink with me today? I'll have to drink all the wine tonight anyway, you know."

I shook my head.

"You ought to join me; I'm celebrating tonight. I'm going back."

"Back? You have relatives somewhere?"

"No relatives. Well, I've got a no-good brother-in-law in Cleveland. No, I'm going *back* . . ." He stopped suddenly, his mouth open in mid-sentence. "You do understand, don't you?"

My mouth must have been open, too. I was amazed. I didn't think the old guy was senile. Yes, I knew what he meant. He meant he was going back to the '20s or '30s, or whenever it was that he and his Julie and Maxine were the happiest. A glance around his apartment showed he'd been trying to do that for a long time. Seeing him crazy only made my job harder. But when they get him into a rest home, maybe he'll think he really is back in his youth. Who knows?

We were just standing there again, looking at one another. And again I didn't know what to say.

"Not your fault, you know. Kicking me out, I mean." That's all he said and started clomping out to the balcony. As I followed, I noticed there were scars on his back, too.

On the balcony, we stood side by side, quiet adversaries, looking out over the city. I leaned on the rail until I realized it was dangerously rickety and stepped back. He too was touching the weak rail for balance, but giving this tough old mobster advice seemed pointless, and I said nothing.

Silently, he lifted his chin in the noon sunlight. His deep-furrowed face basked in it, accepting the smog-filtered light full force, his deep, black eyes wide and unflinching. "I'll tell you something." His voice vibrated, but softly. "I did a lotta things in my life I ought notta." He seemed to be speaking to the sun, not to me. "I'd give anything for a chance to do 'em over." He looked back at me, and I thought perhaps it was a last confession I had just heard.

"You know what I liked most about the '20s? The sunlight. Look up there." He raised a trembling hand to point at the sun. "It's like looking at a light bulb in the fog."

I looked up, but the sun seemed normal to me. But then, I don't remember a time when there wasn't a constant smog haze above

the city. I glanced back at him as he pointed. At that moment, he didn't look like a gun runner or a bootlegger or a killer, or whatever it was he had really been. He was just an old man. But that black gaze was unbearable, and I was relieved when he turned away.

Viktor had been testing angles and light on the balcony and exploding more warperlights while the old man and I stood talking.

Soon we started back toward his front room, and I knew I had failed. His will was stronger than mine. Someone else was going to have to come up here and get him out.

I admired the old man, but I didn't know why. I had the feeling he knew more than I did, maybe just because he was old. Viktor had his warpfotos, which once in a while gave him an imperfect glance at the future, but whenever this old gangster's eyes sparkled, I could see he really believed in his impossible dream.

I went to the doorway, wondering why I couldn't do my job. Still again, we stood looking at each other. He and I had nothing in common except, I guess, that we were both human. I shivered to realize I would end up like him.

Viktor rushed off to another, more important assignment, and after work I went to the Wrong Number Lounge alone and asked the bunny nymph to bring me some Fuzzy Bears. From my table, I lifted my eyes to the corner window of the seventh floor across the street and made a silent toast to the old man, whatever he was going to do. The warpfotos Viktor had taken yesterday showed no future for him. Too bad, I thought. Well, they're imperfect. Maybe Viktor had just been unlucky. Perhaps today's batch would show something. Perhaps if he took a thousand warpfotos, or ten thousand . . .

On Friday, people began to gather near the hotel as early as noon, eager for a spectacle. The police arrived, and some of them went inside. Viktor followed them, still after the elusive story. I knew Viktor would steal the old man's ancient pictures if he could manage it, saving them from destruction with the building. *Blend the past with the future.* But, so far, there was no future for the old man, nothing to blend *with*.

A very long time passed while the day became cloudy and misty. I began to wonder if the old man was talking them out of it, too. But then the policemen reappeared with Viktor behind. One of them signaled that the building was empty.

"He's gone," Viktor told me.

"I don't believe that."

"We went all over the building. He's out."

"Where's his furniture?"

"Still there."

"How about his pictures and his gun?"

"I got 'em. He left them all behind and disappeared."

"That's the last thing he'd do. He's not gone."

"He's gone."

I was disappointed, but I didn't know exactly what it was I had wanted to happen. It all seemed anticlimactic then, and when the charges went off, it was just another empty building going down. The dust rushed out and engulfed all of us.

That evening, Viktor and I were again at the Wrong Number Lounge. I had already had one Fuzzy Bear when he arrived and ordered his Colorado Bulldog. I had been silently contemplating the vacant lot where the hotel had stood for so many decades, remembering the wild stories I had heard about the place.

Viktor flopped his warpfoto gear onto the table along with a bag full of old photographs.

"You get a story?" I asked drily.

"Don't know yet," he said, spreading the hundreds of photos out on the table, scrambling the panorama of the old man's life.

"I took some warpfotos yesterday, just for the hell of it, but they'll turn out worthless."

"How can you know?"

"Even if I did get a warp in this second batch, it'd probably show him slumped in a rocking chair at his no-good brother-in-law's house in Cleveland. That's no story."

"You should have taken a picture of all his old pictures on the wall; you might have got a warpfoto of yourself stealing them."

He punched buttons on his processor and took out a pile of new photos. He began culling through them, mixing them with the ancient ones.

Blending the past with the future.

Absently, I picked up one picture, then another. There was one of an innocent boy, then one of a young man and a young girl. There was a middle-aged man, showing off a pistol. Finally, there was one of an old man on the balcony.

"Nothing," Viktor said, continuing to cull through his new batch of photos. "Nothing . . . nothing . . . Aha!"

I was sorry then that I had not taken a drink with the old man. I raised my glass to the vacant lot and drank another silent toast.

Then Viktor handed me the warpfoto, the only warp he'd got out of the two batches. It was a cloudy, dark day, yet there was

the old gangster, beside the parrot's cage, his chin uplifted, his quiet hands at his lap, the sunlight splashing orange and blue and brown and green and gold in his wide eyes.

Someone sat next to him. ●

A CAPTION FOR ILLIAC IV

art: Robert Kraus

"Last rites for a great computer, ILLIAC IV, which cost NASA 30 million dollars in 1972, is disassembled for scrap (above), while a smaller, smarter, 11-million-dollar model waits..."

National Geographic, Oct. 1982

You weighed in as the heavy of NASA territory
The aerospace bruiser in the ring (**left**)
Whose fists consumed enough raw power
To light Tuscon or Wichita


You slung the slickest gun in Silicon Valley
A binary behemoth in lawless space
Who partnered Armstrong's first lunar step
While your circuits ached to ride higher plains

Now hands strip your memories (**above**)
Like bank robbers rifling through a cash drawer
Now hands stack your storage units
Loose as baggage off the stagecoach

They dismantle your ponderous dreams
While the New Kid in town
Quick and compact and duded up with microprocessors
Sits it out at the Ames Research depot (**right**)

He's no hot head looking for a two byte showdown
Only a bookish purist more wary than you
Of Bobeck's bubble or Josephson's junctions
And all *his* fast-rising successors

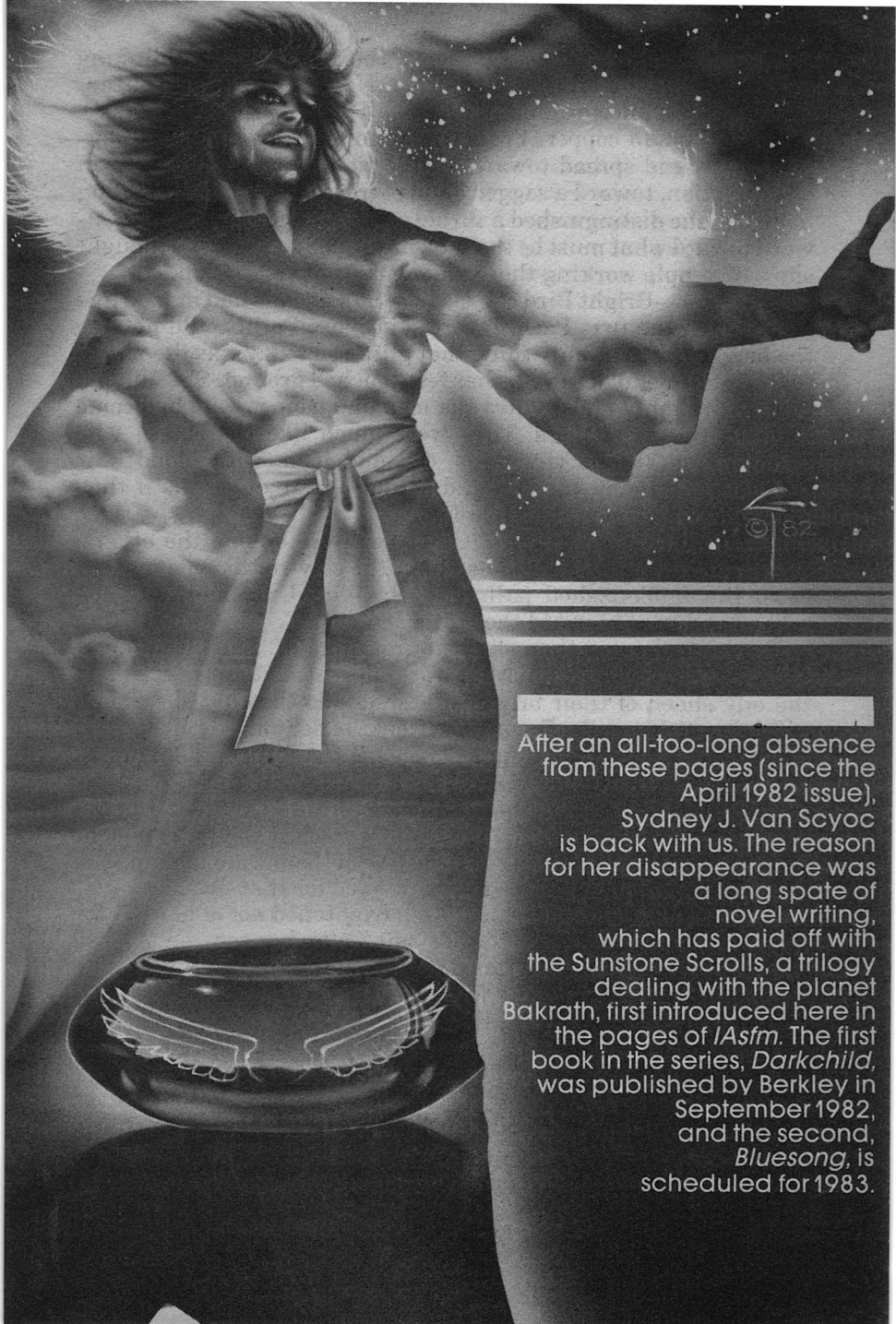
—Robert Frazier



by Sydney
J. Van Scyoc

FIRE- CALLER

art: Gary Freeman



After an all-too-long absence from these pages (since the April 1982 issue), Sydney J. Van Scyoc is back with us. The reason for her disappearance was a long spate of novel writing, which has paid off with the Sunstone Scrolls, a trilogy dealing with the planet Bakrath, first introduced here in the pages of *IASfm*. The first book in the series, *Darkchild*, was published by Berkley in September 1982, and the second, *Bluesong*, is scheduled for 1983.

Pa-lil followed the others down the ship's ramp, blinking against harsh late afternoon sunlight. Her initial glimpse of Tennador was not encouraging. A dusty pall hung in the western sky, turning the sun copper. From the bottom of the ramp, boulder-pocked ground spread toward a collection of rude structures in one direction, toward a ragged band of trees in the other. Shading her eyes, she distinguished a turbid strand of water winding westward toward what must be the growing fields. At least she thought she saw people working there among rows of vegetation.

Tennador—Bright Bird of Freedom. So someone had named this globe when the first Pachni were sent here. Pa-lil could not see the brightness. The only thing that glittered today was the single tear that came to her eye as her feet touched ground. She blinked it away irritably and studied the men and women who had come to greet the newcomers. They were much like the slaves who worked her father's vineyards, tall and lean, with blond hair turned to straw by the sun and squinting grey eyes, as if they had looked too long into a harsh sky.

Now they looked at her, picking her from among the others, silently questioning her auburn hair, the clay-red darkness of her eyes, the unblemished pallor of her skin. Uncomfortably she turned and gazed toward the trees.

They were nearer than she had first thought. Even from here, she could see the thick, fibrous hair that matted their trunks and the oily sheen of their broad leaves, details that put the stamp of finality to her exile. During the weeks of her journey, Tennador had been no more than a name she gave the future, the name of the land where Pachni slaves were sent when their Washrar masters chose to release them but were afraid to let them remain near. Or more brutally, the land where Pachni slaves were sent when the masters who wanted to be free of them were too humane to have them garrotted—or too frightened for that measure.

Pa-lil's master, however, had been frightened not of her but for her. And he had been her father as well as her master. And so today Tennador took substance and tears rose in her throat. She glanced around briefly and found grey eyes watching her. With a strangled sob, she dropped her bundles and pushed past the other newcomers. She ran toward the trees, unable to bear the watching eyes.

Soon she brushed among softly-furred trunks. Fallen leaves crackled brittlely underfoot. The air under the trees held a sharp, oily scent. She ran until she could hold back tears no longer. Then she threw herself down against a hair-matted trunk and cried.

When she calmed, she had only to think how pleased Brindin would be to see her cry and her tears dried completely. Brindin had always hated her, his half-Pachni sister. Their father set a generous table, but Brindin considered each bite Pa-lil ate food taken from him. If their father ordered her a new gown, Brindin demanded a gift too, and of better price. He made caustic remarks about her mother, who had died at Pa-lil's birth, although everyone knew it was his own mother who had brought disorder to the house, who had finally been barred from the estate for raising a knife to their father. And there were the pranks—only pranks, because Brindin knew their father would look to him if she were harmed.

Then one autumn noon she had done the one thing she should not have done—without even knowing she did it. Suddenly the danger had been not just from Brindin but from every Washrar. And her father had recognized that she was beyond his protection if she remained on Washrar.

A mistake, such a small mistake. She had not even been aware of making it, yet now she would not see her father again. She began to sob again, crying until she fell into an exhausted sleep, curled against the tree's matted trunk.

"Sister."

She heard the summons as if from a distance, felt a touch on her shoulder. Reluctantly she opened her eyes, the lids swollen and heavy. A Washrar bent over her: shining dark hair, finely carved lips and nose, heavy-lidded black eyes. He was beautiful, as Washrar men so often were, yet she thought of Brindin and recoiled.

But when he spoke again, she forgot her half-brother. This Washrar spoke as she had heard the Pachni speak among themselves, softly, the words falling in musical cadence. "Sister—it's coming dark now. You must wake and come along. You haven't given work for your night's bed."

Work. She sat, remembering that in the settlements, everyone was required to work, from the first day. And she had not stayed to help unpack crates or janitor the ship. But surprise carried her past dismay. "You're Washrar."

He shook his head emphatically. "No, no, I'm a man of Tenador. I call myself Andor Tereyse. I arrived here three years ago to help build the newer settlements. I came to meet you at the ship today and I heard you had gone into the woods. Now you will have no place to sleep if you don't come do work before dark."

"You came to meet me?" She had expected no one; she knew no one in the settlements.

"You are Pa-lil Rhallis, the fire-caller?"

She drew back involuntarily, a chill settling upon her bare arms. How did he know she had been a fire-caller? "I left the fire-bowl when I left Washrar."

His dark brows rose questioningly. "I didn't think anyone ever left the fire-bowl. I thought that once the conduit was established, it existed eternally."

"A conduit to corrupt gods?" she demanded sharply, trying to keep the quiver from her voice. "I'm not sure it ever existed. I'm not sure there was ever anyone there to hear my complaints."

"Ah?" Although his words still fell in Pachni cadence, the consonants took a sharper edge. "You completed the temple disciplines without believing in the gods? Why would anyone do that?"

Why indeed? Perhaps because she had believed in the gods at first. Or had at least believed in the symbolic truths their legends embodied. Or perhaps she had lost herself so totally in the temple disciplines—the fasts, the vigils, the long hours spent studying obscure texts and learning archaic plaints—because they offered escape from her increasing revulsion with the life she saw beyond her father's estate.

Or perhaps she had simply learned the disciplines to please her father. Certainly it was only through his insistence that she was accepted at the temple, a half-Pachni.

"Maybe," she ventured, "maybe it isn't really the gods I've lost faith in. Maybe it's the people who treat with them."

He nodded, still studying her. "You will find that different when you practice your vocation here."

She glanced up sharply. Practice the fire-bowl here? What gave him the idea she had that intention? But before she could protest, he stayed her with an upraised palm and glanced around, listening. She frowned, puzzled. "What is it?"

"Do you hear the wind rising?"

She listened, distracted. "No. I don't hear anything."

"You'll hear it soon enough. So will the woods cats who hunt this part of the woods. We must go before they wake early and find us in their run." He turned away. "Hurry."

She hesitated, briefly disconcerted, then followed.

She soon realized she had run deeper into the trees than she had thought. Andor walked quickly, glancing warily into the growing shadows. Before long Pa-lil found herself imitating his vigilance, although she was not certain what she watched for.

And now she did hear the wind. It moved into the trees like the breath of night, shaking branches and setting up a brittle clatter of leaves.

Gazing around, distracted, she stumbled over an exposed root. Andor turned back immediately at her startled cry. She accepted his extended hand, then stiffened at a rising cry from deep in the trees. When it died, she stared at Andor uncomprehendingly, realizing that suddenly he gripped her hand so tightly it hurt. "What—"

"One of the woods cats that dens near here. Look—you can tell by the claw marks on the trees that this is a pack run. If your nose were sharper, you could tell from the scent the cats leave. Didn't you learn any of this on the ship?"

"No—no. I—I didn't attend all the briefings." And she had not noticed before that the tree trunks were ripped and torn in places. "What do they hunt?"

"The woods are full of seed gatherers. The cats prey on them. They prey on our stock if they wander this far. And of course they prey on us if we are here."

"Then—then let us not be here," Pa-lil said tremulously. She had always been frightened of the feral cats that stalked her father's estate, although they stood no higher than her knee. Certainly none of them could cry as the woods cat cried again now—the sound full and deep, ending in a gurgling moan.

"Your knee—can you run?"

"It's only a scrape."

They ran hand in hand, leaves crackling underfoot, Pa-lil's breath coming painfully. When they emerged from the trees, she almost fell against Andor in exhaustion. But he did not slow until they had put a good distance between themselves and the woods.

Finally he halted, breathing heavily, and threw himself down on a small boulder. Pa-lil collapsed nearby, her legs quivering, her chest tight.

Dusk was slowly thickening to darkness. In the settlement, lanterns glowed alive, shining through glazed windows and straw thatch. From somewhere came the smell of food cooking.

And she had not done work to earn a meal, Pa-lil realized in dismay. "The rules—" she ventured, licking her lips.

Andor pushed himself upright, gazing at her through the deepening shadows. "You're hungry."

"Yes," she sighed, relieved he had guessed. She was hungry and she had nowhere to stay the night.

He pressed her hand reassuringly. "Then let's go find your

bundles. I have a small wood-hut I built for myself. I keep food there from my own patch."

"You'll feed me? If there's work I should do for you—" She broke off, gazing up at him with sudden uncertainty. Was she trusting him too far on first acquaintance? Even after nineteen years, she still had trouble believing what lay behind so many Washrar faces—the same classic faces the gods wore.

"There's always work," he said easily. "Let's go before it grows darker."

They found her possessions on the landing field. From there she followed him down the boulder-strewn lanes of the settlement. They passed structures of every kind, some built of wood with glazed windows, others of woven grasses or braided twigs.

Andor led her to a modest structure of hewn wood. Its interior, she saw when he lit the lantern, was plain and sparsely furnished. The only luxury was the heavily embroidered quilt thrown over the mattress in the corner.

He noticed immediately that the quilt caught her eye. "My nurse made it for me, every stitch by hand."

She nodded, remembering her own nurse and the fine-work she had done: embroidered quilts, gowns, nightdresses. Remembering too the times Brindin had tangled Yoni's threads or deliberately stained the fabrics she worked with—remembering the impotent glint of anger in Yoni's grey eyes, quickly hidden. Worse had been her own fear that one day Yoni would not hide the anger, that one day she would let Brindin see its intensity. Then Pa-lil's father would have to send her to the vineyards or to the southern estates before Brindin could make a story of it and demand she go to the garrotting chair.

Pa-lil shivered and turned from the embroidered quilt. Andor was sorting through a rank of wooden bins. "Here," he said. "These don't need cooking. And the tea will brew quickly on the lantern burner."

He placed round yellow cakes and dried fruit on brightly patterned platters and Pa-lil ate eagerly, so hungry she hardly noticed the unfamiliar taste and consistency of the food. When they finished, they sat at length over mugs of bitter tea. Finally Pa-lil put her mug down and traced its glazed surface with one fingertip. There was a question she hadn't asked in the woods. "Andor, how did you know I was a fire-caller?"

His brows rose quizzically. "There's free communication between Tennador and Washrar."

She waited, but he did not continue. "That's no answer."

He shrugged, filling his mug from the pot. "No, it isn't. But you know the settlements don't accept just any Pachni whose master decides to free him. There are some we cannot take. Some who would be too disruptive."

Yes, some driven past reason or rule by the cruelties of life on Washrar. Some too disordered or debauched to live without masters and whips. The first settlements, established on Tennador seventy years before, had failed. This time the conditions of emigration and the rules of communal life were far more stringent. "So you learned when my father applied to send me here."

"Yes. And we needed a fire-caller. Our people know the gods, but they have no one to speak for them. No one trained to serve as conduit. Here—let me show you what I've made." Quickly, before she could object, he went to a cupboard and brought down an object wrapped in layers of fabric.

Unwrapping the object, he set it on the table between them. His black eyes glinted as the glazed pattern blazed alive by lantern light. "You see, you haven't asked me what work I do," he said softly. "I'm a potter, and this is the fire-bowl I've made for you."

She gasped involuntarily at the beauty of the bowl. It was low and perfectly formed, glazed Parnith blue, the favorite color of Rundikar, god of fine arts. It was patterned with silver wings so perfectly drawn they seemed to float upon the surfaces of the bowl. "It's beautiful," she said at last. "But I don't call fire any more." The words were regretful. She had always loved the offering bowls, their form and balance, the cool beauty of their glazes. She would have liked to gaze into this one while she sang the archaic plaints she had searched out in the early books, as balanced, as cool as the silver wings that decorated the bowl. But she knew she dared not.

Andor tapped one fingernail against the rim of the bowl, making it ring dully. It was moments before he spoke. "Tell me then—if you won't use my bowl, what work will you do?"

She glanced up, afraid from the sharpness of the question that he thought she did not like the bowl. She met a cool, weighing gaze instead. "I—" She searched for an answer. She had no skills, only her temple training. "I could work in the fields."

He shrugged off the suggestion. "Are you used to hard labor, to working long hours in the sun? It would take half the season to condition yourself properly. Why don't you just take my bowl for the day? I've already set up a canopy near the river, where everyone passes. Our people have fed the fire-bowls of Washrar

for three centuries now and no one has sung any plaints for them. I think it is time."

The Pachni had fed the fire-bowls? "No, the Pachni have never been permitted to come to the temples. Not even—"

Andor's finely etched brows rose sharply. "They have been barred from the temples, yes. But who do you think creates the food and goods that are burned in the temple fire-bowls? Not the estate owners. Not their families. And not any other Washrar, not since Jan Palsin landed the first consignment of slaves at Windigar Port. Since then it has been the Pachni who have filled the temple bowls. I doubt you have ever burned an offering drawn from the sweat of a Washrar."

Pa-lil drew back, struck by the truth of what he said, wondering why she had never seen it before. Even her father, the best man she knew, went to the temple carrying fruits and grains grown by his Pachni slaves. Was that why he so often came back troubled? Because he knew his offerings had not been his own at all?

Was that, in fact, why the people who had come to her station at the temple had always demanded such small-hearted blessings? Was that why they insisted that they be set above their neighbors, that they be aggrandized? How could they ask for dearer gifts, closer gifts, when the offerings they made were not even their own?

"Three of my father's vineyard workers came to me last year and asked me to make plaints for them," she said slowly. "My father wouldn't let me. He said I would be expelled from the temple."

"Now there is no temple to expel you. You have an entire new people to serve—and they want to speak to the gods they know from the older legends. Not the gods the Washrar have tried to create these past years with their extravagant offerings and corrupt demands."

She glanced up sharply, surprised. Did he feel as she did, that the Washrar were trying to shape newer, more venal gods in their own image—because they were ashamed before the old gods? Ashamed of their greed and the brutality it engendered. She bit her lip, stroking the rim of the bowl, realizing he had convinced her. She wanted to do it. She wanted to sit under a canopy and sing plaints that were no longer sung on Washrar, to gods purer than those worshipped now. Slowly she drew her fingertips across the glazed inner surface of the bowl.

When she touched the sloped bottom, she realized what was wrong. "You haven't left a hole for the gas pipe." And where had

he found temple apparatus: fuel tanks to be hidden under the floor, a feeder pipe leading up through the carved column where the bowl rested, the pressure sensitive pilot control she could nudge with one toe when she was ready for the flame to leap into the bowl and consume the offering?

He measured out his response deliberately. "We have no gas. I didn't suppose you would need it, Pa-lil."

At first she didn't believe what he said. Then blood rushed dizzily from her head and her face blanched. *He knew*. He knew what had happened that noon when Fenubia had removed the empty tank from beneath her station and neglected to replace it, when Pa-lil's toe had touched the pilot control and flame had leapt in the bowl anyway. If the petitioner had been anyone but her own father, if he hadn't quickly told Fenubia he had ignited the offering himself with striker tongs—

Her entire body grew cold. Somehow Andor knew.

But how? Certainly her father had told no one. And she had refused to go back to the temple after that day. Fenubia—had Fenubia guessed and passed rumors? She had resented having a half-Pachni caller in the temple, and she had not liked hearing the old complaints sung. Could a rumor have reached Tennador from Fenubia's lips so quickly? Pa-lil shook her head in confusion.

Slowly Andor stood, his gaze measuring. "I suppose I can give you hearth matches if you have no better idea."

She nodded numbly, seizing at his words, refusing to meet the question behind them. "Yes. The offerings won't burn as cleanly without the gas flame, but if that is all you have—"

"That's all I can offer. You'll do it then? You'll go to the river tomorrow?"

"Yes," she whispered, wondering from the steadiness of his gaze how much he knew—and how much her confusion had betrayed. "Yes, I'll take the bowl to the river." She stood uncertainly, suddenly very tired. "Is there a place where I can sleep tonight? Someone I can go to—"

"You can sleep here."

"I—is that usual?"

"No, but it's late to disturb the shelter monitor. And I would have to speak to the meal monitor too to see that you were given breakfast. It will be simpler if you stay here. You take the mattress; I have blankets enough to make myself comfortable on the floor."

She was too tired to vacillate long before accepting his invi-

tation. He turned the lantern low and she slept almost immediately.

Deep in the night, a succession of dream-images overtook her: faces, scenes, half-digested memories. Anger came too and terror; they were her frequent companions in sleep. They had been for many years. When she heard the bellowing cry of a woods cat nearby, she thought she dreamed that too. But it came again, nearer, and was followed by human voices. She awoke to see Andor pull on his boots and slip out the door.

"Andor?" When he did not answer, she ran to the window and saw only running shadows, then nothing. She wondered what was happening, but there was no one to tell her. After a while she lay down again, uneasily, and fell into a restless half-sleep.

She woke later at the sound of the door opening. Andor slipped into the room. "A pack of cats got into the sheep pens," he explained when he saw she was awake. "We'll be hunting them tomorrow night. Once they leave their runs and come into the settlement to take stock, there's nothing else to do."

She frowned, trying to penetrate the shadows of the room. "You're hurt," she said uncertainly.

"This?" He held out a spattered sleeve. "Sheep's blood. They killed two of our best ewes."

He rolled into his blankets and she crawled back beneath the embroidered quilt. After a while she realized neither of them slept. And there was one question she had not asked earlier. She spoke quietly into the darkened room. "Andor, why did you come here?" The first settlements had been established seventy years ago by an eccentric estate owner who had adopted asceticism and decided to free himself of his slaves. Those had been the settlements that failed. The new settlements had been founded by a group of unlanded Washrar whose motives were still much debated. They had turned the administration of the settlements entirely to the Pachni at the end of five years, but their reasons for establishing the Pachni on Tennador remained obscure.

He spoke softly. "I had to come."

"But you don't have Pachni blood." His was a classic Washrar beauty. She had seen his heavy-lidded eyes gazing down at her from dozens of dusty portraits.

"No, not in my veins. On my hands. I had to come, Pa-lil. And now I have to sleep. I'm going upriver to dig clay tomorrow. I'll be leaving early."

She recognized his reluctance and didn't press further. Instead

she lay awake while he slept, staring at the shadows in the corners. She didn't sleep again until near dawn.

It was midmorning when she woke. Andor had gone, leaving his blood-spattered shirt flung over the back of a chair and cold tea, cakes, and dried fruit on the table. Pa-lil pulled on her best temple gown, emerald green patterned with finely spun golden spirals. The silken fabric folded coolly about her ankles. She ate sparingly. When she was done, she filled a pail from the water barrel and rinsed the blood from Andor's shirt. Then she carefully wrapped the fire-bowl, found the hearth matches, and left the hut.

By sunlight, the settlement was caught between rough beauty and squalor. Coarse-spun clothing hung drying on trees and bushes and tiny flowers of intense color bloomed at the edges of weedy paths. Pa-lil glimpsed a child running purposefully between huts and saw an old man sitting dull-eyed in the shade of a hairy-trunked tree. He looked up as she passed and said something she did not understand. Looking back, she saw that he was pulling strands of fiber from the tree and twisting them into cord.

When she reached the landing area, she paused and gazed toward the river. Shading her eyes, she saw a patch of bright color. The canopy Andor had raised for her? She gazed at it, feeling a moment's doubt. Perhaps she should not have accepted the bowl. But she had, and she had accepted food and shelter as well. The bargain was struck.

The canopy was made of brilliant azure canvas supported on poles. It waited for her a short distance from the riverbank. Beneath it weeds had been cut back and a kneeling mat spread for her. She stepped beneath the bright fabric self-consciously, aware of people who had come to draw water pausing to stare. Carefully she unwrapped the bowl and placed it on the mat before her. Sunlight slanting beneath the azure canopy made the silver wings beat with color.

She sat alone for a long time. People came to the riverbank to drink or to draw water and lingered to stare. She could not read their thoughts from their faces, but when she met their eyes, they did not look away. After a while, shivering under their scrutiny, she drew a tremulous breath and gazed into the bowl. Almost without realizing it, she began to sing.

She sang an archaic plaint to Birikar, goddess of blue skies, patron of birds and serenity. All the verses asked of Birikar was an easy spirit. In that it was far different from the newer plaints demanding that the glory of the petitioner reach as far as the sky.

She wove the time-worn words together and silver-glazed wings spanned the sky.

She did not realize until she completed the plaint that a petitioner had come. A girl of perhaps twelve knelt opposite her. When she realized that the plaint was done, the girl touched the rim of the bowl with one careful finger. Her hand was tanned by the sun, hardened by work, and her pale hair was bleached white. Her tongue darted at her lips; her eyes were bright. "I brought an offering. Will you burn it in your bowl?"

She held a small, taut-skinned purple fruit. Pa-lil hesitated only a moment. "Yes, if you can bring me some dried grass to line the bowl. Something I can set afire with my match."

The girl nodded quickly and jumped up. Bare moments later she returned with a double handful of brittle vegetation. She crumpled it into the bowl, then gazed up at Pa-lil, poised between eagerness and apprehension.

Carefully Pa-lil laid the fruit atop the pyre. That done, she hesitated, momentarily uncertain how to treat with her first Pachni petitioner. This setting, so unlike the temple, with its friezes and draperies and polished marble, was well-suited to the old plaints. But if the girl had large wishes—"What is it you want from the gods?"

The girl spoke quickly, as if she were afraid of losing courage. "I want to go to the big looms to weave like my sister. She went to the looming rooms on her birthday and they began to teach her. Now it will be my birthday in four days."

Pa-lil studied the girl: her breathless eagerness, the glint in her eyes. "What birthday is it for you?"

"My twelfth."

"And your sister—how old was she on her birthday?"

The girl sighed and squirmed impatiently. "She was fifteen. But—"

"Have you ever had a chance to practice weaving? To see if you have any ability for it?"

The girl leaned forward eagerly. "I have a lap loom. I've made pieces on that. But I want to learn the big looms. I want—" Quickly she jumped up. "I'll show you. I'll bring you the pieces I've made and you can see them. Can you wait?"

"I can wait," Pa-lil agreed, relieved that the girl was amenable. She would never have dared question a Washrar petitioner on the suitability of his demands.

While she waited, a group of workers came from the fields to take their meal beside the water. They sat a short distance from

her canopy, laughing while they ate. She had seldom heard a Pachni laugh before, and now she heard six of them laughing together, men and women. She listened and found she liked the sound of it.

The girl returned soon, her tanned face flushed. She threw herself down, rummaging through the cloth bag she carried, bringing out small swatches of fabric. She spread them, watching anxiously for Pa-lil's reaction. "They aren't fine. I don't have fine threads and yarns. All I have are lengths that weren't good enough to be used on the big looms. But—"

"It's your workmanship we're interested in," Pa-lil agreed. She studied the samples. She did not know much of the weaver's art. She had seldom visited the looming rooms of her father's estate. Yet it seemed to her that the girl had done well, that she had combined colors carefully and created distinctive patterns and as even a grain as possible, given the inferior materials she had used. She nodded, realizing the girl watched her expectantly.

"I think," she decided, "that we must address Nabikar, who has the gift of dexterity, and Rifikar, who is patron of practical arts. We will tell them you require cleverness for your hands and a wise eye for color and form. It appears to me that you already have those abilities in their early form. We will ask that they be steadily strengthened until it is your turn to go to learn the looms. Then when it is time, you will be so skilled that you will learn quickly and easily."

"But I can't go on my birthday?"

"Are others taken when they are twelve?"

The girl shook her head. "No."

"Then you must not ask to be taken out of turn. Instead you must let your talent grow until it is old enough for the large looms. But I would like you to go often to the loom mistress and show her your work. Take opinions from her. Perhaps when she sees how well you work, she'll let your sister give you lessons on the large looms sometime when the weavers are not busy." She studied the girl, wondering if she would accept such a modest blessing. If so, it would be by far the most humble request Pa-lil had ever made of the gods for anyone but her own father. Not to become wealthy or feared, not to put rivals in the shadow or to gain revenge upon enemies—simply to be permitted to learn a skill she had already begun to master.

The girl did not hesitate. "That's what I want."

Pa-lil nodded as if she had expected just that answer. "Then tell me your name and I will sing for you."

"Tibbi."

Pa-lil nodded again, striking a hearth match with as much ceremony as possible. The dry grass in the bowl caught fire immediately, flaring in a small yellow blaze. Pa-lil let her head drop and began to breathe as she had been taught, concentrating upon the flame. She called up memory of Rifikar's face, of Nabikar's, as she had seen them in sculpture and tapestry, their features serene, composed, untainted by any hint of striving or dissatisfaction. She held their faces before her mind's eye and the flame in the bowl grew more vivid, burning blue, dancing. Drawing breath, she commenced her plaint to Nabikar. She chose verses recorded twelve centuries before, in the days when the Washrar first called themselves a people. Those were the days when the Washrar labored on small plots and knew hardship, the days when they housed their gods in plainly furnished temples and brought offerings they could scarcely spare.

She sang to the gods of those early temples, vital and unsullied. She was hardly aware, as she made her plaint, of Tibbi staring breathlessly into the fire-bowl, of men and women coming from the river to watch—of the flame dancing clean and blue far longer than it should have, dancing from the bottom of a bowl that soon contained only ash and a charred fruit pit. She sang to the gods the early Washrar had created from hard work and need.

She approached the final verse of the last plaint when she became aware of an old Pachni woman leaning near, her lips moving as she peered into the flame. Her concentration broken, Pa-lil let her eyes dart around the circle of eyes. She saw the same blue flame mirrored in them all.

The flame. She caught a ragged breath, the plaint dying. The flame danced, but there was no gas line feeding the fire-bowl, and the offering was long since consumed. And no sooner did her voice fade than the blue flame winked out. Stunned, she stared first down into the emptiness of the bowl, then up into the faces that surrounded her.

If they were not frightened, she was. She had called fire again—not as she had been taught in the temple, by tapping a hidden control with one toe. Instead she had called it from another source. From herself.

For a moment she could not breathe. Her heart pounded so loudly she was certain everyone heard. She knew she should sit calmly and add some benediction to the plaint she had sung. But she could not. She was on her feet and stumbling from under the canopy before anyone else looked up.

Even as she ran, she mouthed silent plaints. Let not the fire follow her, let her not wield it and do harm. She had left the sullied temples of Washrar behind. The gods she had brought in her heart to Tennador were young and uncorrupted. They had not seen the cruelties practiced on Washrar these past centuries. Their eyes were clear.

But she had seen those things and they burned in her. She ran from the riverbank to the landing field to the trees, her gown whipping at her ankles. She ran until tears blinded her. Then she threw herself down and cried, choking for breath.

As on the day before, she sobbed herself to sleep, her head cradled against the coarsely furred trunk of a tree. She did not even think of woods cats until Andor's voice woke her. Then she sat, drawing an anxious breath.

Andor was not alone. A tall Pachni woman with white braids stood behind him. And something in the woman's eyes, some deep-seeing quality, dispelled all thought of woods cats. Quickly Pa-lil tried to stand.

"No, stay," Andor said, sitting in the dry leaves. "This is Loxa, governor of the settlements. She has come to talk to you about the gift."

The gift? Pa-lil stared in confusion as Loxa lowered herself to the ground, crossing her lean legs. She was dressed in a long, loose gown which she pulled up unselfconsciously to bare her legs. Her face might have been worked in leather, the flesh was so weathered, but her eyes were brightly alive, probing and commanding at once. Pa-lil tried to guess her age and could not. "I don't know what you mean," she faltered.

"You have brought us a gift we have waited for," Loxa said. "We thought you might, but your father's message was cryptic. He could not write plainly with the shadow of the garrotter upon you."

Her father had sent a message? What had he said? And what gift? Pa-lil looked to Andor in confusion and for a moment saw a blue flame wavering in his eyes.

The fire. She had brought the Pachni fire the Washrar had tried so hard to extinguish. But how could anyone call that a gift? "No," she protested. "It was an accident. I forgot there was no gas to feed the flame. I—"

"So you fed the flame yourself. You kept it alive the same way the first Pachni slaves did. Of yourself."

Pa-lil stared helplessly at Loxa. The first slaves had made fire from nothing—yes—and everyone knew what had become of

them. "They died!" she said. "They called fire—without strikers, without matches, without pilots or gas tubes—and they died. Their masters killed them!"

"Of course they killed them," Loxa said, untouched. "Imagine yourself a Washrar land owner. Your family has struggled for centuries, tilling the earth, perfecting the vines, shipping their wines to every known market and getting all too little for it. Then Tel Veximar perfects the *palina-vira*, which produces a unique wine, in demand everywhere as soon as it's tasted—and the vines flourish only on Washrar.

"Suddenly the market is boundless. But who will work the new lands required to supply it? Invite emigrants to come in and share the bounty when they haven't shared the hardship?"

"An entrepreneur named Jan Palsin had a better idea. He had heard of a world peopled by humans far less enterprising, far more docile than the Washrar. They appeared to be primitives—simple primitives, living with no thought of civilization or trade.

"You know the rest. Jan Palsin made his family's fortune by trading in those people—the Pachni. By bringing them to Washrar and selling them as slaves. And the first Pachni, so naïve in the isolation of their own culture, hardly realized they had become slaves.

"Nor did they guess that the few little gifts they brought with them would terrify their new masters. A youngster working in the potting shed needs a trowel that has fallen to the floor. Instead of leaning down to pick it up, she simply lifts it. An overseer instructs one of a crew of pickers to take a message to the rest of the crew. The picker conveys the message without leaving the trellis where he works—and without speaking aloud. An estate owner's wife instructs her Pachni houseman to light the hearth fire, and he does it without matches.

"The Pachni who possessed these gifts did these things as casually as they walked and talked. To them they were natural.

"But the gifts were not natural to the Washrar. They were terrifying. For one thing, the Washrar couldn't guess what gifts beyond these simple ones the Pachni might have. The ability to make healthy vines wither? The ability to kill an overseer with a glance? Yet those same feared slaves had become essential to everyone dependent upon the wine trade. And not every Pachni had a gift. Some could call fire. Some could lift. Some could in-speak. But there were many others who could do none of those things.

"The estate owners acted secretly and in isolation at first. Pachni with gifts simply disappeared, sometimes after a loss the estate owner attributed to their witchery. Later the weeding became systematic, even institutionalized. It became a preventive measure, a way of holding back flood or drought or disease—because surely the Pachni could inflict all those disasters upon their masters if they didn't learn the proper fear.

"The Pachni were too naive to realize at first what was happening—or to understand what more could happen. And so before they thought of using their gifts in their own defense, the bearers of the gifts were murdered. Later their survivors were too compromised by fear and isolation to resist. They learned not to let any spark show in their eyes—of intelligence, of anger, of humanity. Because the Washrar quickly learned to fear those things too."

"They died," Pa-lil repeated flatly. That was what Loxa said with all her words. Any Pachni suspected of witchery disappeared or died.

"Yes, and they're still dying on Washrar—for the pettiest reasons, upon the slightest of suspicions," Loxa agreed. "But not so often now. That's the irony of our situation, Pa-lil. The less humanity they left us, the more the Washrar feared us. Now that they've almost entirely quenched our spirit, they've persuaded themselves that a dead slave can reach out from the garrotting chair to avenge himself. Some Washrar have become so frightened they are willing to let us go."

Pa-lil nodded reluctantly. Fear had fed upon itself for so long now that many masters wanted only to rid themselves of their slaves and live upon their fortunes. So they sent the Pachni to Tennador and hoped the terror went with them. But what did that have to do with her? Her father had not been frightened of her. He had sent her here because he had been afraid Brindin would learn she had raised fire and call the garrotter on her. "I don't understand—"

"You don't understand why we've followed you here to tell you things you already know? Only because we want our gifts back. They were taken from us by the Washrar and our people think they are gone forever. Our people think they have been permanently lessened by slavery. They think their spark has been extinguished.

"You showed them today that it has not. You showed them hope—hope that they are as fully themselves, as fully human, as their ancestors were. You showed them that the gifts still exist."

Pa-lil's throat ran dry. Loxa's presence was so strong she might have been a Pachni god: elemental, strong, avenging. And how did one argue with a god? When her voice came, it was hoarse. "What do you want me to do?" She asked the question although she knew the answer.

"We want you to show them hope again. Every day. We want you to show them again and again until you have burned three centuries of doubt. We want you to show them until they know they are finally free—and strong."

Pa-lil's shoulders tightened, muscles cramping. "No. I can't use the fire-bowl again." Her voice was so tight it quivered. Loxa could speak of hope and freedom. She had never called the fire. She couldn't guess the force with which it could burn—the angry force. "I'll sing the complaints. But I won't use the bowl. It's—it's only a focusing device. I don't need it. I can speak to the gods without it."

"But what are the gods, Pa-lil? Are they living entities? I believe they are simply hope and faith and strength given human face and name. And those are the very things our people need—the very things you can give them. You can show them they are whole again, Pa-lil. You can whisper it to them as a mother whispers to a child, day after day. They need to believe again that they are a race with strength and beauty and power. You can show them it is true."

Pa-lil shook her head doggedly, refusing to meet Loxa's eyes. "If it's true, if they have those things—then there must be others. Others with gifts. Let the others show them." The words sounded small. But surely the other gifts were less dangerous than her fire.

"When others find their gifts, when others are born to them, they will. But you are the first."

"No." Pa-lil took her feet, struggling to put the full force of her fear into her words, trying to make Loxa hear it. "I can't."

Andor stood too, ready to argue, but Loxa rose and caught his arm, her eyes narrowing. "Yes—I see you need time, Pa-lil. It was too much to expect that you would not. Take it. Think about what I've said. Then come to me. Any child can direct you to my cottage." Catching her long skirts, she turned and strode away through the woods.

Pa-lil looked after her, relieved and troubled at once. If she were the only one with a gift . . . But even so, she could not do what Loxa wanted. She could not call the fire again. Not with anger running like blood in her veins.

Slowly she became aware of Andor, of his silent scrutiny, and realized it was nearing dusk again. She glanced around but saw no sign that they trespassed on a cat run. Still she spoke hurriedly. "I won't trouble you longer. I'll—I'll go to the shelter monitor and ask to be assigned a place to sleep. It's late, but surely there's work I can do. I won't bother you again."

He spoke shortly. "I've already spoken to Para. She has assigned you to sleep in my hut. And the meal monitor has given me extra rations for your meals."

"But you can't—I'm supposed to sleep in the newcomers'shelter. I'm—"

"We took a very heavy consignment of newcomers yesterday. The shelter is over-filled. Even the dining hall is over-booked. The arrangement is made." He peered around. "It's getting dark. I have to join the others for the hunt. We'd better hurry."

She followed him, reluctant to accept his hospitality again when she could not do what he wanted. Why, she wondered, did it matter so much to him whether she called the fire? If he knew the impulse that had possessed her in the temple when she realized the flame in the bowl was her own, if he knew what will it had taken to call back the fire instead of sending it leaping from the bowl to burn the temple clean—

But he did not know those things. She followed silently, kicking brittle leaves.

When they reached his hut, the fire-bowl sat in the center of the table, all trace of ash scrubbed away. Andor's lips tightened as he wrapped it and returned it to the cupboard.

They ate silently, lantern-light painting the walls with shadow. Soon there were voices on the path outside. Andor stood. "I have to go. Don't step outside without the lantern. And don't go far even with it. This pack has become bold. If we don't take them, they'll come into the settlement again."

She promised. At the last minute, as he slipped out the door, she felt the sharp prompting of anxiety. "Be careful, Andor."

"Always," he promised, unsmiling.

She stood at the window and watched a long line of torches pass down the lane. Later she went to another window and saw them in the distance, moving toward the trees. She counted seventeen before she lost sight of them. She turned from the window, rubbing her arms anxiously.

She washed their dinner platters and swept the floor. Then, finding nothing else to do, she spread blankets and made herself

a bed on the floor. She lay awake for a long while, trying to find some way to do what Andor and Loxa wanted. Finding none.

She woke once in complete darkness and realized the lantern had burned out. Later she woke again at the creak of a floorboard. "Andor?"

"It's me."

"Did you catch them?"

"We took three. We couldn't find the other."

Reassured, she fell asleep again and did not wake until morning. Andor sprawled across the mattress, the quilt over his head, his legs bare. She covered him with her blankets and took food from the kitchen. Then she slipped outside, closing the door carefully.

She ate in the shade of a small fruit tree, watching men and women pass on their way to the fields. Many of the implements they carried were familiar: rakes, hoes, shovels, shears. Others were unfamiliar. She couldn't guess their use.

It was time she learned, however little use Andor thought she would be in the fields. When she had eaten, she slipped back into the hut and unpacked the drab trousers and long-sleeved shirt the estate seamstress had made for her. Discarding her gown, she drew them on, then pulled her hair back and secured it with a strand of cord she found in a storage bin. Then, swallowing back doubt, she left the hut again.

She found the administrative offices in a long hut at the western edge of the settlement. An elderly woman sat at the counter. Her features puckered into a hard frown when Pa-lil entered. Disconcerted, Pa-lil approached the counter. Was it so obvious she was poorly conditioned for work? "My name is Pa-lil Rhallis. I arrived yesterday and I would like to be assigned work."

The woman's grey eyes narrowed. "So you intend to do something of real work today?"

Pa-lil shrank at the unexpected hostility. "Yes. I don't have any training but—"

"Nor much muscle either. You won't be a lot of help, will you? If you want to sweat, you can sweep and pare in the kitchen. If you want to ache, you can carry water in the fields."

Pa-lil hesitated, confused by the woman's venom. Finally, when the woman continued to stare at her from poisoned eyes, she said stiffly, "I'll carry water. Where are the buckets?"

"Go to the tool shed. In the field." The woman bit the words off.

Embarrassed, Pa-lil turned to the door. As she stepped out, she thought she heard a small hissing sound behind her. She turned,

puzzled, but saw only the woman sitting at the counter. She smiled now, her smile as hostile as her frown had been before.

Dampened, Pa-lil made her way to the field and found the tool shed. She soon became uneasily aware that many of the people who had stared at her yesterday averted their eyes today, as if she had become unwholesome. When she found the overseer and asked him where water was needed, he spoke brusquely from the corner of his mouth and immediately turned his back.

Again she heard the hissing sound, so small she wondered if she had imagined it.

But as she placed the yoke upon her shoulders and began her first trips to the river, the hissing followed her. It was faint, taunting. Soon she found herself listening for it, waiting. But no matter how quickly she glanced around, she never caught anyone making it.

It wasn't until her fourth trip, when the yoke had begun to chafe and her back to ache, that she heard the first whispered comment. She passed two women pinching back overgrown vines and heard one say to the other, "Did you see the *fet-lizard* come slither by?"

"On the way to feed its brood. It should be stamped before we have a whole nest of them. But who wants to dirty her boot?"

Pa-lil turned, the buckets swinging awkwardly on their yoke. The women peered up at her, grey eyes challenging. Disturbed, she turned away.

Fet-lizard. The name followed her as she continued to trudge on her rounds. Sometimes it was spoken aloud. Other times it was only mouthed, but she read the scorn in it anyway.

She didn't understand. Were people angry because she had not worked the day before? Because she worked so slowly today? Because the pallor of her skin told them she had never done manual work before? Yet for every person who turned his back or stared stonily, there was another who seemed merely wary or even silently sympathetic.

The sun beat down. Noon came and the others went to eat, sitting in groups beside the river or under scattered trees. Pa-lil emptied her last load of water and shrugged off the yoke, realizing she should have brought food from the hut. She was too tired to go for it now. Instead she trudged to the river to sit alone under a small tree. The midday sun pricked through the foliage. Sighing, blinking back tears, she drew up her knees and rested her head on them.

A few minutes later she started at a touch on her sleeve. Tibbi

knelt in the grass beside her. She pushed back her sun-bleached hair and darted a defiant glance at a group of youths who splashed in the water nearby. "Pa-lil, I know it was real—the fire you called for me. Some of the others say it was a trick. They're calling you a *fet* because they think you tried to fool them. But I saw it. I saw the fire burn."

Pa-lil drew back from the conviction that glowed in Tibbi's eyes. "Tibbi—" But what was she to do? Try to persuade her she had only seen dried grass burning? Pa-lil rubbed her temples, trying to stroke away confusion. "Tell me—tell me what a *fet*-lizard is," she said finally.

"You haven't seen one? They burrow in the fields, near the surface. If you break into their nest, they jump out and strike. They're poisonous." She extended one tanned hand, tracing a series of tiny white scars on the thumb and index finger. "Here—I broke into a small nest. There were only three nestlings. But I was in the infirmary for four days."

Pa-lil shuddered. "The nestlings—do they hiss?"

Tibbi's eyes narrowed. "Just before they strike. You don't hear it any other time." Pressing her tongue to her teeth, she produced the sound that had followed Pa-lil that morning.

So that was what the hisses told her. That the people thought she had tried to deceive them with her fire-bowl. That they considered the deception poisonous. She felt a bubble of laughter rise in her throat. On Washrar she would have been garrotted if anyone had guessed the fire was real. Here she was despised because they thought the fire was false—a trick she had played, showing them one moment's hope, then dashing it.

Aware of Tibbi's gaze, she brought herself under control. "They'll forget in a few days," she said, as much to herself as to Tibbi. "If I work hard, if I show them I'm no different—" Perhaps it was true. Not everyone was hard-eyed and angry. She had seen that. And what other course had she? She pushed herself to her feet. "I have to work, Tibbi."

Tibbi jumped up, catching lightly at her arm. "Pa-lil, if I bring you another offering, if you make the fire come again—they'll see then."

Pa-lil shook her head. "No." She wanted to give the people what they needed. But she could not. The fire she had called could leap from control so easily, as easily as her own anger. And she must not let it, no matter what names they called her. "I have to work, Tibbi," she repeated. Work and show them she was as they were, no different.

She assumed the yoke again. The sun beat at her face and her muscles grew tender. Although she stopped often to drink, the water sat heavily in her stomach. After a while she didn't hear the hisses that followed her, didn't see the occasional worried frown or half-extended hand. She moved mechanically, her body aching.

She had just emptied her buckets into the irrigation ditch when Andor caught her by the shoulder and spun her around, buckets banging her legs. "What are you doing?"

She gasped in surprise, trying to break his grip. "My shoulder—" The flesh, where his fingers pressed it, felt as if it had been burned.

"Yes, and not just your shoulder. I told you you weren't conditioned to work in the sun. Here—look." He pushed up her sleeve, baring scarlet flesh. "Did you think you could cover yourself with fabric this coarse and not burn right through it?"

She stared at her arm dumbly. "I—I didn't think about it. It doesn't hurt—unless you touch it. It—"

"It will hurt later. And did you remember to take salt pills?"

Salt pills? "My—my father's workers took them sometimes, during the hot season," she said in confusion. "But I—I didn't think of it."

"And I don't suppose anyone here reminded you."

Pa-lil shook her head, anxious that he not be angry with the people working around her. "Andor—it's not their fault. They think—they—"

"I know what they think," he said. "I've heard. I suppose it was to be expected. And if you intend to work again tomorrow, you'll get out of the sun now. Otherwise you'll be too stiff and burned to be of any use."

Reluctantly she agreed. She followed him to the hut, aware of every sore muscle, aware of the tenderness of her sun-burned flesh. She accepted ointment and smoothed it on, avoiding Andor's frowning gaze. At his insistence, she stretched out and fell asleep immediately.

She woke several times, aware of the sound of Andor's boots against the floorboards, pacing. Once she thought she heard Loxa's voice, heard Andor arguing with her in low tones. She tried to rouse herself to hear what they argued about but could not.

He wakened her soon after dusk, mug in hand. "Here—the nurse sent this. Drink it while I get you something to eat."

She sat, her stiff muscles protesting painfully, and peered into the mug. "What is it?"

"It's herbal. Drink it."

Why did he speak so shortly? Was he still angry? She drank cautiously. The liquid was salty and thick. It sat easily in her stomach, leaving her hungry for the cakes and fruit Andor brought next.

He stood with hands in pockets, watching with frowning detachment as she ate. When she put the platter aside, he said softly, "You're not going to use the bowl, are you?"

She raised her eyes reluctantly, meeting his level gaze. "No."

"It doesn't matter that you're the only one who's brought a gift to Tennador. You won't give it to your people."

Helplessly she felt a tear escape the corner of her eye. "Not—not because I don't want to, Andor." At least he was not arguing with her, not pressing her. He was simply probing the state of her mind, studying it with clinical detachment. Trying to understand.

But how could he understand when he had never called fire himself? Had never seen his own anger burn to life in a glazed bowl? "Andor, I can't."

He studied her for moments longer, then nodded absently to himself and paced to the window. He gazed out for a long time, apparently taking counsel with himself. When he turned, a taut frown scored his forehead. "There's still a ewe-killer in the woods, the puss we didn't take last night. I'm going for the hunt."

She watched in dismay as he changed into dark clothes and soft boots. "You're going because you're angry with me."

"No." The word was without inflection. He took a heavy jacket from a hook. He didn't glance back as he went to the door.

She knew his denial was false. He did not even attempt to make it convincing. She watched from the window, her shoulders tense, as he strode down the lane. Tonight there were no voices, no accompanying shadows. He walked alone. When she lost sight of him, she turned away, staring around the empty hut helplessly, then went to the other window to watch for the torches of the hunting party.

It was long before she saw anything but lantern light from the other huts. Then she saw a single torch moving away from the settlement toward the woods. She stared after it, watching for others to join it, but it moved alone toward the trees.

Was he hunting alone? She pulled her gown close, caught by an indefinable anxiety. The others must have gone ahead. But she had seen no sign of them.

Perhaps they were to follow instead. But she saw no sign of that either. She watched and she saw no sign that there was a hunt.

But why would Andor go to the woods at night if there were no hunt? She knew he was angry. Would anger take him that far?

She hesitated a while longer, her anxiety growing. When she could stand it no longer, she discarded her work-stained clothes, pulled on her oldest gown, and snatched the lantern from the table. Loxa had said any child could direct her to her hut. Surely Loxa would know why Andor had gone to the woods alone. Perhaps that was what they had argued about while Pa-lil slept.

The night air was cool, so cool Pa-lil's teeth began to chatter as she picked her way down empty lanes. Any child—but there were no children out tonight. Nor any adults. Every door was closed. In many huts, the lanterns had already been extinguished. People slept early to prepare for an early waking.

Pa-lil hesitated outside first one hut and then another, trying to find courage to rap at the door. It wasn't Andor the people had hissed. If she told them she must find Loxa's hut because she was afraid for him—

She still had not found courage by the time she reached the administrative building. She hesitated, undecided. Perhaps Loxa lived in the small hut she saw behind the larger administrative structure. Quickly Pa-lil stepped around the corner of the building.

Lantern light fell against the side of the building and eyes burned down at her. She shrieked involuntarily and stumbled backward. Hides—there were dark-furred hides nailed to the side of the building, the heads attached. Woods cats: dead eyes glaring, fangs bared. She stared, a hard pain in her chest. They were larger than any cat she had seen before. Raising her lantern, she saw tufted ears and razor claws.

She counted three—of a pack of four. And Andor had gone to the woods. She glanced around, half hoping her cry had roused whoever lived in the small hut. But the hut remained dark and still.

Suddenly it seemed to her that the entire settlement was the same, dark and still. Suddenly it seemed she was the only person awake and frightened.

Certainly she was the only person who knew Andor had gone to the woods. She bit her lip, thinking of the times he had followed her there. Did he want her to follow him this time? She remembered how long he had stood at the window taking his own counsel.

She remembered his frown, his air of decision when he announced that he was going to the hunt. Had he expected her to watch from the window, to realize there was no hunt? To follow?

It made no sense. She wadded and crushed the fabric of her gown in one fist, then picked her way quickly through the shadows to the darkened hut. She rapped twice, three times, but there was no response. She knocked once again, more loudly, and held her breath, listening.

And then she could wait no longer. She could not spend half the night knocking at doors, trying to find Loxa, when Andor was alone in the woods. Yielding to an anxious sense of urgency, she raised her lantern and set toward the woods.

She made her way carefully over the irregular ground. The night sky bristled with stars, but they offered no useful light. Boulders and dried vegetation caught at her gown. Twice she paused when she heard a scurrying sound nearby. The seed gatherers Andor had mentioned, she guessed. Once she saw glinting eyes barely five paces away and gasped with terror before she realized they belonged to a straying sheep.

She smelled the trees before she saw them. Their oily pungence seemed stronger by night than by day. She paused, calling Andor's name, peering into the trees.

Did she only imagine a faint light ahead? She called again, then gathered courage and plunged into the trees. Soon hairy trunks surrounded her. Dry leaves crackled underfoot. "Andor?" Her voice was lost in the shadows that pooled under the trees. She held the lantern high and saw, chilling, that a nearby tree trunk was freshly clawed. "Andor?" She was surprised she could call out at all when she was suddenly breathless with fear. But she *did* see a light ahead, receding. She called again, more loudly, and moved in the direction of the light.

She lost her bearings quickly, following the elusive light through the woods. Occasionally she passed trees grown into grotesque shapes or large, root-bound boulders. Her lantern cast threatening shadows against them and her heart pounded at her ribs. Her calling grew more guarded. There was only one cat left from the pack that claimed this run, but she didn't want to attract it.

And then, miraculously, the light halted. She gasped with relief, running toward it. "Andor!"

He spoke from the darkness. "I'm here."

Why did his voice sound so strange? She looked up and found him perched on a large boulder. The stock of his torch was wedged

into a crevice in the stone. Its flickering light cast his profile in relief. He sat with his feet drawn up, looking down at her with dispassionate interest. "I thought you would come."

She raised the lantern, trying to read his face. Something in his tone—flat, over-controlled—frightened her. "Why did you come here? There wasn't any hunt." She searched the boulder for a foothold, not waiting for him to answer.

"Do you want to climb up here with me? It's safer."

Safer? Still the flatness in his voice. She glanced around and saw only trees muffled in darkness. "Andor—"

"Over here. Give me the lantern. I'll hold it for you."

Gratefully she found the foothold he indicated and passed the lantern to him. She bunched her gown in one hand and picked her way up the side of the boulder, sun-burned flesh drawing painfully. He caught her hands and pulled her up. She sank to her knees beside him. "Andor, please—why did you come here?"

"I'm hunting a cat."

The words weren't convincing. They had no resonance. She shook her head. "No. There isn't a hunt tonight. You're the only one who came."

"I'm hunting alone. Here, you can see the bait." He leaned over the edge of the boulder, holding the lantern so that its light fell on the ground. "One of the lambs wasn't feeding. It would have died anyway."

She caught her breath, peering down at the faint white stain at the base of the boulder. "But the cat—isn't it afraid of fire? And you didn't bring anything to kill it with. You—" Her mind worked quickly. What kind of hunting implements did they use against woods cats?

His eyes glinted by lantern light. A hint of a smile touched his lips. "We usually dig pits and bait them, then drive the cats toward them. They're frightened of fire; you're right. But tonight we will conduct our hunt differently. She'll smell the bait quickly. Her warren is near." Before she could respond, he lowered the lantern's wick, extinguishing it. Then, with a swift motion, he smashed the lantern against the side of the boulder.

Pa-lil stared at him wildly, gasping as he tugged his torch from the crevice and set the spilled lantern fuel afire. It blazed briefly on the flank of the boulder, sending up dark smoke. Then there was only torchlight.

Pa-lil sank back tensely, wondering with cold detachment if he had passed reason. There was something very like satisfaction in his eyes, but his knuckles were pale on the stock of the torch.

"What are you going to do?" she said finally, knowing he would do something. Knowing he had a plan.

"The next is more difficult," he said. "I haven't tried it before, but I think it will work." Holding the torch high, he knelt over the narrow crevice in the rock. Quickly, before she could protest, he plunged the burning torch head-down into the gap. Before the flames could race up the wooden stock, he stuffed his jacket into the crevice.

The torch died, smothered. Shaken, Pa-lil stared into the dark, suddenly aware of sounds she had not noticed before: the soft bump of her heart against her ribs, the rasp of Andor's trousers on the boulder, the lazy sound of leaves in the breeze. It was no use, she guessed, to ask what he intended next. But she suspected she knew. Knew what he was going to say.

He said it. "Now there is no fire here but yours, Pa-lil."

Yes, that was why he had brought her here, why he had extinguished both torch and lantern: to make her call fire. "No." Her voice took a rising edge. How many times did she have to tell him?

The fright that infected her voice did not touch his. "No? Tell me why you can't do it."

"Why?" She shuddered, pulling her gown close, trying to lose herself in it. "Do you really want to know?" The words were trembling and hard-edged at once. And once they had escaped, she knew she couldn't call them back—they or any of the others that followed in a swift rush. "I can't do it—I *can't do it*—because I'm half Washrar and the Washrar turn everything to dirt. The Washrar bring rotten fruit to the temples and demand that the gods cripple their enemies. The Washrar murder and think no one sees. The Washrar snatch and grab and take what they can. They can't even leave the gods alone. They've made the temples filthy. If I used my fire, I'd burn them all. I'd clean the temples. I'd burn the towns and the estate houses. I'd—I'm like them, Andor. I'd use my fire like them. I—" How could she make him understand how angry she was? Not nineteen years angry but three hundred years angry. Angry for every indignity, every death. Angry for all the bitter things her father's people had done.

He caught her by the shoulders, breaking the rising cadence of her words. "Is that what you think I am? A man who corrupts temples? I'm Washrar, Pa-lil. Your father is Washrar. Do you think I'd burn towns and houses if I could call fire?"

She drew a shuddering breath. His rebuke forced her to pause, however reluctantly. To think. "No. I know you wouldn't." And

her father was no more evil than Andor. He had acknowledged her; he had defied ostracism to keep her with him; he had protected her.

"Then why think the worst of yourself?"

"Because—" She faltered. Why was she afraid of her own anger? Simply because she had held it so long? Because she had hidden it? "Because it's touched me. It's all touched me closer than it has you. It—"

"Closer?" His voice took a bitter edge. "Do you remember what I told you the first day we met? That I call myself Andor Tereyse?"

"Yes?" She frowned, surprised at his tone.

His grip tightened on her shoulders. "I call myself that because I don't want to use the name I was born with: Andor Palsin."

"Palsin?" She repeated the syllables blankly before she recognized their significance. Jan Palsin, the man who had heard of a world where docile people lived. Jan Palsin, the man who had made his family's fortune by trading in those people. What had Andor said that first night? That he had Pachni blood—on his hands. "But that was a long time ago," she protested. "Three hundred years ago. That has nothing to do with you."

"It doesn't? When thousands of Pachni were taken by Jan Palsin? When thousands more were killed because they could do a few small things the Washrar could not? That's all the gifts were. Small conveniences. They weren't vital to the Pachni. Not then.

"But they could be vital now, Pa-lil."

He had released her shoulders. Looking closely, she could distinguish his profile against the diffuse darkness that enclosed them. "That's why you came to help build the settlements," she realized. "To pay for what Jan Palsin did."

"Partly. And partly because I was becoming like the others. So afraid it was making me vicious. So frightened of the power I thought the Pachni had. I was afraid to walk on my father's estate by night. Afraid to go to the vineyards or the looming rooms. I was so afraid—" He broke off, drawing a sharp breath, listening.

Pa-lil tensed, staring into the darkness. She had been frightened too, living in her father's estate house, enjoying privileges that should never have been hers. Privileges bought with the labor of slaves. But Andor's fear didn't seem related to his words. "What is it?"

"The cat is coming."

She wasn't prepared for the rush of fear that made her skin prickle. "I—I don't hear anything."

"I do. Listen."

She caught a shallow breath, trying to make herself still. She heard only the wind in the trees, the dry rattle of leaves overhead. Then she heard another sound, the soft pad of feet. Blindly she caught Andor's arm. The quiver of his muscles frightened her as much as the sound of padded feet. "Can it jump? Can it jump this high?"

"It won't. I'm going down."

It took a moment for her to understand. When she did, the effect was numbing. "*No. Andor—*" The trembling of his muscles should have warned her. Should have told her what price he was willing to pay for Jan Palsin's crime. What price he was willing to pay for the gift he wanted her to give the Pachni. "Andor, you can't. You—"

But he could. He pulled his arm free and was already sliding down the face of the boulder. She heard the sound of his feet against rock. In a moment she heard his boots hit the ground. And she heard the heavy pad of the cat's feet, the low mutter of its breath. Her throat closed spasmodically, cutting off her breath.

"They're afraid of fire, Pa-lil."

She sat like stone. The cat was afraid of fire. But she had called fire only twice, neither time with a woods cat stalking below. Neither time with Andor its prey. "Andor—if I can't do it—"

"Then I'll pay."

He would pay. And she didn't even know what god to call. Krakar, who guarded the night? Coqkar, who looked after the hunter? She began to tremble violently, the names of the gods running rapidly through her mind. Bozika, Malika, Magaka—Were they actual entities, living and sentient, waiting to hear her plaint? Or were they only the names people had given hope, strength, courage?

Did it even matter? *Nordika*. It was *Nordika*'s wisdom she required. Wisdom to find the fire before the cat struck. Wisdom to control the fire if she found it.

Quickly she raised her voice, imagining a bowl with silver wings, an azure canopy, a river. *Nordika, father-mother, here is the fruit of my hands, the plenty of my heart. Help me find the wisdom you have safe-guarded for me. Show me the way, Nordika, while the flame does burn. Show me where truth lies, show me where justice beckons. Show me, Nordika—*

The plaint rose, sweet and true, carrying no taint of fear. Pa-lil pressed her hands to the rock, willing flame to come. When it did not, her voice began to waver.

Courage. She must have courage. She pressed her eyes shut,

putting all her will into the rising plaint. Slowly, in her vision, she saw blue flame grow. She breathed on it, giving it fuel. Then, catching her breath, she opened her eyes.

Flame burned blue upon the rock. Flame grew and below Pa-lil saw the cat, its tufted ears laid back, its fangs bared. Andor stood utterly still, his back pressed to a matted tree trunk, his eyes as brightly reflective as the cat's.

Bless me, Nordikar, with the wisdom to study the paths before me, the judgement to choose from among them, the perseverance to follow that which I have chosen. Bless me, Nordikar— She had called the flame. Now she must form it into a weapon and wield it against the cat. The muscles at the back of her neck knotted with effort. Perspiration stood on her burned skin, prickling.

Hope, courage, strength. As the cat gathered itself to spring, Pa-lil caught a deep breath, drew sparks from the fire, and shaped them into a fiery spear. With a final effort of concentration, she hurled the spear at the cat.

The cat screamed, its fur scorching. It flailed briefly, muscles jerking spasmodically, then glared briefly up at her, as if it understood. Finally it found control of its feet and fled. Dry leaves shattered noisily in its path.

Then there was silence. Pa-lil stared down, not believing what she had done. Slowly Andor raised his head and stared up at the fire that still danced on the rock. He seemed to be numbed—as numbed as she was. He did not speak as Pa-lil groped her way down the boulder.

"It's gone," he said finally, as if he didn't believe it.

The cat was gone but the fire was not. It still burned on the boulder, electric blue. "Didn't you think I could do it?"

"I wasn't sure," he admitted.

Pa-lil laughed unsteadily. He hadn't been certain and neither had she. But she had called the fire and she had harmed no one. She had not even injured the cat. And Andor—"You've paid now. You've paid for what Jan Palsin did to the Pachni."

He sighed, color slowly returning to his face. "Yes. And for what he did to the Washrar."

"The Washrar?" What did he mean?

He took her hands between both his. "He destroyed the Washrar, you know. He made them what they are today. Frightened, cruel— That's why we're building the settlements. To save the Pachni and to save our own people. The Washrar."

She drew back, surprised. He was one of the group that had backed the settlements? And their intent was to save the Washrar

by taking their slaves away? But she understood what he said. Slavery had destroyed the masters far more surely than it had destroyed the slaves. The Washrar were a ruined people. They had corrupted themselves and now they corrupted their gods as well.

But the Pachni— The more frightened the slave masters became, the faster the settlements would grow. And when she called fire for the Pachni each day by the river, when she sang complaints for them, they would see it was no trick. They would see they were whole. They would see that the gifts had not been destroyed, not in three centuries of slavery, never.

They would see the fire and soon they would see other gifts too. Perhaps in people who had suppressed them without ever suspecting they carried them, perhaps in children yet to be born. And if the Washrar someday moved against them, the Pachni wouldn't be naive again. They would use their gifts any way they could. Pa-lil laughed softly, understanding everything. "Andor, I thought you told me you were a man of Tennador."

He laughed too, as softly as she. "I am. And if you can light our way home, Pa-lil—" The words held a Pachni lilt.

"I can light our way," she said, adopting the soft cadence, adopting his whole bright vision. Carefully she drew the fire from the rock and ringed them with it. They walked within its protective circle back to the settlement. ●



HAIKU FOR HALLEY'S COMET: 1983

Back from cold storage,
deep velvet box, the choker
reveals its pendant.

—by Robert Frazier

The Void Captain's Tale

By Norman Spinrad

Timescape, \$13.95

Science fiction had its equivalent of mid-century Britain's literary "angry young men" a little later, in the 1960s; they were part of that revolution in the field known as the "new wave" that loosened and broadened SF—can it be nearly 20 years ago now? Not all the new wavers were angry and many proved no more than ripples, but several of those Young Turks have become enduring talents; one of these is certainly Norman Spinrad.

His early *Bug Jack Barron* raised more than a few eyebrows and was one of the novels that introduced a certain gritty realism to SF (its detractors would have substituted "vulgar" or "filthy" for the adjective there). But Spinrad, as do all good Young Turks, has matured and changed and his new novel, *The Void Captain's Tale*, is closer to elegant than gritty, a far cry from the rough and tumble of twenty years ago.

The new work is indeed concerned with sex, perhaps more

so than any SF novel in recent memory. It's an intriguing concept—that an interstellar drive on which star-traveling humanity is dependent is itself dependent on a human element. And this must be a female of a certain psychological makeup to whom the faster-than-light jumps are a sort of instantaneous yet at the same time endless orgasm. These women (one per ship per voyage) are known as Void Ship Pilots.

Spinrad has chosen to combine this with a culture that is bizarrely baroque, an aristocracy that spends its time on the interstellar ships. The other major personnel of any voyage are the Void Captain and the Domo, traditionally male and female respectively; the Captain is the ruler of the ship, as the title implies, and the Domo is responsible for the esthetic quality of life in the luxurious and stylized social milieu of the star travelers.

Captain and Domo traditionally form a ritualistic pairing that is the central point of this society, while the Pilots, invar-

iably neurotic and antisocial, have no part in it. But *The Void Captain's Tale* tells of a voyage with a most untypical Pilot, so untypical as to form a relationship with the Captain. Here is the classic romantic triangle, but its existence threatens not only the quality of life on the voyage, but the very ability of the ship to reach its destination.

The author has chosen a style of writing to match the baroque culture he has created, a future *patois* consisting of words and phrases from several languages, including some fairly arcane English ones. This may be hard going for the more impatient reader; sentences such as "I do not know why hypothesized perception frissoned my animal appreciation of her libidinal attentions with a moue of contempt" can slow you down. I personally came close to feeling that I would throw the book across the room the next time I hit the word "thespic" no matter how appropriate it was to most of the circumstances so described. In point of fact, it pretty well describes the novel; story and style are both heavily theatrical and, in its way, it's something of a frissonic, libidinal tour de force.

The Floating Gods

By M. John Harrison

Timescape, \$2.50 (paper)

The chief practitioner of that

ornate, imaginative, and free-wheeling style that is so popular now and which I think of as baroque science fiction is, of course, Gene Wolfe. The precursors of baroque SF can be traced back through Jane Gas-kell and her startling Atlan series, that genuine genius Mervyn Peake, and beyond to (of all people) Charles Dickens, if you really want to get academic about it. But the ancestry is definitely British, as you can see, and it seems to have escaped notice that a decade ago when Wolfe was on the verge of taking his first step in that direction with shorter works (the novelette, "The Fifth Head of Cerberus," for instance), the Englishman M. John Harrison had already published a novel in the baroque style, *The Pastel City*, which may go down in the history of SF as the first true example of its kind. It was, needless to say, greeted with almost universal bafflement save by the most perceptive (of which, I regret to say, I was not one).

The city of the novel's title is Viriconium, which exists in the unimaginably distant future of Earth. Another novel about Viriconium, *A Storm of Wings*, was published a few years ago. It was what no one would call a direct sequel (nothing about Viriconium is direct), though it shared some of the earlier

novel's characters. Now a third novel about Viriconium has appeared, called *The Floating Gods* and it has little to do with the first two, taking place, I'd guess from some vague interior clues, thousands of years after them.

This latest in the Viriconium sequence is much less epic, also; it is almost domestic by comparison, though the background is a plague which has struck the city. It's a most amorphous plague, however, being described as "a kind of thin-ness, a transparency." People within its zone of influence simply fade, or succumb to debilitating illnesses; buildings fall apart; businesses fail, projects come to naught. Its area is sharply defined and spreading, though it has not yet reached the High City, where live the aristocrats and the richer artists.

The major storyline concerns the efforts of the portrait painter Ashlyme to rescue from the plague zone a fellow painter, Audsley King, for whose talent he has enormous respect and who, already ill, does not want to be rescued. On this slight narrative, Harrison places the bizarre people, places, and incidents one would expect in Viriconium. Ashlyme and the astronomer Emmet Buffo attempt to take Audsley by force, disguised in rags and giant fish head masks. He becomes involved with the malignant

dwarf, The Grand Cairo, who seems to rule Viriconium, but is himself subject to the Barley Brothers, Gog and Matey. These brothers are a problem, first appearing over the city as giant floating figures once or twice in a decade, now living there "trying to become human" by roistering drunkenly through the streets and generally behaving in the crudest of manners.

All of this takes place in the wonderfully named locales of the city: the Plaza of Unrealised Time, the heights of Mynned, the Gabelline Stairs, the rue Serpolet, the Bistro Californium, the Atteline Plaza, Uranium Street.

As is obvious, Harrison is coming perilously close to surrealism here. The small scale of the claustrophobic city and the emphasis on eccentric character are reminiscent of Peake's Gormenghast trilogy, but the passion, consistency, and vivid reality are lacking. The strong colors of the earlier novels about the Pastel City have indeed become pastel in this one. But for those who are happy with superbly evocative writing about strange events in bizarre settings, Harrison will certainly do.

Misplaced Persons

By Lee Harding

Bantam, \$2.25 (paper)

Given the interest in things

Australian these days, I thought it might be of interest to check out the short novel by the Australian, Lee Harding, called *Misplaced Persons*, which was published in hardcover three years ago and is now available in paperback. It's an odd little fantasy with a good deal of atmosphere, about a youth in Melbourne who becomes uneasily aware that people are more and more ignoring his existence. Soon they are entirely unaware of him, and what's more, seem to have forgotten he ever existed. At the same time, his perception of the world becomes dimmer and dimmer; all externals blend into a kind of fuzzy grey limbo.

He wanders through this "greyworld," as he calls it, and finds that every once in a while something will appear in color, other things that have arbitrarily slipped "through" as he has; it is on these that he must live. Eventually he comes across other people who have also come here.

This is presented with a lack of drama, almost of action, that is yet quite unnerving. I was reminded of the later, sparer novels of Alan Garner, or Le Guin's *The Beginning Place*, a story that's not quite fable, not quite allegory, but with the lean, cool quality of both. Australia continues to interest.

I might note that the publisher has saddled this book

with a horrendously inappropriate cover, of the protagonist watching a lightly clad lady at her dressing table. While vaguely connected with an incident in the novel, it looks more like the cover for "I Was a Teenage Peeping Tom."

Niff the Lean

By Michael Shea

DAW, \$2.95 (paper)

If Wolfe, Harrison, et al. are thought of as baroque, Jack Vance and those who aspire to his many-colored soap bubble worlds are inevitably rococo. Vance was probably the first writer to use a far-future Earth as a setting for light adventures and amusing characters, where leftover science and psychic sorcery, equally unexplained, provide the wonders and devices that keep the plot going. These are operettas to the grand operas of the baroque school.

Michael Shea's earlier novel, *A Quest For Simbilis*, was a spin-off of Vance's *Dying Earth*; as might be expected, his new book, *Niff the Lean*, is Vancey-bred and yet individually enough flavored to escape being considered a slavish copy.

It is less a novel than four longish stories about the same character, one Niff, who is—what else?—an engaging master thief. The Earth of his time is rife with sorcery and dim science, and only vaguely remembers a distant time when

men went to the stars and the stars came to man, though remnants of those visits are still encountered, as in "The Goddess In Glass," in which a giant alien, preserved for millennia in a glass cube, revives and escapes, to the utter confusion of the city which had worshipped it as a goddess for all that time. In "The Pearls of the Vampire Queen," Niff't outfoxes a blood-thirsty (literally) lady who is such an excellent ruler that her people willingly overlook the comparatively few subject to enforced anemia.

As an amusing conceit, each of the stories is introduced by Niff't's pedantic friend Shag Margold, who fills in the reader on the geography and sociology of the regions touched on, and verifies as to which of several sources (perhaps unreliable) the particular story may have come from.

Shea tells a good story and his imagination is fertile, though he tends to pack his prose so tightly with detail (imaginative though it may be) that it doesn't bounce along quite so lightly as that of Vance or Leiber (whose inimitable Gray Mouser tales I was also reminded of). They are nonetheless highly enjoyable and recommended to Vance fanciers.

The Dragon of the Ishtar Gate
By L. Sprague de Camp

Donning, \$5.95 (paper)

As one long fond of the works of L. Sprague de Camp, it's good to see new interest in them due to the republication of his Krishna stories (as well as a new one). Readers who have just discovered him may not know that he has also authored a series of historical novels which are as engagingly readable as his science fiction and, in fact, are much like his fantasies, though without any overtly supernatural events. All set in the ancient world, where the old gods rule real or not, there's swords and superstition aplenty.

The Dragon of the Ishtar Gate tells of the adventures of Bes-sus, a young Persian noble, sent by Xerxes to find a real dragon at the headwaters of the Nile. This trek across the ancient Near East and into an Africa even more unknown than it would be in the Christian era is full of wonderful details and lots of action. De Camp somehow manages to inject a witty modern sensibility without violating the beautifully researched historical validity of the story, and those who crave adventure in imaginatively exotic settings won't even miss the demon or two who would have been present if this had been set in the Hyborian Age instead of an historical one. (There *is* a nicely slimy sorcerer.)

Titus Groan, Gormenghast and Titus Alone

By Mervyn Peake

Overlook Press, \$18.95 each

I like to remind you periodically that I devote some space in nearly every column to older works that have recently become available again; I hope this is edifying to the reader who may want to know about the interesting books of the past and I know it's edifying for me because there are so many of them I like to write about. But never before in this column has there been a reprint of such major importance as the one I take pleasure in announcing now; a trilogy presently unavailable in this country in paperback (a sad state of affairs indeed) brought back in a hardcover edition as handsome as it deserves.

It is the Gormenghast trilogy of Mervyn Peake, the three books of which are *Titus Groan*, *Gormenghast* and *Titus Alone*. Published in the decade after the Second World War, they were cult books for many years, of which only a comparative few knew. Their influence is only now being strongly felt; as I noted above, the most popular of current SF shows it. Michael Moorcock's best work, *Gloriana*, is dedicated to Peake. And there have been recent biographies, memoirs, and collections of his work, including his

extraordinary drawings and paintings—he was first recognized as a visual artist and his work in that area is accepted as major. His poetry, also, is thought well worthy of serious consideration.

There is still, though, nothing like the trilogy. The painter's eye and the poet's ear have made a fantasy, a fantasia, of people and places in which nothing really fantastic happens, but the setting and cast of which are so outre that it makes most recent fantasy seem about as mundane as suburban Los Angeles. The first two books are really a piece, one novel that chronicles the growing up of Titus Groan, heir to Gormenghast, the enormous, labyrinthine castle of the Groans. Gormenghast has nothing to do with any time, any place we know of, and it is inhabited by a collection of characters as strange as itself, Titus's family and its retainers. *Titus Alone* follows Titus into the strange world he finds when he is able to break away from the rituals and disasters of Gormenghast.

I'm tempted to go into detail about the wonders of Gormenghast, but I don't really have the space or, frankly, the ability to do it justice. I've known *Titus Groan* since I picked it up, remaindered, for 50 cents on the way home from the Cinvention in 1949—which turned out to be the major event of *that*

convention—and from the first reading, Peake's images have remained burned in my mind. They are literally books you can't forget.

The new edition is absolutely splendid. The three volumes are illustrated with Peake's own amazing drawings, which are, of course, absolutely right. What is startling is how perfectly they match the images evoked by his prose. I did not see the illustrations for many years after I had first read the books, since they were not included in early editions; when I *did* see them, they matched what my mind's eye had conjured up from the printed page. Also, this is the first American edition to use the beautiful dust

jacket drawings that Peake had done for the first English edition.

Even if you are resistant to hardcovers, this is a set without which no fantasy library is complete—a great classic given a production worthy of its status. They don't happen very often.

Recently published works from those connected with this magazine include *Isaac Asimov Presents the Great SF: 9 (1947)* edited by Isaac Asimov & Martin H. Greenberg, DAW, \$3.50 (paper).

Books to be considered for review in this column should be sent to Baird Searles, c/o The Science Fiction Shop, 56 8th Ave., N.Y., N.Y. 10014. ●

NEXT ISSUE

July's *Asfm* will feature stories by two of the field's most prominent writers. We're sure you'll enjoy Tanith Lee's cover story, "La Reine Blanche," as well as Ursula K. Le Guin's delightful romp, "The Ascent of the North Face." Also in July, Martin Gardner will present us with more than his usual fiendish puzzle: His Viewpoint, "Great Moments in Pseudoscience," offers us a critical look at current studies in the paranormal. Of course, Mr. Gardner also finds time to teleport to 1999 A.D. and send us back his brainteaser, "The Number of the Beast." With seven other stories by authors such as Scott Sanders and George Zebrowski and a special On Books by Norman Spinrad, July promises to be a very exciting issue. Pick up your copy on sale May 17, 1983.

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The Good Doctor will be the Guest of Honor at a con in New York soon, so make plans now for social weekends with your favorite SF authors, editors, artists and fellow fans. For a longer, later list, an explanation of cons, and a sample of SF folksongs, send me an SASE (addressed, stamped #10 envelope) at 9850 Fairfax Sq. #232, Fairfax VA 22031. (703) 273-6111 is the hot line. If a machine answers, leave your area code and number. I'll call back on my nickel. Send a #10 SASE when writing cons. Look for me at cons behind the iridescent Filthy Pierre badge. For free listings, I need to know about a con 6 months ahead.

MAY, 1983

13-15—**MarCon**. For info, write: **Box 2583, Columbus OH 43216**. Or phone: **(614) 497-9953** (10 am to 10 pm only, not collect). Con will be held in Columbus OH (if city omitted, same as in address) at the Quality Inn. Guests will include: James ("Genesis Machine") Hogan, fan George (Lan) Lankowski. Masquerade. Reputation for good parties and songfests. Close-knit Midwestern social ambience.

13-15—**EuCon**. Eugene Hilton Hotel. Spider (Callahan's Crosstime Saloon) Robinson, Dean Ing.

13-15—**TexarKon**. King's Row Inn, Texarkana AR. Andrew Offutt (John Cleve), R. & W. (Elfquest) Pini.

20-22—**LepreCon**. Ramada TowneHouse, Phoenix AZ. Artist Kelly Freas, Jack (Humanoids) Williamson.

27-29—**SwampCon 4, c/o BRSFL, Box 14238, Baton Rouge LA 70898**. Jo Clayton, Geo. Effinger.

27-30—**Sol III, 39 Dersingham Ave., Manor Park, London E12, UK**. Birmingham, England. Anne (Pern) McCaffrey, Bob (Slow Glass) Shaw. Star Trek con (Scotty & Chekov will appear), but with SF guests.

28-29—**QuestiCon, c/o Smith, 903 Bellas Artes, El Paso TX 79912**. Andrew J. Offutt (John Cleve).

JUNE, 1983

3-5—**DeepSouthCon, Box 16140, Knoxville TN 37996**. Stephen ("Cujo") King, Karl Edward Wagner, Chelsea Quinn Yarbro, artist Doug Chaffee. Masquerade, wine & cheese buffet. The big Southern con.

3-6—**WindyCon, Box 11400, Manners St., Wellington 1, NZ**. The annual New Zealand national SF con, to be held at the Waterloo Hotel. Not to be confused with the WindyCons each December in Chicago.

10-12—**XCon, Box 7, Milwaukee WI 53201**. Oconomowoc WI. Poul Anderson, David Egge.

10-12—**ValCon, c/o Doering, 190 NW Hills Dr., Valparaiso IN 46383**. Costumes. Dorm rooms available.

10-12—**Millenium, 1369 York Mills Rd. #304, Don Mills ON M3A 2A2, Canada**. Gordon Dickson.

10-13—**SynCon, Box A491, Sydney South 2000, NSW, Australia**. Shore Motel, Artarmon NSW. 22nd annual Australian national con. Theme: "SF & Society." Harlan (Paingod) Ellison, Van Ikin. Story contest.

JULY, 1983

1-4—**EmpiriCon, Box 682, Church St. Sta., New York NY 10008**. I*S*A*A*C A*S*I*M*O*V, old-time fan Art Saha. The big Manhattan con returns, at a new hotel (Milford Plaza). Fannish Fri. talent show.

SEPTEMBER, 1983

1-5—**ConStellation, Box 1046, Baltimore MD 21203**. John (Zanzibar) Brunner, David (Lensman) Kyle, Jack (Well of Souls) Chalker. The 1983 WorldCon. Join by July 15 for \$40, or pay more at the door.

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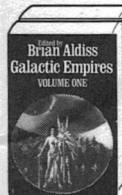
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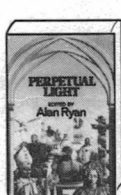
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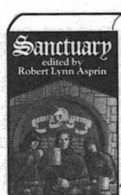
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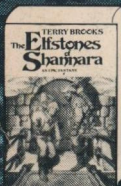
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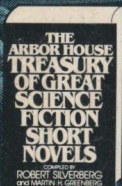
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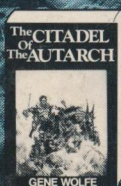
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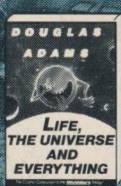
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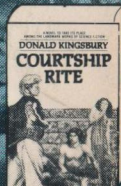
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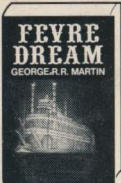
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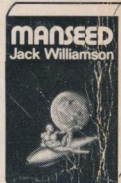
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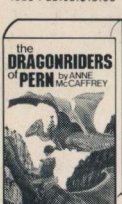
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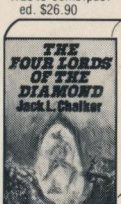
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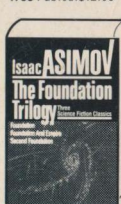
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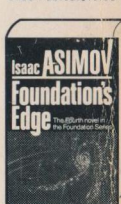
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