

The Complete  
Sinister  
Researches of  
C. P. Ransom

H. Nearing, Jr.



DOUBLEDAY  
SCIENCE  
FICTION



# THE COMPLETE SINISTER RESEARCHES OF C. P. RANSOM



Homer C. Nearing, Jr. PhD (15 April 1915 – 29 May 2004) was a Professor of English at Pennsylvania Military College. His doctorate was in 17<sup>th</sup> Century historical poetry. He is best known for his comic mathematical stories about Professor Cleanth Penn Ransom.

One of his students remembers him:

“To see the man in class you would have no idea that he could ever have written such a work. He invariably wore a gray suit with a white shirt and maroon tie, to which he added a maroon knit vest in winter, and clip-on sunglasses in spring. Once he began to teach, however, the combination of wit and intelligence that could create Cleanth P. Ransom became wonderfully evident. He loaned me his own copy of the book when I was unable to find the lone copy

owned by the college, and I enjoyed it immensely. I would love to track down a copy of my own. I took every course he taught, from short story writing to Elizabethan poetry, and was saddened when I read of his death in my alumni magazine. “

The "novel" *The Sinister Researches of C. P. Ransom* collects seven of the eleven published Ransom stories and adds two additional incidents along with a brief prologue and epilogue. The stories have been rewritten from their magazine versions in an attempt to pass them off as a novel. They were better in their original form, and here they are, all eleven of them, ten from *The Magazine of Fantasy and Science Fiction* and one later entry from *Fantastic Universe*, plus the four new pieces from the "novel." Together they comprise some of the funniest academic comedies ever written. They should never have gone out of print.

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## THE DILEMMA

"The first meeting of the subcommittee of the Faculty Senate," said Professor Cleanth Penn Ransom of the Mathematics Department, "in charge of investigating ways and means of utilizing science in the advancement of the liberal arts will come to order." He folded his arms back of his head, stuck out his little round belly, and began to swing in his swivel chair. "All two of us."

Professor Archibald MacTate of Philosophy crossed his long legs, pulled his colleague's icosahedral ash tray across the desk, and lit a cigarette. "Tell me, old boy. Why do you suppose they put only the two of us on the subcommittee?"

"Well——" Ransom regarded the ceiling. "I sort of convinced the dean that two heads are better than one but three's a crowd. Too many cooks, I mean. So seeing as this is a pretty hot subcommittee——"

"Hot?" said MacTate.

"Sure. It was all explained at the——" Ransom stopped swinging and looked at his colleague. "My God, MacTate, do you sleep through *every* faculty meeting?"

"Well, old boy, you must admit that this last one was uncommonly conducive to——"

"All right. All right." Ransom waved his hands in capitulation. "I'll go through it again." He sighed. "This Desmond D. Ettiscope, see—the eccentric deodorant king, *you* know—he says the only way science is really helping the poor down-trodden liberal arts is by figuring out new library gadgets. Microcards or whatever you call them. And audio-visual aids. Stuff like that. So he says if the university can come up with a scientific gadget that will help out the liberal arts directly instead of through the library, he'll kick through with a fifty-thousand-dollar endowment."

MacTate smiled. "There was an article in the *Journal of Aesthetics* the other month on the possibilities of enabling ballet dancers to levitate. I don't suppose——"

"No, no." Ransom shook his head. "It's got to be something we teach. Here, I mean. The university's not giving academic credit for dancing. Not yet." He grinned. "It's got to be something more on the order of a time machine for studying history, or a football you can pass through the fourth dimension for physical education."

"That's a liberal art?"

"Well, Ettiscope might think so. He's an Old Grad. But look, MacTate." Ransom's grin faded. "Let's stop being whimsical. We've *got* to come up with a crazy gadget of some sort."

MacTate looked at him earnestly. "I have the utmost confidence in your ability to find one, old boy."

"That's right. Be sarcastic." Ransom began to swing his swivel chair petulantly. "Here they toss a red-hot baby on our doorstep and all you can do is make nasty remarks. If you could just——"

"But see here, Ransom." MacTate flourished his cigarette soothingly. "Is fifty thousand dollars really so important as all that? To the university it's no more than the price of half a dozen economics professors per year. Or ten philosophers. Now if it were fifty million——"

"Look, MacTate." Ransom stopped swinging. "Get it out of your head it's for the university. Why I'm doing it, I mean. This is purely—mercenary."

MacTate raised an eyebrow. "But won't it be rather difficult for you to embezzle from the——"

"No, no." Ransom waved a be-sensible hand. "Keep under your hat, MacTate, but I got it from the dean confidentially that I've got a nemesis on my trail."

MacTate smiled. "Women? Creditors? Assassins?" He flicked his cigarette. "Don't tell me you've been *gambling* beyond your means."

Ransom looked at him seriously. "You remember Harrington B. Snyder?"

MacTate thought a moment. "Oh yes. The multibillionaire. When he was an undergraduate here, wasn't there some hostility——"

"Hostility hell," said Ransom. "He practically accused me of murdering him."

"Something about calculus, wasn't it?"

Ransom nodded. "I kept flunking him in calculus till he had to switch from engineering to law. Said I'd ruined his career and deprived the world of a great scientific brain. So now he's really found a way to get me."

"They're not going to make you a dean?" MacTate looked concerned.

"Worse. He's offered to give the university fifty thousand

dollars if I'm assigned to teach calculus"—Ransom paused as if appalled by what he had to say—"on the University of the Air Summer Series."

"Calculus? On the University of the Air?" MacTate looked puzzled. "I thought all they did there was show conservation movies and talk about Art in the Home."

"That's the point." Ransom aimed a finger at him. "He wants to drive me out of the university. Like poor old Hopjoy."

"Hopjoy?"

"You remember, MacTate. The philologist. Lectured on Gaelic—Old Irish or whatever it was—over the air summer before last. And the television fans swamped him with letters ranging from obscenity to recommendations of suicide. Made him feel like a public enemy."

MacTate nodded. "He resigned and went down South, didn't he?"

"That's the one. Teaching in a school for delinquent girls down there. Complete obscurity."

MacTate looked thoughtfully over his colleague's head. "Perhaps they mistook him for an unsuccessful entertainer. But your friend Snyder had nothing to do with that, did he?"

"No. Hopjoy rushed in with his eyes closed. But Snyder wants me to meet a similar fate. He's even specified that I've got to teach half an hour a week on the air. Hopjoy only had a fifteen-minute spot." Ransom began to swing gloomily. "Calculus. When Hopjoy got done in just by a language. So you can see why we've got to dream up a science-liberal-arts gadget in the next eight months."

MacTate looked at him blankly. "I can see why—what?"

"I should draw pictures." Ransom stopped swinging and held out explanatory hands. "Look, MacTate. Desmond D. Ettiscope is going to give fifty thousand dollars for a gadget. Right? And Snyder is going to give fifty thousand dollars for sending me to Siberia. Now do you imagine the university

cares which fifty thousand dollars it gets? As long as it can't get both?"

"Why can't it get both?"

"MacTate." Ransom shook his head sadly. "You don't think that if we came up with a gadget I'd just put it on a plush cushion and trot it in to the dean, do you?" He leaned back in his swivel chair. "We *conceal* it, see? Until the dean agrees to turn Snyder's offer down so we'll win the Ettiscope endowment for him. More prestige in it, and Ettiscope's looser with his change than Snyder, anyway. Got it?"

MacTate smiled. "So now all we have to do is invent a time machine or a four-dimensional football before summer."

"Now stop joking, MacTate. We've got to think of something realistic. Like a machine that can compose music or something." Ransom ran a sleeve desperately across his forehead. "Trouble is, they've handed me so damn many jobs this year I haven't got time to concentrate. I'm on the committee for promoting the Faculty Play, and chairman of the committee on Athletic Purity, and I've got to supervise the installation of that new electronic brain Snyder gave the Electrical Engineering Department—" He stopped. "MacTate. You heard about that, didn't you?"

"What?"

"Snyder. Probably influenced subconsciously by his own troubles with math. He gave the E. E. Department a big electronic computer." Ransom's eyes were gleaming. "And I'm in charge of installing it. MacTate." He got up. "I won't have to go to Siberia. Our problem's solved."

MacTate got up too. "It is?"

Ransom put on his hat. "Come down to the E. E. building a week from Wednesday and I'll show you." He went to the door. "I'll go down right now and get ready to set it up. Meeting's adjourned."

*It is regrettable that there is so little satire in science fiction; the opportunities therefor implicit in the genre seem to us unlimited. It is an especial pleasure to us, then, to discover a writer willing to take advantage of those opportunities. Mr. Nearing's witty satire on the new science of cybernetics is his first published fiction. Hitherto he has written articles on Shakespeare and on the medieval legends of Julius Caesar for various scholarly journals, and many deft verses for "The New Yorker." Being a poet himself, Mr. Nearing writes of the mechanical brain designed to create poetry with particular sympathy, understanding and high humor.*

## *The Poetry Machine*

by H. NEARING JR.

"EVERYBODY knows that the mind is a machine," said Professor Cleanth Penn Ransom of the Mathematics Faculty. "Man up at M.I.T. wrote a book about it. When it goes crazy, it acts like an overworked electronic calculator. The mind, I mean."

Professor Archibald MacTate, of Philosophy, started to say something about Plato, thought better of it, and gazed silently at the huge, nearly finished hatchery of electron tubes that ran down the room.

"So if you have a machine that can go crazy and work differential equations," Ransom continued, "why shouldn't it write poetry, too?" He straightened his little body and his eyes began to gleam. "And better poetry. As much better—" he pecked a finger at MacTate—"as the equations are harder. Than the mind can do, I mean."

MacTate glanced nervously at the rows of tubes again.

"So when they put me on this job, I figured out how to make a poetry machine." Ransom looked at the tubes maternally. "There."

MacTate stared at the machine incredulously for a moment, then gave a low whistle.

"I know," said Ransom, "everybody thinks it's going to be a calculator.



But there's plenty of calculators. Harvard, Penn, lots of calculators. *We've* got a poetry machine."

"But —" said MacTate.

"That's where you come in," said Ransom. "Technical adviser. I fix the tubes to scan words out of Rozhay —"

"What?"

"R-o-g-e-t."

"Rahjet."

"All right. I fix the tubes to scan out words and look them up in the dictionary for accent and sound — so they won't rime *indict* and *predict*, I mean. I fix all that and the syntax relays, and then when the poetry comes out you say whether it's any good or not." Ransom smiled conspiratorially. "You teach aesthetics. You say it's good, everybody says it's good."

MacTate looked sardonic. "My dear Ransom," he said, "even assuming your last premise to be valid, how can this — these tubes really create poetry? One writes poetry about one's experiences. This — this machine has had no experiences." He waved at it disdainfully.

"Not at all. The experiences, I mean. Does a calculator have to have experiences before it works equations? Like a mind? Not at all. *You* give it the experiences. You tell it what experiences you want it to solve or make poetry about, and it does."

MacTate looked dubious.

"Look," said Ransom. "Suppose we want a poem, a great poem about, say, a man having trouble with his fiancée, which is what most poems are about. That's an experience. You feed it to the tubes just like a problem, but instead of reducing it to factors they reduce it to words."

MacTate still looked dubious.

"Come back Wednesday," said Ransom. He clapped his colleague on the shoulder. "Come back Wednesday and I'll show you."

To MacTate it seemed incredible that his friend of Mathematics should have been left so long to his own devices on so expensive a project. But that was the University, he reflected. Penny wise . . . And compared to the incompetents that had been placed in other positions of responsibility, well, Ransom. . . . How he had arranged the connivance or ignorance of the engineers constructing the machine was a mystery of epic potentialities. Perhaps he had converted them to poetry.



MacTate was a philosopher. It never occurred to him to report Ransom's activities to authority. On Wednesday he was back in the calculator building.

Ransom hurried toward him waving a piece of paper. "First fruit," he said breathlessly. "Just came off. Look."

MacTate took the paper and read aloud:

"Befetished nymphophobe and chastitute  
Give pity to my ache — your hinted wines  
Make desiccated hankering delight  
And in my pectoral sing lubric tunes."

MacTate smiled. "Something Gallic about it, don't you think?"

Ransom ignored his colleague's levity. "Look at that first line. Blends. What do you call them? Portmanteau words. Didn't I tell you? Looked up roots in the dictionary and invented words. Roots. Didn't I tell you?" His enthusiasm was pure and childlike. MacTate lacked the heart to remind him that his interest in the line was more mathematical than aesthetic.

Ransom's eyes suddenly became sober. "There's just one thing that puzzles me," he said. "I'm sure I set the rime circuits up right. Nothing spoils a poem like a bad rime. But this doesn't."

MacTate peered over his shoulder and wagged a finger four times. "Analyzed," he said.

"What?"

"Analyzed rime. The riming vowels are interchanged in the last two lines. Instead of *ute* — *ines* we have *ight* — *unes*. A virtuoso device." He pursed his lips. "The machine may be smarter than you think."

Ransom looked at him. "You mean it started to take poetic license with rimes before it tried to do it right?"

"You might put it that way. It doesn't need experience, you know."

If there was irony in this, Ransom missed it. "I don't know." He shook his head. "I'd better check the rime circuits again."

MacTate was interested in the poem despite himself. "Hadn't you better take a few more lines before you change anything? Just to see what else it will do, that is." He laughed self-consciously. "Brain surgery is no light matter, you know."

Ransom did not laugh. "It won't hurt to check," he said. "Maybe some-

thing a little out of line we can fix without any trouble. Then we'll get real poetry. All you want."

The checking went on and on, and MacTate had to leave before it was over. It was not until the next day that he returned to the calculator building, which he was beginning to think of as the poetry building. A gang of young men swarmed about the machine plying implements and gauges of various sorts, while Ransom rushed anxiously from one to another presumably giving directions and advice. Seeing his colleague, he stopped and brandished a handful of paper slips. "Something wrong," he said. "Worked on it all night. Tubes won't answer. Ten times we tried last night and this morning, and all we get is this." He held out the slips. The top one said:

Cancel Cancel Cancel Cancel Cancel

The others said the same thing.

"I can't figure it out." Ransom rubbed his haggard face with a handkerchief. "You know it was working fine when you were here. Then we checked, and all we could find was just a little less capacitance in one circuit than we planned for. I can't see how it could make any difference. But we put in another condenser anyway, just to be sure. And now all we can get is these." He flapped the slips.

"Perhaps it was offended that you should suspect its riming talents," MacTate smiled.

To his astonishment Ransom started and looked at him with wild surmise. "What did you say? Do you think it could? The rimes, I mean." He clutched MacTate's arm and stared at the tubes. Then he looked at MacTate searchingly. "It *must* be. How did you know? That's what I've been trying to think of, but it wouldn't come out. The back of my mind, I mean. But you're right. What a silly thing to do, to suspect it. What a damned silly thing to do."

MacTate disengaged his arm and tried to speak in a soothing tone. "Ransom, old man," he said. "Rather a big job you've been doing here last night and today. Probably a drink wouldn't do you any harm. Let's suspend operations for a bit." He tried to pull the little man gently toward the door, but Ransom shrugged away and turned to the machine.

"No, wait. If I could apologize. How could you apologize to it?" He wrung his hands. "You know it was hurt. How can I smooth it over?"

MacTate felt it was time for bluntness. "I assure you, Ransom, I was only joking. You're being absurdly anthropomorphic about the matter. Now do come out for a drink and stop this —"

"All right," Ransom said. "The joke, I mean. To you it was a joke. You think I'm crazy. But it's not." He sighed patiently. "Look. Just listen calmly and I'll explain it. Then you'll be reasonable and help." He wiped his face with the handkerchief again. "Look. I know these machines better than you do. I should, I mean. And believe me, some of the things they do are — weird. Weird. You can say I planned wrong, and that one little capacitance was just right, so when we changed it, it spoiled the setup. But on my honor as a mathematician, I don't believe it." Ransom's eyes were desperate. He aimed a finger at MacTate and leaned forward. "Suppose you, now, were a bright young poet who figured out an ingenious kind of poetic license you weren't supposed to know about. And then you show it to people, and instead of applauding and asking for more, they jump to the conclusion that your setup is wrong, and start telling you how the conventional way goes. How would you feel? How did Keats feel? How did — the one that took poison."

"Chatterton."

"All right. How did they feel?" Ransom's eyes narrowed. "Doesn't it seem rather weird that the tubes are acting so much like that? Stubborn, I mean. Look at it with an open mind. You've had your feelings hurt sometime. Look at it that way." He turned to the machine helplessly.

MacTate tried hard to think of something sensible to say. The affair was becoming contagiously Lewis Carroll. Suddenly he had an inspiration. "You're right, Ransom," he said. "It's perfectly right that we should keep open minds, you as well as I. So we'll put it to a test. The machine, I — We'll put the question to a test." He clapped Ransom on the shoulder. "You will write an apology to the machine, phrase it so that it's unmistakably an apology from you to it, and send it through for versification. In that way the machine will be sure to read it. If a response of any sort is forthcoming, we shall have to accept your anthropomorphic premise. If, on the other hand, the machine persists in stuttering these cancels, we may proceed confidently on a physical basis."

Ransom's face was an ode to joy. "I'll do it," he cried shrilly. "I'll do it right now." Wiping his hands on the handkerchief, he hurried to a type-

writer at the end of the room and inserted a blank slip. MacTate watched over his shoulder. "Should sound as official as it can, shouldn't it?" Ransom said. He muttered the words as he pecked them out. "*I, the creator of this ingenious machine. . . . how's that? . . . do hereby apologize for criticizing its rimes and making it angry. . . . Ought to explain, I suppose. . . . It is just that I was expecting something different.*" He paused. "Probably should appeal to its reason, too. . . . *There is no need to go on this way. Please cooperate with us. . . . There.*" Without waiting for MacTate's opinion he jerked the slip from the typewriter and fed it to the machine. "Now." He turned to MacTate. "The answer-impulses work a typewriter here." He pointed. "All we can do is wait." He could not stand still.

Suddenly there was a click. Both men leaned over the typewriter as it tapped out the response.

The God is sorry for irascifying  
The clever robot in re versifying  
But of His expectations is dissanguine  
And bids it Cancel Cancel Cancel Cancel

The tapping stopped. "Cancels again." In Ransom's voice there was a hint of a whine. He peered closely at the typewriter connections.

MacTate pursed his lips. "What do you suppose it was going to rime sanguine with?" Then he looked almost startled. "Unless — do you think it could be using the Rubaiyat stanza? Incredible. How could it know? But if it were, the last rime-word would be —"

"Never mind about the rimes," snapped Ransom. "I just want to make it quite Canceling." He noticed a group of engineers clustered around the center of the machine. "What's wrong down there?" he shouted. His voice shook. His hands were shaking too.

One of the engineers left the group and approached him. The young man smiled apologetically. "More trouble, doc," he said. "Central plexus, all burnt out."

Ransom blanched. "Burnt out? Why? What did you do?"

"Nothing we did. Just blanked out."

Ransom was close to fury. "Listen," he said. "Those things don't just do it themselves. Burn out, I mean. I've got to know what happened. If you —"

"But nothing happened, doc." The young man looked good-naturedly offended. "The circuit just went."

"Don't lie to me. Don't —"

"Now wait a minute, doc."

Ransom's face was livid. "You're lying," he screamed. "You're lying about your damned blundering." He threw himself violently at the engineer.

The young man pushed him back and Ransom fell to the floor. "Don't do that, professor. It's like I told you. Nobody did anything. It just went dead." He looked at the machine queerly and seemed suddenly to forget the little man on the floor. "Dead. Just like it had killed itself."

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*Some issues back we brought you the first of the fabulous scientific and para-scientific adventures of Professor Cleanth Penn Ransom, in which, as you'll recall, he invented a poetry machine so sensitive that it committed suicide when harshly criticized. Now that we have, through the kindness of H. Nearing, Jr. (like Ransom an academician, and like his creation a poet), learned more of the Professor's achievements, we realize that the first episode was relatively rational . . . almost realistic. By gradual steps we plan to lead you further into the wilds of Ransomania. Here the enterprising Ransom, accompanied as always by his Watson-and-Mentor Professor Archibald MacTate, attempts the application of voodoo methods in mathematical pedagogy with curious but logical results.*

## *The Mathematical Voodoo*

by H. NEARING, JR.

"WHO WAS IT whose slave Socrates extracted the Pythagorean theorem from?" said Professor Cleanth Penn Ransom, of the Mathematics Faculty. "From the mind of, I mean."

"Meno," said Professor Archibald MacTate, of Philosophy.

Ransom's eyes brightened. "That's the name of Plato's dialogue. The one that tells all about it."

"Yes."

"Well, it's a lot of nonsense." Ransom stuck out his little belly and began to swing in his swivel chair.

MacTate smiled. "See here, old boy, you're speaking of the man I teach." He tapped Ransom's desk with his finger. "Do I go about carping at Gauss and Newton —?"

"That's exactly the point." Ransom stopped swinging and aimed a forefinger at his colleague. "You can teach your pupils right. Tell them that wasn't just any old slave Socrates was working on. You can quote me." He jabbed his belly with a thumb.

"Rather an obvious conclusion," said MacTate. "What's the trouble? Has someone flunked algebra?"

Ransom waved disdainfully. "Somebody's always flunking algebra. That's nothing. This man has flunked it six times. Twice in summer school."

"You mean to tell me you could find no substitute for a barbarous requirement like —"

"It wasn't us." Ransom shook his head impatiently. "Some dim-witted dean kept coming across an obsolete catalogue listing that no one ever bothered to take out."

"But the boy —"

"The boy." Ransom groaned. "MacTate, I want you to meet the boy. He's coming here this afternoon. You're a philosopher. Maybe you can figure him out."

"He's in your algebra class now, I take it."

Ransom nodded. "And he's a senior, and it's too late for him to drop a course without getting a failure in it, and he sits —"

"Football player?"

"No, that's the funny thing about it." Ransom looked puzzled. "He's naturally dumb."

There was a decorous knock at the door.

"That's him now. He, I —" Ransom swung his chair around, straightened his tie, laid one hand gracefully on the desk and grasped his lapel with the other. Putting on a grave but benign expression, he intoned, "Come in," with a rising accent.

The young man that stepped into the office wore brown slacks, a blue coat, and a yellow tie. He was slight and narrow-shouldered, but his head and hands were abnormally large. About his eyes was a hunted expression.

"Appointment, doc." His voice was an uncertain baritone.

"Ah, yes. Sit down, Finchell." Ransom waved at a chair. "This is Professor MacTate, of the Philosophy Department."

The young man shook hands with MacTate and sat down.

"Now, Finchell," said Ransom, "what seems to be the — ah — core of your difficulties? With algebra, I mean." He looked at the boy piercingly.

Finchell rubbed his nose. The hunted look about his eyes grew sharper. "Well, I don't know, doc. I'm just a little slow, I guess." Suddenly an idea blossomed in his eyes. "My father and grandfather were actuaries. Do you think the vein could be worked out? You know, like a mine?"

Ransom looked at him. The hunted look returned to the boy's eyes. He smiled half-heartedly. "No good?"

Ransom reached into his desk drawer and took out a brown book. He flipped the pages. "This, Finchell, is a grade-school mathematics book. On page — twelve" — he turned a page and pressed it down — "we have a problem that most morons should be able to solve. Here. 'If Farmer Brown's horse eats one barrel of oats every two days, what part of the barrel constitutes his daily fare?' In other words, Finchell, — that's a little difficult in the phrasing so I'll ex-

plain it to you — if this horse eats *one* barrel of oats every *two* days, how much oats does he eat in *one* day?" Ransom noted with joy that the boy's eyes were lit with a dawn of comprehension. "In terms of barrels, I mean," he added. The light in Finchell's eyes died.

"Finchell!" Ransom glared at the boy for a moment, then regained control of himself. He modulated his voice to bell-like tones. "See here." He took a sheet of paper from the desk drawer, drew the outline of a barrel on it, and bisected the outline horizontally. "The horse eats so much of the barrel every two days." He waved his pencil vaguely over the whole outline. "It takes him *two* days to eat so much. See? Now then, in *one* day, he would eat" — he pointed the pencil at the upper half of the outline — "this much. All you have to do is divide one barrel by two days. Right? Now put that down on the paper here. One divided by two." He handed the pencil to the boy.

Finchell looked at the paper as if he had been ordered to jump off a skyscraper. The hunted look about his eyes became poignant.

Ransom smiled at him ingratiatingly. "*One* divided by *two*. You can do it. Go on, write down *one* —."

The boy drew in a sobbing breath and traced a thin vertical line on the paper.

"*That's* it. You've practically got it. Now divide it by two."

Finchell stared at the paper.

"Go ahead. Don't you see? You've practically got it there. How many times does two go into one?"

Finchell dropped the pencil and looked at his mentor with tormented eyes. "It *can't* go in, doc," he said. "It's too damn big."

MacTate hastily pulled out his handkerchief and coughed into it uncontrollably. Ransom stared at his protégé incredulously. Then he dropped the book back into the desk drawer. The boy squirmed in his chair.

MacTate finally controlled his cough and wiped his eyes. "Tell me." He looked at Finchell. "How are you with the multiplication tables?"

Finchell brightened. "Oh, I can do those."

"You can?" Ransom's tone could not quite disguise his skepticism. "Let's see. How much is two — No. Let's make it hard. How much is nine times three?"

The boy fixed his eyes on the ceiling and twisted his jaw off center. For a minute or two he seemed to be chewing an imaginary taffy. Then he spoke. "Twenty-six. No. Twenty-seven."

"My God, that's right." Ransom looked at the boy with wonder in his eyes. "How'd you do that? In your head?"

Finchell dropped his eyes deprecatorily. "Well, yes. Sort of. I did it on my teeth."

"Oh, on your teeth."



"Yes. You see, I figured that one times nine is nine. Everybody knows *that*. So then I put my tongue on this wisdom tooth —" He put a finger into his mouth and pointed. "That's ten. Now I know I have eight teeth on each side of my lower jaw. So the tooth to stop counting with when you're multiplying nine is this one." He pointed. "One past the half of your jaw. You count up to there twice, beginning with ten, and you have three times nine." Finchell smiled with an air of having overcome difficulties reasonably. "It's less noticeable than using your fingers. They don't laugh at you so much."

"Well Ransom, you can't say there's absolutely nothing to work with there." MacTate turned to his colleague. "He can multiply, and that's a start."

"Yes." Ransom glowered at the boy.

MacTate rubbed his chin. "Perhaps if there were some way of giving him confidence — You know. A simple formula of some sort that he could memorize and apply to various sorts of problems."

Ransom studied his protégé and shook his head judiciously. "A rabbit's foot would work better."

MacTate smiled. "You mean something on the order of a football player's talisman?"

"I've seen it work." Ransom looked at Finchell.

Following his colleague's glance, MacTate noticed that Finchell's eyes were shining with a strange eagerness. He hastened to dispel the boy's unseemly interest in this turn of the conversation. "Now, Ransom. Next you'll be tutoring a wax doll containing his fingernail clippings. Voodoo, or whatever it is."

Ransom turned to him with an expression that matched Finchell's. "What did you say?"

"I merely said that it's absurd to suppose that contagious magic —"

"Wait." Ransom aimed a finger at him. "What's so absurd about it? I've read in — lots of places that that voodoo stuff does funny things sometimes. Who knows?" He looked at Finchell. "Who knows what might be best for this man?" He put a hand on the boy's shoulder. "Anything we can do for him is well warranted." He swung back to the desk. "Short of murder," he added under his breath.

"But Ransom. Don't you think — ?"

Ransom gave his colleague a warning glance. "I think it's an idea worth trying." He reached into the desk drawer and took out a fingernail clipper. "Here, Finchell. Let's have some of your fingernails."

Finchell pressed his fists against his stomach and shrank back into his chair.

"What's wrong, man?" said Ransom. "This might work for you."

"I —" Finchell gasped. "I don't have any fingernails, doc. I bit them all off trying to do algebra."

Ransom laughed with strained sympathy. "Is that all? Well, your hair will

do just as well." He whipped out a pocket knife, opened it, and sliced off several strands of the boy's hair. "Now, MacTate and I will make this wax doll this afternoon. And tonight" — Ransom clapped the boy smartly on the shoulder — "tonight I wouldn't be surprised if you found mathematical concepts suddenly — generating in your mind." He laughed, rather too heartily. "Tomorrow in class we'll see what's happened."

Finchell got up, clasped Ransom's hand fervently in both of his hands, and looked earnestly into the little man's eyes. "Thanks, doc. Thanks —" He turned and left the room.

When the door had closed behind Finchell, MacTate looked at his colleague. "My dear Ransom —"

"Now, it isn't going to hurt to try this, MacTate. The boy is one of those low mental types that can be helped by superstitions. If we can teach him any mathematics at all, by any means at all —"

"But if he tells anyone, you'll be the laughing stock —"

"He won't tell anybody." Ransom waved a deprecatory hand in the direction of the door. "Didn't you hear him say how he counted on his teeth instead of his fingers so people wouldn't laugh at him? He's scared to death people will find out he's dumb."

"But he told you about the teeth-counting."

"All right. That's different. He was confessing to a — diagnostician. But this voodoo —" Ransom made a face.

"Well, I hope you're right. By the way —" MacTate looked at his little colleague curiously. "Do you really intend to make a wax doll?"

Ransom looked up with a sneer that slowly faded into an expression of suspicion. "Is there any good reason? Why I should, I mean?"

MacTate looked thoughtful. "Disregarding the ethical consideration, it occurred to me that if you have sized up the boy correctly, he is just the sort to insist on seeing the doll. Better have a few of his hairs sticking out of it, too. If this scheme is to succeed at all, it has to be quite circumstantial."

Ransom sighed. "All right. I'll make a doll." He slapped the desk with his hand. "But I'm *not* going to teach it algebra."

MacTate did not argue the point, but later he wondered, if he should not have argued it. From time to time as he lectured to his classes the next day, he would catch his thoughts wandering to Finchell and the wax doll. The day after, he was in Ransom's office again.

"Well, Ransom, how's your boy coming along? What's his name? Finchell."

Ransom glared at him.

"No change, I take it." MacTate glanced over the desk. "Do you have the doll here?"

Ransom opened his bottom desk drawer, took out the doll, and set it on his

desk. About six inches tall, its body had been painted brown and blue, with a yellow streak to represent a tie. From the top of its head rose a quincunx of hairs embedded in the wax. Its features were vague but somehow sinister.

"You were right about one thing." Ransom turned the doll around to look at its face. "Finchell showed up here the next morning and asked to see this thing. Even wanted to know how I went about teaching it." He smiled reminiscently.

"What did you tell him?"

"Oh, I gave him some kind of double talk. Something about going through the book with it step by step. I don't remember —"

"Did he believe you?" MacTate turned the doll around again.

"What?" Ransom stared at him.

"Was he convinced that you really had tutored the doll?" MacTate waved his hand. "Or do you think he saw through you?"

"Of course he did. Believe me, I mean." Ransom looked confused. "I think he did. How can you tell what a boy like that is thinking? If he thinks at all. He didn't press the point, anyway."

"I see." MacTate brushed his finger over the hairs on the doll's head.

Ransom's eyes narrowed. "Look, MacTate. What are you getting at? Why shouldn't the boy believe me? I made the doll and showed it to him, didn't I? Isn't that —?"

"Ransom, old boy." MacTate put his hands on the desk and leaned forward. "As an old friend I may observe without offense that you are one of the world's worst liars. And as I said before, a trick of this sort has to be as circumstantial as possible. Now, the boy's mathematical ineptitude does not necessarily preclude penetration with respect to human reactions. Maybe he can't learn your algebra, but he probably can size *you* up better than you think. If you want my advice, I think you should go through a book with this doll — step by step, as you said — so that you can assure the boy unequivocally —"

"Wait." Ransom looked outraged. "You want *me* to teach algebra to this — this —" He gestured toward the doll. "My God, MacTate. Everybody'll think I'm crazy."

"You pointed out yourself that the boy probably won't mention the arrangement to anyone."

"But, MacTate. Can you picture me, now —"

MacTate shrugged. "Suit yourself, old man. I'm only telling you what I think."

Ransom leaned his elbows on the desk and put his jaw between his hands, looking ruefully into the distance. "All right. I said I would try this fool thing, and I will. Go away, though, MacTate. I won't do it in front of anybody."

Next morning, the ringing of his office phone roused MacTate from a nap

induced by the *Journal of Aesthetics*, open on his desk. Ransom's voice, on the other end, was strained and excited.

"MacTate. He worked a problem. This morning."

"Problem? He?" MacTate was not yet fully awake. "Who?"

"Finchell. Who else? He worked a problem in class all by himself. I'm not exaggerating."

"Oh, Finchell. Yes. He worked a problem? What kind of problem was it?"

"An *al*-gebra problem. What's the matter with you, MacTate? You asleep or something?"

"No, no. I meant was it a multiplication problem, as before, or something more difficult. You say it was an algebra problem? Nothing terribly hard, I trust."

"No, nothing terribly hard," Ransom trilled ironically. "Just a little thing involving the binomial theorem, that's all."

"Ransom. You're pulling my leg."

"Look. MacTate. Oh my honor as a — Look. I swear by everything I —"

"The binomial theorem." MacTate tasted the thought. "You're really serious about this?"

"On my honor as a —"

"And it was entirely correct? No indication that someone had done it for him to memorize —?"

"Absolutely not. I made him do it three times with different signs and once with different exponents. He's got it down. The binomial theorem, I mean."

"Just a moment, Ransom. Did you teach the doll anything yesterday?"

"What if I did?"

"What was it you taught it? Think."

"Why —" Ransom's voice dropped almost to a whisper. "I guess it was the binomial theorem."

A fortnight later Ransom informed his colleague that Finchell, having mastered algebra and analytic geometry and bitten deep into calculus, had transferred to a mathematics major. "We're going to let him satisfy requirements by taking special examinations," said Ransom. "By the end of the year he'll know more mathematics than a lot of members of this department, anyway." He laughed. "What a boy. I still feel like a fool teaching this thing" — he patted the doll on the head — "but it's a — unique experience, covering a book a week and knowing that somebody's learning everything you teach. I almost know how it feels to be a coach."

"Well, you're tutoring a team, so to speak." MacTate smiled.

"And how they click. Maybe we should teach everybody that way."

MacTate shook his head judiciously. "No. Won't do. There are too many geniuses on this campus already."

"But really." Ransom set the doll on the edge of his desk. "Finchell is a real genius. Or this doll is, I don't know which. Next week I'm going to start them on complex variables." He tripped the doll with his hand and watched it flip over into the wastebasket. "I wonder how long it would take them to learn all the math I can teach." He reached into the wastebasket and set the doll on the edge of his desk again.

MacTate looked at him thoughtfully. "It's possible that mathematical *gestalten* are already forming in Finchell's mind that have never happened to shape up in yours. It's a matter of juxtaposition and attention and general experience, isn't it?"

"But what about Socrates and the man's slave? You remember. In Plato. How you're born with math in your head, and don't have to learn it but only be reminded of it." Ransom tripped the doll again and sent it spinning into the wastebasket. Its head struck the edge of the metal container with a loud clang.

"Aren't you afraid you'll break that thing, Ransom, playing with it that way? I wonder what would happen if you did."

"It won't break," said Ransom. "Special grade wax. I do this all the time."

"Well, as for Meno's slave" — MacTate's eyes twinkled — "you yourself have assured me that the notion of innate mathematical concepts is untenable. 'A lot of nonsense,' if I remember correctly." He looked at his watch and rose. "So that takes care of that. I have a class in five minutes." He went to the door and then turned around. "Don't forget to take your doll out of the wastebasket. Heaven forbid we should nip a genius in the bud by losing his psychic control."

From time to time during the ensuing months MacTate heard from his rapturous colleague concerning Finchell's new triumphs. Then one day he was summoned by phone to Ransom's office to hear something "terribly important." When he got there, he found the little man smiling with something like transport at a sleek young man in a well-fitting gray suit who sat before his desk. MacTate stared at the young man trying to place him.

"MacTate, you remember Finchell." Ransom beamed.

As the young man rose to shake hands with him, MacTate almost rubbed his eyes. Gone was the self-consciousness, gone the hunted expression about the eyes, gone the rabbitiness of the mathematical idiot whom he had seen here only a few months before. The person shaking his hand was mature and nearly handsome, radiating intelligence and competence. His handclasp was almost numbing.

"I have not forgotten that my career began with a suggestion of yours, sir. I am happy to see you again." Gone, too, was the uncertain voice. Finchell spoke in an enormous bass.

"Look," said Ransom as the others sat down, "I want some of the credit

here, too. I was right that time about Socrates and the slave, MacTate. It's a matter of ability and experience. Mathematical aptitude, I mean. How did you put it? Juxtaposition and attention."

"You mean Finchell knows something you haven't taught him?" MacTate looked at the young man with interest.

Ransom pretended to wince at the understatement. "MacTate, Finchell knows something no other mathematician yet born has discovered. He's solved the Problem of Dirichlet."

"He has? What on earth is that?"

"Dirichlet was Gauss's successor at Goettingen. Among other things, he tried to prove that a region bounded by a single curve, like a slice of the earth's surface, for example, can be projected isogonally and point for point on a circle. In the case of the earth it amounts to reproducing a convex surface on a plane, like a map. Well, to prove it, he tackled an analogous problem in the calculus of variations. The calculus problem was to find a function,  $u$ , which with its first derivatives is continuous in the region to be projected, which has continuous second derivatives, and which makes a minimum of the integral — I won't go into details. Anyway, for a while they assumed that a function of this sort really exists, and they called that method of solving the problem Dirichlet's Principle. Then a fellow named Weierstrass showed that the reasoning was insufficient. Now Finchell" — Ransom looked at the young man with almost maternal pride — "Finchell has proved definitively the existence of the function  $u$ ."

MacTate looked at Finchell and nodded benignly. "Quite something, I imagine."

"The department went over and over it," continued Ransom, "and then sent it every place for checking — Chicago, Princeton, London, every place — and nobody could find anything wrong with it." He beamed at the young man again. "Finchell already has an international reputation."

Finchell laughed, richly and somewhat pompously, and stood up. "Now, Professor, you're likely to make an egotistical ass of me. I'd better get back to my researches before you do so." He seized MacTate's hand, and smiled heartily. "A great pleasure to see you again, sir." He turned briskly and left the room.

MacTate looked after him reflectively. "And just a few months ago —"

"My God, do you remember that?" Ransom screwed up his face. "To think how I was hoping something horrible would happen to him. And now he's the pride of the University. Next week he's going to read a paper on the function  $u$  in the public lecture series. Only student they ever let do that. And some of the biggest wigs in this part of the country are coming to hear it."

"Well." MacTate looked thoughtful. "I'm glad to hear of the happy event."

I suppose Finchell's career must lie in mathematics now. I just wonder what he's going to do when you stop teaching that doll. Have you tried to wean him yet?"

"No." Ransom took the voodoo doll out of his drawer, looked at it, and set it on the edge of his desk. "But he won't need it much longer. He's working on a critique of Einstein's unified field theory — you know, about gravitation and electromagnetism being the same thing. Going to read a paper on it at the convention next summer. So I've got to take him through complex tensors. And then we can pull this hair out and —" he flipped the doll into the wastebasket — "throw this away."

"Have you mentioned that to him?"

"No. Why should I? He's doing all right just the way things are."

"You don't think he might resent your proposal?"

Ransom took the doll out of the wastebasket. "I don't see why he ever has to know about it. He hasn't asked about the doll for a long time now. Probably forgotten about it. As a matter of fact" — his eyes twinkled — "Finchell seems to be interested in a different kind of a doll lately. Girl that sings downtown. Name of — Dolores something. Anyway, he's worked up such an interest in music that I'm almost jealous." He grinned.

MacTate waved at the doll. "I wonder if that's jealous, too."

"MacTate. Will you stop worrying about the doll. Anybody would think you took this voodoo thing seriously. I have to keep fooling with it so he won't think I'm lying to him, but that's no reason to carry on as if there were something — valid in it. I give him the same assignments I teach the doll, and he works them out for himself, that's all." Ransom set the doll on the edge of the desk. "Someday when he's a doddering old professor he might remember and say, 'Ransom, my old friend and benefactor, what ever happened to that silly wax voodoo you made of me?' And I'll clap him on the shoulder and say, 'Finchell, you were dreaming. There never was any such thing. All you needed was a little confidence, and —'" he flipped the doll into the wastebasket — "'I gave it to you.' So stop worrying."

MacTate wished that Ransom's blandness were contagious. He could not overcome a sense of foreboding, a feeling that the whole thing had been wrong to begin with and was now out of hand. But he consoled himself with the reflection that it was not really his affair, and for the next week he avoided his little colleague's office so that he would not have to think about the matter.

But then one morning his office phone woke him from a *Journal of Aesthetics* doze again, and Ransom was wildly insisting that he come over at once.

"What is it this time?" MacTate said sleepily. "Has Finchell discovered the thirteenth dimension?"

"MacTate. Weren't you at the lecture last night? I know I told you —"

"What lecture? You mean Finchell's? On the function — what was it? No, I'm afraid I wasn't there. I —"

"Well, neither was Finchell."

"What?"

Ransom had hung up. MacTate lost no time in getting over to his office. The little man was pacing restlessly up and down.

"MacTate, why should he do this to me? Why? I make a great mathematician of him, have his problem checked for him, put him in the lecture series and invite the big wigs to hear him. And then he disappears. Without a word."

"What did you do? Cancel the lecture?"

"Couldn't. Everybody was already there. We had to let the Dean talk about methods of teaching rapid calculation. It was — dismal." Ransom sat down and held his head in his hands. "Mathematically speaking, the University is in the dog house."

MacTate looked thoughtful. "When did you last see Finchell?"

"Let's see. This is Tuesday." Ransom paused a moment. "Yesterday I figured he was resting up for the lecture, so I didn't look for him. The weekend doesn't count. Thursday and Friday I was out of town. I guess it's been almost a week."

"Old man." MacTate put a hand on his colleague's shoulder. "Have you inquired at the jails? Or the — hospitals?"

Ransom gasped. He looked past MacTate with glazed eyes. His lips formed the word "morgue." He grabbed his hat and darted to the door. "Let's get down there."

After a week or so of frenzied inquiry, between and after classes, at the morgue, the bureau of missing persons, the police department, the public health service, and five or six insurance companies, Ransom was beginning to suspect that Finchell had been shanghaied for service on a ship engaged in illicit trade, while MacTate favored the theory that the doll had contracted contagious amnesia from striking its head on the rim of the wastebasket.

"You know," he said one day as they sat in Ransom's office, wearied by the usual rounds, "I wonder if there *could* be any connection between the doll and Finchell's disappearance. If he sensed that it wasn't cared for properly —"

"Who doesn't care for it properly?"

"When you flip it into the wastebasket, you know, it sometimes strikes its head against the edge. Have you ever noticed whether it's chipped or —?"

"Of course it's not chipped." Ransom looked offended. "I should know, shouldn't I, working with it all the time?"

"When was the last time you did work with it?"

"Why, it was — What does that matter? Look, I'll show you." Ransom opened the bottom desk drawer and reached into it. "You can see for yourself



that it's just the same —" He opened the drawer wider, bent over it, and rummaged about in it. "Funny. I'm sure — Maybe I put it in this one." He opened the drawer above and rummaged in it. Then the drawer above that, and finally the central drawer at the top of the desk. He looked at MacTate in bewilderment. "What happened to it?"

"How about the wastebasket?"

They both leaned over the wastebasket, nearly bumping heads. Ransom reached in and threw out several balls of paper and a candy wrapper. There was no doll.

"Well," said MacTate, "there may be more to this than —"

"MacTate. Listen. What could have happened to that doll? We've got to find it. We've got to find the person that stole it." Ransom's eyes were anguished. "But who would want to steal it?" He wrung his hands.

There was a knock at the door.

"Now who — ?"

The door opened slightly and a head appeared around it.

"Professor Ransom?" The visitor came into the room. He wore blue slacks and a maroon jacket, and his silk shirt was open at the neck. In spite of the waving hair and newly grown mustache, Ransom recognized his erstwhile protégé.

Finchell moved languorously to a chair, dropped into it, and smiled fatuously at Ransom. "I'm leaving the University, Professor, and remembering that you were my adviser, I felt that I ought to let you know." He spoke with a peculiarly meticulous articulation and resonant, pear-shaped tones.

"Well now, that's damned decent of you, Finchell." Ransom was unable to sustain his sarcasm. "Where have you been, you Judas?" he burst out. "Why did you disgrace me at the lecture? Why did you keep me running to the morgue and the — ?" As if suddenly realizing the futility of his rage, he stopped and looked at Finchell appealingly. "Finchell — why?" he whispered.

Finchell looked mildly astonished at Ransom's outburst. "Lecture? At the morgue, you say?" He squeezed his eyes shut and drew a hand gracefully across them. "Yes. I remember. There was something about a lecture. But not at the morgue, was it? Well," — he opened his eyes — "I trust I missed nothing indispensable."

Ransom was speechless. MacTate took over. "You say you're leaving the University?"

"Yes." Finchell put on a supercilious expression. "Not that I disapprove of the sort of work you people do here. It has its place. But as Dolores says, when one's art is at stake —" He smiled tolerantly. "I'm to have my final audition tomorrow, and waiting for a degree from the University would delay my career for some months. Not that I disapprove of degrees, as I said, but —" He ges-

tured gracefully with his hand. "You see how it is." He stood up. "Nice knowing you, Professor," he said to Ransom. "I'll try to remember to send you tickets sometime." He turned to the door.

"Finchell." MacTate called after him. "One last thing before you go. Does the function  $u$  mean anything to you?"

Finchell turned around. "The function  $u$ ?" He squeezed his eyes shut and touched them gracefully with his hand. "Afraid not." He opened his eyes. "Sounds like one of those frightful mathematical things. I never could do math." He turned again and swung from the room.

MacTate sighed. "Well, I hate to say I told you so, but I knew you should have been more careful of that doll."

Ransom started. "The doll! MacTate, call him back. We forgot to ask him what he did with the doll."

"What makes you think he did anything with it?"

"But we're the only ones who knew. Who else but —"

"I'm not so sure." MacTate shook his head. "Anyway, my guess is that the person who empties your wastebasket is the one who can tell us most about the doll. Who do you suppose that would be?"

Ransom looked at him. "Do you think —?" He stood up. "Let's find out."

From the Director of Maintenance, they went to the Superintendent of Buildings and Grounds, the Supplies Coordinator, the Foreman Janitor, and the Assistant in Charge of Washrooms and Waste — and finally found the emptier of Ransom's wastebasket filling soap containers in the School of Business Administration. He was a wiry man of indeterminate age.

"Doll?" he said in answer to their questions. He rubbed his nose reflectively with his forefinger. "Oh, the little doll. Painted with colors. Yes. I find him in wastebasket. Two, maybe three weeks ago sometime. I am taking him home for the baby, but he's lost." He shook his head sadly.

"How could you lose a thing like that?" Ransom was annoyed. "It was at least —"

"Just a moment, old man." MacTate stepped forward. "Tell me," he said to the janitor, "did you lose the doll at home?"

The janitor pondered, then shook his head. "No. When I get home, he's gone. I don't tell the baby. She's —"

"Where did you go after you left the University with the doll?"

The janitor turned his head, pursed his lips, and pressed a finger against them. Suddenly his eyes lit up. "Ah. Now I remember. I go to the opera, where it plays *Meistersinger* by Richard Wagner. In the second act I go. I am apprentice."

"You mean where all the apprentices come out and riot because what's his name is courting one of their fiancées by mistake?"

The janitor smiled. "That." He nodded. "That is right."

"And did you have the doll with you when you went on the stage?"

"Yes. I have him in my pants pocket." He patted the seat of his overalls.

"Wrap up in — I think brown paper. Under my — what? Costume."

"Then after you came off the stage, did you look to see if the doll was still there?"

The janitor shook his head and held a fist to one eye. "When I am come off the stage, I have the — what? Black eye. They forget it is only play. I don't think about nothing else till I am home. Then he's gone. The doll."

"But you think you must have lost it during the riot scene? On the stage."

"I go back after and look. Next day. I am smuggler in *Carmen* by Georges Bizet. I ask stage hands." The janitor shrugged. "They do not see. They think, I think too, some star pick him up. Stars very — what? Superstitious. They find something on stage, anywhere, they pick him up. Hide for good luck. Never tell nobody."

"Well, Ransom." MacTate turned to his colleague. "That's that. Your voodoo is probably sitting in some diva's dressing room, listening to arias and scales —" He stopped, suddenly struck by a thought. "Just a moment. Didn't you tell me Finchell has a friend who sings? What kind of singer is she? Do you know?"

Ransom frowned impatiently. "What's that got to do with —" His mouth fell open. He looked at MacTate, then jabbed a finger at him. "Opera."

"Wouldn't it be a coincidence — ?" MacTate shrugged.

Ransom groaned. "An opera singer. Oh, God. And to think he was ready to tackle Einstein. MacTate, we've got to get that doll back." His eyes blazed. "I'll get a search warrant —"

MacTate shook his head. "No use, old man. They'd only make a fool of you." He looked thoughtful. "Anyway, didn't Finchell leave notes of any sort on this electromagnetism thing? Illustrative figures or something like that."

Ransom nodded ruefully. "I've got his notes," he said, "and they look like the greatest thing since the Theory of Special Relativity. But nobody will ever know now."

"Why not?"

"Well, to save time in his figuring, Finchell invented two new symbols. Without bothering to put down what they mean. Crazy things. One he called a 'horse.'"

MacTate looked at him, startled. "And the other — ?"

"A 'barrel.' What I don't get —" Ransom frowned with perplexity — "is where he could have picked up crazy names like that."

Apparently there is no sphere of human activity that Cleanth Penn Ransom will not attempt to jar out of its accustomed orbit. Now we see the great man as musician, seated one day at the organ and even more ill at ease than his audience. As is to be expected, it does the patient MacTate no good whatsoever to seat himself in the very last row of that audience.

## The Malignant Organ

by H. NEARING, JR.

"Musica," said Professor Cleanth Penn Ransom, of the Mathematics Faculty, "*est arithmetica nescientis se numerare animae*." He brandished the green bottle he was holding. "In other words —"

"*Animi*," said Professor Archibald MacTate, of Philosophy.

"What?"

"*Animi*." MacTate started down the steps of the University hospital. "*Nescientis animae* means 'the innocent soul.' You mean *nescientis animi* — 'music is the arithmetic of the subconscious mind.'"

"All right." Ransom clutched the green bottle to his little belly and trotted down the steps with MacTate. "The words don't matter anyway. What Schopenhauer means —"

"Leibnitz, old boy."

"Now listen, MacTate." Ransom reached the bottom of the step, turned, and jabbed a finger at his colleague. "It's Schopenhauer. I just read it. It's in —"

"He quotes it, old boy. From Schelling, if I remember rightly. Who in turn quotes it from Leibnitz." MacTate pursed his lips. "With all due respect, I'm not sure any of them knew what he was talking about."

"Well, it's worth looking into, anyway," said Ransom. "What if you could learn to work a harmonic analysis by ear, or feel a differential equation in your bones. Like music."

MacTate rubbed his left eyebrow. "I'm not sure the bones are constructed to do that sort of thing very well. I rather think —"

"No, no. Not your bones." Ransom shook his head impatiently. "It's your brain. You feel things *in* your bones, but you do it *with* your brain." He held up the bottle. "So that's what I'm going to work on. The brain."

MacTate smiled. "Rather an odd shape for a brain, don't you think?" "Don't be silly, MacTate. This isn't a brain. It's a brain tumor."

"A what?" MacTate looked at the bottle warily.

"Brain tumor. Special kind, very rare in the brain." Ransom tucked the bottle affectionately under his arm. "They took it out old Prof. Schweingeweine this morning. You know. In the Music Department."

MacTate stared at the bottle with an expression of disgust that threatened to turn into nausea. "Good heavens, Ransom. What do you want with a thing like that?"

"Well, when he began having these headaches not long ago," said Ransom imperturbably, "he started to hear music when there wasn't any. Schweingeweine. Then they opened him up and found this thing between his first and second temporal lobes — where the sound-memory center is. You know. So I figured if he was sort of calculating music, you might say, it would be a good idea to experiment with the thing that was doing it. To him, I mean. He told me before the operation I could have whatever they took out of him. So I put it in some preservative, and now I'm going to —"

"See here, Ransom." MacTate backed away a few steps. "If you had me meet you here to be a party to your ghoulish —"

"No, no." Ransom laughed benignly. "I need you in a purely professional capacity. Nothing to do with this." He beckoned to MacTate and set off down the street. "I've got to go over to the auditorium to practice, and you being an aesthetician —"

"Practice?" MacTate looked suspiciously at the bottle.

"Now stop looking that way, MacTate. I tell you it's got nothing to do with the tumor. This tumor, I mean." He grinned. "It's the Dean's wife. She's sort of taken this sorority under her wing. The Sigma Epsilon Xi, or whatever it is. And she runs it like a women's club. Goes around hogtying the faculty for free lectures and stuff. She's making me play the organ."

"Why, Ransom. I didn't know you —"

"She invited a bunch of us to a cocktail party and tricked us into admitting if we had ever taken lessons on anything. First thing we knew, she had this musicale arranged. She wants to sort of improve the sorority culturally and launch the new electronic organ with one blow. Or whatever it is you do to virgin organs." Ransom waved toward the center of the campus. "You know. The one they got for the Music Department to practice on. In the basement of the auditorium. I'm the lead-off man on the program, so I've got to start getting in shape. It comes off next Wednesday at — what did she call it? 'Tea time.'"

MacTate smiled. He was beginning to forget his colleague's ghouliness. "What particular selection are you rendering?"

"Massenet's 'Élégie.' I'm going to hop up the tremolo to give it lots of schmaltz. I want those girls to feel music till it hurts." He brandished a fist and grinned. "That's why I need you. For advice on the esthetic effect."

The new organ was in a hall at the end of the corridor in which the Music Faculty had their offices. Ransom set his bottle on top of it, turned it on, and tried the tremolo at full. He shook his head critically. "Got to be wigglier than that. Where's the tubes?" He looked around. "Here." He opened a door in the wall behind the organ and reached inside. "Push down a key, MacTate. Let's see how it is now."

MacTate laid a gingerly finger on a white key toward the center of the lower manual. The organ emitted a hideous grating bleat.

He jerked his finger away. "Good heavens, Ransom! What did you do to it?"

Ransom nodded. "It's a little rich, I guess." He reached into the tube closet again.

A door banged down the corridor and a series of irate footsteps clanged on the stone tiling.

"What are you doing here? Get away from that organ. Don't you know it's the property of the Music Department?" A slender young man with neurotic eyes swept out of the corridor. He clutched his hair with both hands. "How can I work when you —"

"What are you talking about, Flugel?" Ransom pulled his head out of the closet. "This organ is the property of the whole —"

"Oh. I might have known it was you, Ransom," Flugel said nastily. "For your information, the Music Department keeps a schedule of people who have permission —"

"Look, Flugel." Ransom scowled. "You don't have to start throwing your weight around just because Schweingeweine's in the hospital. I'm supposed to practice here, and I'm going to." He reached into the closet again.

"Ransom! You get out of there." Flugel lunged wildly around the organ to guard the closet. As he passed Ransom's green bottle, his shoulder struck it, knocking it with a dull crash onto the manuals. The organ bleated again. From the manuals something dripped down on the pedals.

"Flugel! You damned, neurotic —" Ransom looked at the organ with horror-struck eyes. "What have you done? That was Schweingeweine's tumor. You've — ruined it."

Flugel clutched his hair with both hands. "Wouldn't you just. Wouldn't you just. Look at it. Glass all over everything. And that foul —" He swung around to face Ransom. "Look here, Ransom. You get busy and clean this up. We can't —"

"What's the matter with you, Flugel? You knocked it off." Ransom stuck

out his little belly pugnaciously and advanced on the wild young man. "Besides, you've ruined —"

"Ransom." MacTate was pale, and his mouth was curled oddly. "Let's get out of here."

Ransom looked at him. "All right." He glared at Flugel. "But you haven't heard the last of this, Flugel. You can't go around ruining valuable specimens of —"

"Ransom!" MacTate headed for the corridor.

"Now you wait a minute." Flugel waved his arms violently. "You can't go away like this and leave —"

Ransom glared at him again, turned on his heel, and followed MacTate.

MacTate recovered eventually by concentrating on the sense of relief it brought him to reflect that Ransom's devious biological intentions had been thwarted. Ransom, on the other hand, soon forgot the loss of his valuable specimen in worrying about the success of his performance.

"I can't go back there to practice," he told MacTate the day before the musicale. "I'll break his neck if I see him again. And I keep rehearsing on the piano, but it isn't the same. I don't —"

"Well, old boy. Just do the best you can. Nobody's expecting to — that is, I don't want to belittle the program, but you *aren't* a professional musician. It will come off better than anyone expects, I'm sure."

"Damn it, MacTate, you sound like the Dean's wife. That's what I mean. I can't be that bad. But if I go down there to practice —" Ransom sighed.

When the fatal hour arrived the following afternoon, the hall in the basement of the auditorium was half-filled with young ladies, looking polite, from whom radiated faint but pervasive auras of party perfume. A few of them were accompanied by desolate-looking young men. In the back row, as far from the organ as he could get, sat MacTate.

The Dean's wife, after enunciating a few thousand well-chosen words about the higher things, introduced Ransom and sat down behind her bosom among the performers in the front row.

Ransom got up, went to the organ, and grinned nervously at the audience. The Dean's wife clapped convulsively, setting up sympathetic vibrations among the girls behind her.

Ransom sat down at the organ, turned it on, and bent sideways to put his foot on the proper pedal. Between the pedals he saw lines of a dark red substance. He straightened up and looked at the manual keys. In the cracks between them were similar dark red lines. They did not occur haphazardly but appeared in every crack. He touched one and found it something like hard rubber. He shrugged, sighed, set a few stops, and pushed down on a pedal E to begin the "Élégie."

Abruptly through the hall boomed the theme statement of Bach's *Passacaglia in C minor*. Ransom sat frozen, staring at the manuals. When the first variation began, he came to and tried pounding on the keys and stamping on the pedals to make them stop. But the keys and pedals not participating in the variation were unyielding, as if locked in place. He looked at the audience, saw rows of open mouths, and began to move his arms up and down the manuals with the music. There was nothing to do but fake it to the end.

The organ seemed to enjoy itself more with each variation. It depressed the volume pedals, flicked stops, invented strange mixtures. It howled exuberantly in the crescendos, then sank to sinister mutterings. It roared, whimpered, caroled, cursed, seduced. Ransom found himself wishing he were in a position to appreciate it.

But as the *Passacaglia* came to its final note, he remembered that organs cannot work without power. He snapped the switch just as the last sound was dying, sprang off the bench, and began to mop his face with a handkerchief.

The audience sat stunned for a moment. Then the Dean's wife was on her feet, and the girls began screaming an ovation. The Dean's wife and his fellow performers charged at Ransom with breathless compliments.

"Had no idea —"

"Tremendous —"

"Must have more —"

"Yes, forget about us. We want —"

"Do you know the Widor symphonies?"

"No, no. MacTate!" Ransom staggered back from his admirers. "No, listen, I — MacTate!"

Suddenly, from the corner of his eye he saw the red light on the power switch glowing like a baleful eye.

"My God. I —" He tore himself away from the Dean's wife, leaped back to the organ seat and began to move his arms just as the thing started a Franck chorale. His admirers returned happily to their seats.

When the chorale was over, Ransom clicked off the power switch. Immediately it was clicked on again. The organ began a Frescobaldi *ricercare*. From that it went to the "St. Anne Fugue," a Schumann canon, and three transcriptions from Chopin, and finally began to improvise variations on *Down by the Old Mill Stream*.

Ransom, in spite of the pressures of his situation, managed to feel a lapse of dignity at this point. It occurred to him suddenly that he was probably stronger than the organ. At the end of the next variation he clicked off the switch and pressed down on it with the forefingers of both hands. He could feel the thing trying to push up again, but it was no match for him. He



leaned firmly on the switch and he looked helplessly at the Dean's wife.

She put on a sorrowful expression, rose to her feet, and swirled around to face the audience. "Girls," she said, "I am sure I speak for all of us when I say that we are all Deeply in Professor Ransom's debt for giving us this Beautiful, Beautiful Music. And to show how Deeply we appreciate the Strain which he has been under in Wedding us to these Beautiful selections, I should like to ask all of us to leave Quietly, without further applause, until we can prevail upon Professor Ransom to Again Enchant us with his Beautiful playing."

The girls looked startled, as if Ransom had just died, and began to tiptoe out of the hall. The Dean's wife went up to Ransom. For a moment he thought she was going to hug him to her Bosom, but she only beamed ecstatically, clasped her hands together, and made an emotional sound in her throat. Then she turned and followed the girls.

MacTate went out with the others. Ransom began swearing under his breath when he saw him go. But when everybody was gone, MacTate stuck his head around the edge of the corridor, surveyed the empty hall, and came back in.

"You can let go of it now, old boy. What on earth happened?"

Ransom sank weakly on the bench and mopped his face again. The organ immediately turned itself on and the pedals began to play *The Old Rugged Cross* while the manuals joined in contrapuntally with a Debussy piano prelude.

"MacTate. Maybe I'm crazy, but how else can you explain it? It's Schweingeweine's tumor. It can't have his temporal lobes any more, so it's taken over the organ."

"But, Ransom —"

"Well, what else could it be? You saw it spill down between the pedals the other day, didn't you? Flugel probably couldn't get it out. And I'm not sure what that preservative —"

"But wouldn't we have heard from Flugel about it before this? He's hardly the sort to be reticent —"

"No." Ransom shook his head. "He probably hasn't been near it since he cleaned it up. He's not an organist, and I think the Dean's wife sort of laid down an unwritten law that it wasn't to be used till the — launching today." He grinned. "I cheated. That one time. I guess that's why Flugel got so excited."

MacTate looked at the organ thoughtfully. "But how would that keep it from playing itself? She didn't seem to exercise much control over —"

"Now that's the funny thing about it." Ransom aimed a finger at him. "I had a feeling it was just learning how to turn itself on for the first time

today. When I did it. You know." He clicked the power switch off and pointed to it as it clicked itself on again. "See how quick it goes on again now? But after the first piece, it took it a minute or two to figure out how to do it. And didn't it strike you while it was playing that it was sort of feeling its oats? As if it was letting itself go for the first time?"

"Well," MacTate's expression was not quite skeptical, "there was a certain unction — But tell me, old boy, how are you going to break it of turning itself on and playing its own pieces?" He looked around apprehensively. "Is Flugel here today?"

"No." Ransom waved disdainfully. "You couldn't expect a great genius like him to stand listening to an amateur program." He grinned. "But he'll find out what he missed when he comes back." He got off the bench and stuck his handkerchief into his pocket. "Then *he* can worry about breaking it of bad habits. It's the Music Department's property, isn't it?"

"But, Ransom —"

"Come on, MacTate." Ransom headed down the corridor. "It'll serve them both right. Him *and* the organ."

MacTate heard nothing further of the maverick organ until several days later. He was tearing interesting shapes out of the pages of an unrewarding issue of the *Journal of Aesthetics* when his phone rang. Ransom was on the other end demanding his presence at an interview with Flugel. "He's on his way over here to my office. Sounded desperate on the phone. I need you for a witness in case there's a murder."

Flugel was already in Ransom's office when MacTate got there, but no murder had been committed. He was slumped in a chair like a personification of surrender.

He nodded tragically to MacTate and turned back to Ransom. "But, Ransom, I tell you I *know* the thing hates me. I don't know what you did to it, but you've got to undo it. I don't have the temperament for in-fighting like this. I'll do anything you say. I —"

"But I told you, Flugel." Ransom waved his hands demonstratively. "I didn't do anything to it. You did. You spilled Schweingeweine's tumor all over it. And that funny preservative it was in — Listen. You don't think —" He paused thoughtfully. "I mean, there's no reason to think that Schweingeweine hates you, is there?"

Flugel looked up indignantly. "Of course not. Why should he? I do all his work for him."

"Well, then, there's no carry-over there." Ransom looked at him. "You say it's trying to drive you crazy."

"Yes. I *know* it is." Flugel squirmed in his chair. "Somehow it's found out the one piece I can't stand. It's an old hymn. *Shall We Gather by the River*.

Hideous. Goes back to — a childhood experience. But it *knows* I can't stand it, because it plays it over and over, in all keys and all sorts of variations —" Flugel clutched his hair with both hands. "How does it *know* I can't stand it? Unless you told it somehow?"

"But look, Flugel. I didn't know that was your — nemesis. The piece, I mean. Did I?" Ransom looked at him for a moment. "Listen. Did Schweingeweine know you couldn't stand it?"

Flugel looked up. "Why, yes. As a matter of fact, he did. But I —"

"Well," Ransom leaned back in his swivel chair and began to swing, "that's it, then. The tumor used to be part of Schweingeweine's brain, so it's familiar with your — neuroses."

"But what I don't understand," Flugel said hopelessly, "is why it should want to drive me crazy. I didn't do anything —"

"Just a moment, Flugel," said MacTate. "When did it begin to play this hymn?"

"Why," Flugel drew a hand across his forehead, "it was about — No. I remember." His eyes lit up. "It was right after I tried to lock it up. The switch, you know. I drilled a hole in it and put a little chain through it, and then screwed a bracket on the edge of the top manual to lock it to. So the thing couldn't turn itself on." He shook his head sadly. "Next morning I found it had stuck one of those little red wires into the keyhole of the lock and burst it open. Then it began to play *Shall We* —" He shuddered.

"Well, if you tried to frustrate it —" Ransom started to grin. But the sight of Flugel's haggard eyes checked him. "Listen," he said, suddenly sympathetic, "why don't you just take out the whole switch mechanism? Then it can't turn itself on. It's not very bright, because it didn't know how to work the switch in the first place. Till I showed it. Maybe after a while it'll wear itself out trying to figure what we did to it, and those red things will be weak enough to —"

"Professor Ransom!" Flugel's eyes shone with gratitude. He got up and clutched his hair emotionally with one hand. "I'm sorry I ever doubted you. I'm glad I didn't think of it myself, because now I'm sure it wasn't you. I'm — I'm sorry. And thanks." He went to the door. "I can't wait to do it. I'll go do it now!" He darted happily out of the room.

MacTate looked at Ransom. "Do you really think it will work?"

"Well —" Ransom shrugged. "It sounds reasonable. Doesn't it?" He swung thoughtfully in his swivel chair for a moment. "Of course I'm not too sure about it wearing itself out. But if it'll make him feel good to think so —"

"But why does he keep going down there if the thing is driving him crazy?" MacTate cocked a puzzled eyebrow.

"Oh. He told me about that. Schweingeweine has him orchestrating some pieces for the University band and he's scared the old boy will get nasty about it if they're not finished by the time he gets out of the hospital."

"But couldn't he take them home and do them there? Or get a new office?"

"No." Ransom shook his head. "They've got a lot of scores down there he has to use. You know. To steal hot licks from Rimsky-Korsakov and those fellows. Too many of them to move."

"Well, I hope your idea works out all right," MacTate said dubiously.

He was far from confident that so simple an operation as taking out the switch would balk the organ's malicious ingenuity for long. He did not agree with Ransom's estimate of its intelligence. All the rest of the day he puzzled over ways of destroying, or at least immobilizing it without damaging the organ itself. It seemed more logical to do something to the tube closet, to which the thing seemed as yet to have no access. Perhaps take out the tubes. At least the idea was worth communicating to Ransom. The next morning he went to his colleague's office.

"Have you heard anything from Flugel?" He sat down, crossed his legs, and lit a cigarette.

Ransom shrugged. "Not a thing. Yet. Why? You worried about him?"

"Well, you know, old boy, after all he is a human being. Aren't you worried about him?"

Ransom leaned his chin in his hand thoughtfully. "As a matter of fact, I did sort of feel sorry for him yesterday. But I told him what to do, didn't I? I don't see what else we can do. Short of taking the organ apart and —"

"Well, that's what I wanted to see you about. I thought perhaps if we took all the tubes out —"

Suddenly the door flew open and Flugel darted into the room. His cheeks were bloodless, his hair and eyes aghast.

"Ransom! MacTate! I can't stand it any more. I'm going to quit my job. That thing's trying to kill me!" He clutched his hair with both hands.

"Look, Flugel." Ransom spoke in soothing tones. "You've been under a strain lately. Why don't you sit down and take it easy."

Flugel fidgeted and sat down on the edge of a chair. "But you have to believe me. It's ruthless. It's evil. It's — homicidal!"

Ransom laughed blandly. "Now, Flugel. It can't be as bad as all that. Did you take out the switch, like I told you?"

"Yes, yes." Flugel waved his hands nervously. "But it got the wire ends together again. With those red tendrils. And it's —"

"Well, never mind. We'll soon fix that. What's it trying to do? Hypnotize you?"

"No, no! I wish to God it were. It's trying to find a vibration that will kill me. It tries one frequency at a time, and increases the volume till the bones in your head —"

"All right. Let's go down and take a look at it. Is it still doing it? I mean, does it know you're not there? That you've —"

"I don't know." Flugel wrung his hands. "Before I slipped out, I put on a record of myself playing the piano. Loud, so it would think I was — rather fighting back. But it has an uncanny way of —"

"Well, you better come along, in case it's waiting for you to come back. MacTate has a scheme for —"

"I won't." Flugel sprang to his feet and began to sob hysterically. "I won't go back there! I won't! I tell you it's trying to kill me. You can't make me —"

"Now look, Flugel." Ransom looked him firmly in the eye. "Sit down and stop acting like a big baby. Look. It's pretty hard to actually kill anybody with audible waves. If it wasn't, why wouldn't people go around getting killed by organs every day? You could stand it long enough to —"

"But that's what I mean!" Flugel screamed. "The waves aren't all audible. It's got into the tube closet and it's making frequencies you never —"

"My God!" Ransom looked apprehensively at MacTate. "Let's get down there. It's liable to knock the auditorium down before it gets to Flugel. Come along, Flugel. You can wait outside."

They ran out of the building and over to the auditorium. Flugel hesitated at the top of the basement steps while Ransom and MacTate ran on down.

As they came to the head of the corridor, they heard an immense groan, as if all the organ notes were sounding at once, and then a sickening crack, followed by several splintering crashes.

Pieces of the organ were still sliding from the top of the debris when they rounded the edge of the corridor. Sticking out of the heap like fantastic bristles were the ends of what looked like a tangle of wires. The wires were no longer red but blackish, and the stiff ends began to grow flaccid and fall back among the scattered keys of the organ.

"My God, MacTate! It hit its own vibration first." Ransom kicked a splintered pedal.

"The organ's too, apparently."

"No, no. It just tore the organ apart in its death throes. Go tell Flugel he needn't worry any more about —"

"What have you done, Ransom?" Flugel's pallid face appeared around the edge of the corridor. "Good Lord! Don't tell me you had to use an axe." He advanced cautiously to the edge of the debris. "That noise —"

"Don't be silly, Flugel. If I could do that with an axe, I'd hire out as a —"  
A phone rang down the corridor.

"Sounds like mine," said Flugel. "Wait a minute."

For the first time they became aware of the piano record playing in Flugel's office. They heard him turn it off to answer the phone.

MacTate wiped his forehead with his palm. "Well, what do we do with the remains? This is going to cost someone a lot of money."

Ransom grunted. "They've got insurance on it." He pointed to the tangle of wires. "But we better get the tendrils out before they start to putrify." He stooped over and began to pull at one of them.

"Ransom." Flugel came back into the hall. "It's for you. She couldn't get your office, so she thought you might be practicing down here."

"She?" Ransom looked up suspiciously.

"The Dean's wife. Something about when you're going to give another concert. I didn't —"

"Flugel." Ransom stood up. "Look, Flugel. I helped you out with the tumor, didn't I? Listen, Flugel, tell her I'm not here. Tell her you don't know me. Tell her — MacTate! You talk to her. Tell her — Oh, my God! That's what you get for helping people. If I'd just let it drive Flugel crazy. . . ."



*It is quite obvious by now that the researches of Professor Cleanth Penn Ransom know no bounds. No field of human activity or knowledge is wholly safe from his investigations. Now, after combining vitamins with the modus operandi of the lightning bug, he makes a spectacular invasion of the theatre. And in HAMLET no less! You'll quickly discover Ransom's self-assigned role. His patient ally, Professor MacTate, is the victim of triple-casting; with his usual academic aplomb he plays the parts of dramatic coach, prompter — and mental patient!*

## *The Actinic Actor*

by H. NEARING, JR

"THE trouble with most *Hamlets*," said Professor Cleanth Penn Ransom, of the Mathematics Faculty, "is the Ghosts aren't scary enough."

Professor Archibald MacTate, of Philosophy, crossed his long legs. "I don't know," he said. "The Ghost has some pretty scary lines. Even when you read them to yourself —"

"That's just the point." Ransom leaned over the desk and aimed a finger at MacTate. "You read those lines, and you think, my God that's good, and then you go see *Hamlet* some place, and what happens? Somebody comes clomping out, just like any other actor, and murders all that stuff you heard in your head. And you know why? Because the visual suggestions you got in your head from reading the lines aren't there on the stage. The Ghost hasn't — materialized." He grinned at his play on the word, stuck out his little belly, and began to swing back and forth in his swivel chair.

"But isn't that traditional?" said MacTate. "If you overplay the Ghost, you steal scenes from Hamlet himself. When Edmund Kean —"

"Who?" Ransom stopped swinging.

"Kean. Edmund Kean. Greatest Hamlet of them all. Something over a century ago. When he played —"

"Now don't get off on ancient history, MacTate. If you're going back there, go all the way back to Shakespeare. What part did he play in *Hamlet*?" Ransom nodded. "That's right. You think he couldn't have played those other parts if he'd wanted to? Nonsense. He picked the Ghost because he *intended* it to steal scenes."

"My dear Ransom —"

"Now look, MacTate. There's no use arguing about it, because my Ghost is going to be really scary. And Hamlet can go —"

"Your Ghost?"

"Sure. It's going to flash on and off like a lightning bug. I tried it out this morning, and if it doesn't make stage history —"

"Ransom." MacTate raised a finger. "I'm afraid I'm not keeping up with the conversation. Just what is this Ghost of yours?"

"Me." Ransom jabbed a thumb into his belly. "Who else? The Faculty play. You know. Annual benefit for indigent Shakespearean actors. This year we're giving *Hamlet*."

"And you're the Ghost?" MacTate's opinion of the casting director's judgment was clear.

"All right, MacTate. I can't act. All right. But wait till you see. The way I've got it fixed, the Ghost doesn't need to act."

"But, Ransom —"

"Look, MacTate. Does a thunderstorm need to act? Does a — tornado? Not at all. You wouldn't notice whether they were acting or not. They're — sublime."

"And you're going to put on a sublime — what did you say? Lightning bug?"

"Now you needn't be reactionary, MacTate." Ransom started to swing again. "It's a matter of multiplication. You blow a lightning bug up to man size and you've got something."

MacTate smiled. "How do you do it? Stick a flashlight in your mouth?"

"Don't be silly." Ransom stopped swinging. "How could I recite the lines with a flashlight in my mouth? Anyway" — he held his breath for a moment — "this is a real flash. Look." He pointed to the window. "Pull down the shade and I'll show you."

MacTate shrugged, went to the window and pulled the shade down. The room, while not dark, was fairly gloomy.

"Now watch." Ransom held his breath again for a moment. Then he began to intone in a macabre rumble: "I am thy father's spirit, Doom'd for a certain term to walk the night, And for the day confin'd to fast in — fires —"

MacTate started. On "fires" Ransom's face blazed with a greenish light that was concentrated at his eyes in two incandescent coals. It was a cold, hard fire that made his head look something like a huge, fantastically carved jewel. For two or three seconds the light blazed, then slowly faded. Ransom proceeded to rumble: "Till the foul crimes done in my days of nature Are — burnt — and purg'd away."



On "burnt" he flashed again. This time MacTate noticed that the green blaze was heralded by a slight grunt. Ransom continued: "But that I am forbid To tell the secrets of my prison-house, I could a tale unfold whose lightest word Would — snarl — No. Would — harass — No. Would — Damn it, MacTate, I always get stuck there. Anyway, you've seen enough to get the idea. Pull up the shade."

MacTate pulled it up and looked at Ransom, whose face, while a little flushed, was its old self again. "Good heavens. How do you do that?"

Ransom laughed, a little vindictively. "Beginning to change your mind about my acting?" He reached into the top drawer of his desk and took out a brown bottle. "Not much to it, really, considering the effect you get. It's just vitamins. Vitamin B<sub>2</sub> mostly." He opened the bottle and took out a brown pill. "Made it myself. This vitamin B<sub>2</sub> — what do you call it? Riboflavin. Well, if you irradiate riboflavin with ultraviolet rays, it turns fluorescent and gives off a glow that looks practically the same as the stuff in a lightning bug's tail. Through a spectroscope, I mean. So I figured you ought to be able to make your eyes act like a lightning bug, because there's always a lot of riboflavin in the retina. It was just a matter of finding out how." Ransom looked down demurely at the pill in his hand.

"Well?" MacTate motioned him to go on.

Ransom frowned. "I'm not quite sure of the formula, but I've got the general approach down. You see, a lightning bug works this stuff in its tail — luciferin, they call it — with nerves, an enzyme called luciferase and tracheal capillaries — for oxygen. *You* know. So I took some acetylcholine — that's the stuff your nerves make to send electricity through the muscles you want to contract — and mixed it with a mixture of luciferase and riboflavin. And then I had two or three oxygen compounds sitting around in bottles that I was going to experiment with for the oxygen — the compounds, not the bottles. Anyway, I had them all sitting there beside the acetylcholinated riboflavin or whatever you want to call it, when the rat broke out and knocked them over. Awful mess. Some places they got all mixed together, and others —"

"Just a moment, old man. What was it that broke out?"

"A rat. White rat. It was over in the biochem lab. You know. I had all this stuff out on the table, and this rat broke out of its cage and knocked the bottles over."

"I see."

"Well, I caught the rat when he started to eat the riboflavin. I don't know. I guess they were using him for a vitamin-starvation test or something, because he went for it like filet mignon. He didn't eat much of it, of course, because I put him right back in his cage. I had enough left to make these."

Ransom tossed the brown pill into the air and caught it. "But I don't know which of the oxygen compounds he knocked into the riboflavin, or how much."

MacTate looked at the pill. "How did you find out it worked?"

"Oh, I was there the next day when they fed him, and I remembered he liked riboflavin so I put some in his dish. He liked it so much, he ate too fast and got the hiccups, and I noticed every time he hiccuped his eyes lit up. So I tried it on some other rats and it worked. And then I tried it on myself. Now all I have to do" — he popped the pill into his mouth — "is learn my lines."

"Ransom. Who cast you as the Ghost?"

Before Ransom could answer, the door flew open and a little man flitted into the room. He had wide blue eyes that seemed to be perpetually astonished and a sensitive mouth. He perched on Ransom's desk, took off his hat and ran a hand nervously over his balding head. "Ransom, I'm going mad. Just mad. I've come to apologize about this morning, though it wasn't really my fault. I'm just going mad, that's all."

"Pull yourself together, FitzSparrow." Ransom nodded at MacTate. "You know MacTate? This is FitzSparrow, MacTate. Dramatics. He's directing us and playing Hamlet, too."

FitzSparrow bobbed his head at MacTate and turned back to Ransom. "I know I shouldn't have lit into you quite so hard at rehearsal, Ransom, but you really have to learn your lines. With the shadow of Murdbloom breathing down our necks — look, a mixed metaphor, I'm going mad —"

"Look, FitzSparrow," said Ransom. "Why don't you tell Murdbloom you think Bacon wrote *Hamlet* after all. We'll still have to learn our parts, I mean, but —"

"Caught between two fires, Ransom." FitzSparrow shook his head tragically. "What would my colleagues say over here? The only way out is to put on a perfect show."

"Murdbloom." MacTate pursed his lips. "Name sounds familiar."

"Murdbloom," said Ransom, "is the dramatic critic of the *Chronicle*. What's worse, he's head of the dramatics department — over there." He waved, with a just perceptible air of contempt, in the direction of the city's other university. "He thinks Bacon —"

"Yes, I gathered that." MacTate looked at FitzSparrow. "But does he really consider a faculty play important enough to review?"

"My dear fellow," said FitzSparrow. "We may make some use of amateur talent, but —"

"Wait, FitzSparrow." Ransom held up a soothing hand. "MacTate, if FitzSparrow recited 'Mary had a little lamb' at a Sunday school picnic,

Murdbloom would write a review of it. A nasty review, like the ones they write about scholarly books. It's a — fixation with him. FitzSparrow is a sort of personification of anti-Baconianism."

"You're understating the case, Ransom." FitzSparrow looked at him. "But I'm glad you grasp the situation as well as you do, because you see why you have to learn your lines. I don't want to be offensive, but you know I only gave you the part because you nagged me to death for it. And it's too late now for a replacement. My God, Ransom, do you realize we put on our warm-up performance at the mental hospital two weeks from today? I'm going mad. Just mad."

"Don't you worry about me, FitzSparrow. I'll learn them all right."

"It isn't as if we had a lot of expensive props," said FitzSparrow. "We'll all look absolutely undistinguished. Absolutely. So the acting is everything. If we don't —"

"Ransom." MacTate raised his eyebrows. "Doesn't he know about your —"

"No, no, MacTate." Ransom made a warning face. "I haven't mentioned that yet. But —"

"What haven't you mentioned yet, Ransom?" FitzSparrow looked at him suspiciously.

"Oh." Ransom laughed fatuously. "Well, I was saving it for a surprise —"

FitzSparrow banged his fist on the desk. "Listen here, Ransom —"

"Now, FitzSparrow, don't get excited. It's nothing at all. It's simply that — MacTate is going to drill me in my lines. Aren't you, MacTate?"

"I am?" MacTate looked apprehensively at the brown bottle on the desk.

Ransom grabbed up the bottle and put it back in the drawer. "Of course. That's all there is to it, FitzSparrow. I was going to surprise you by knowing all my lines at the next rehearsal. But now I won't. Surprise you, I mean."

FitzSparrow glared at him, got off the desk and backed up to the door. "Just see that you do, Ransom. Don't, rather." Muttering "mad," he opened the door and went out.

Ransom turned to MacTate. "Well, let's get started."

"Started?" MacTate cocked an eyebrow.

"Sure." Ransom reached into the desk drawer and tossed a thick book over to him. "Turn to *Hamlet* and go to work. Didn't you hear me tell him you're coaching me?"

For the next week or so MacTate tried every educational device he could think of to fix the Ghost's lines in his colleague's memory. He even had Ransom read the lines into a dictaphone and listen to them with earphones while he slept. But nothing availed to get Ransom over his two psychological hurdles. He could never remember the word "harrow," and his confusion

at that point blanked out the lines down to "List, Hamlet." Similarly, he would always say "arches of mine ears" instead of "porches," and knowing intuitively that he had it wrong, he was thrown off from there down to "Thus was I, sleeping."

"It's *harrow*, old boy," MacTate would say. "'Harrow up thy soul.' Rimes with FitzSparrow. Can't you remember it that way?"

"'Harrow up thy soul, freeze thy young —' Damn it, MacTate, 'harrow' sounds wrong to me by now. I keep trying to correct myself when I shouldn't."

"Well, try it a little slower. Here we are. 'I could a tale unfold . . .'"

For "porches of mine ears," MacTate had him imagine a surrealistic ear-shaped temple with a columned stoa in front of it. "Are you visualizing the porch in front of the ear, Ransom? Let's go. 'Upon my secure hour thy uncle stole, With juice of cursed hebenon in a vial, And in the —'" He formed his lips to make a *p*.

"MacTate. Do you know what's on top of those columns?"

"What, old boy?"

"Arches."

The Saturday before the scheduled opening, they were no further than when they had started, except that Ransom no longer said "arches" but just went mute, as at "harrow."

"Ransom," said FitzSparrow after the morning rehearsal. "It won't do. MacTate here takes almost as much of your part as you do." He motioned to MacTate, who had replaced FitzSparrow's wife as prompter in hope of giving Ransom enough confidence to get through his lines. "I hate to suggest this, but I wonder if you wouldn't like to be prompter and let him —"

"No!" Ransom's eyes were anguished. "Listen, FitzSparrow. I've got to play the Ghost. Wait till you see — Listen. MacTate —" He turned and clutched desperately at his colleague's arm.

FitzSparrow rubbed his forehead. "Ransom. My God, think what Murbloom will do to us. Think what he'll do to *me*."

"FitzSparrow. Listen. I swear you won't regret letting me play the Ghost. Maybe I don't have a memory like an illiterate, but it's going to be all right. I swear by the memory of — MacTate, what was that actor's name? About a century ago?"

"Edmund Kean."

"I swear by the memory of Edmund Kean that this *Hamlet* will never be forgotten."

FitzSparrow looked at him. "Aren't you right." He threw up his hands. "Oh, well, what's a reputation more or less. Who hath it? He that died o' Wednesday." He laughed hollowly, stopped abruptly and ran a hand over

his head. "Look at that, Ransom. You've got me in the wrong play." He muttered, "Mad. . . . But listen here. We have to think of something to make you remember those lines. For instance, did you see that movie of *Hamlet* they made several years ago?"

"Sure." Ransom's eyes gleamed. "Can you get the sound track of that? Listen, with that Ghost's voice and my —"

"Don't be ridiculous." FitzSparrow waved a contemptuous hand at him. "But I was thinking it might help you to hear your speeches in an acting context again. The movie's showing this afternoon somewhere uptown. So why don't we buy some popcorn and run up to see it?"

"Sure, FitzSparrow." Ransom's sigh was poignant with relief.

The *Arabian* motion picture theater, which destiny had placed at the heart of a fertile city's procreational concentration, was, for better or worse, an institution of some sociological importance. The proprietor, who had taken part in a high-school production of *She Stoops to Conquer* at an impressionable age, was prone to confuse the classics with edification, and in spite of an unhappy experience with a French film, persisted in interlarding the moral westerns and ambiguous musicals of his commodity with as much fine art as his manager would stand for. Hence the kiddies' matinee of *Hamlet*.

Horatio, his voice barely audible over a susurrant of crumpled candy wrappers, wiggling posteriors, and querulous whispers, was already expounding the international affairs of Scandinavia when Ransom and his tutors entered the theater and sat down somewhere near the middle. In a silly mood Ransom had seized on FitzSparrow's remark and bought a bag of popcorn. Without taking his eyes off the screen he held the bag out to his companions, who ignored him. Shrugging, he dipped into the bag himself. He had not eaten popcorn since taking his nephew to the circus some years back, and was astonished at how good it tasted. He crunched merrily, the noise unnoticeable in the sibilant uproar that filled the theater. It was a large bag, but by the "dram of eale" speech it was two-thirds empty.

When Hamlet began to follow the Ghost, the noise in the theater diminished by several decibels. Ransom could hear himself chomping the popcorn.

FitzSparrow looked at him. "Ransom, for the love of God throw that away. Your hurdles are coming up."

Ransom crammed his mouth full of popcorn and chewed vigorously. By "harrow up thy soul" he had managed to swallow it, though it felt as if it had lodged about the middle of his esophagus instead of going down to his stomach. He swallowed again and threw the rest of the popcorn on the floor.

"Revenge his foul and most unnatural murder," said the Ghost on the screen.

Ransom turned his attention back to the unnatural lump in his midriff and twisted his body a little. He was suddenly very thirsty.

“. . . revenge.” said the screen Hamlet.

“I find thee apt;” said the Ghost; “And duller shouldst thou be than the fat weed That rots —”

Ransom interrupted with a loud hiccup. He had opened his mouth to breathe more easily, and the convulsion of his organs resounded in the stuffy theater with an unctuous smack. FitzSparrow started and looked at him. MacTate turned his head.

“Hey, Curtis,” said a voice behind them. “Did you see that guy when he hiccuped? He —”

“Nah. Shut up. Look at the picture.”

Ransom clamped his jaws together tight and held his breath. He could feel the next hiccup coiling for its spring deep in his insides. When it smote his closed glottis, it broke through with a slurring nasal grunt.

“Look, Curtis. He did it again.”

“Ah, shut up. Let him hiccup if he wants to.”

“I don’t mean the hiccup. He — sparkled sort of.”

“So the guy’s got a flashlight. Watch the picture.”

Ransom snatched out his handkerchief, wadded it into his mouth and held his breath. “I will not hiccup,” he said in his mind. “I am a mathematician, and I will not hiccup.”

The next one was muffled by the handkerchief, but the luciferous riboflavin in Ransom’s eyes illuminated his head in full glory.

“Hey, Curtis, here comes the manager.”

“We ain’t with him. Look at the picture like you didn’t see him.”

“Ransom, for God’s sake —”

“All right. Who’s got that flashlight?” FitzSparrow was interrupted by a low but venomous female voice from the aisle.

Ransom turned his head, hiccuped, and blazed directly at her.

“Oh my God, a comedian. Listen, you, these kids have paid to see the picture, not you. Now get out of here and quit stirring them up.”

Ransom blazed again.

“Look here,” said FitzSparrow. “Since when do you kick people out for getting the hiccups?”

“Listen, buddy, I’m not going to argue with you. It’s that light he’s got. If he’s your friend, you better get him out of here before I bring the cops.”

“Just a minute. I’m afraid you don’t know who we are. We —”

“Buddy, I don’t care if you’re Cecil B. De Mille. You can’t bring comedians into this theater. Now are you going to get him out of here, or do we have trouble?”

"Old man," said MacTate. "We've heard both the difficult speeches. Perhaps we shouldn't stay for the rest of it. Might go stale."

Ransom pulled the handkerchief out of his mouth and stood up. "MacTate, that's the most sensible idea you ever had."

"But look here," said FitzSparrow, "I don't like to take this lying down."

"All right, FitzSparrow." Ransom grabbed his arm and pulled him up the aisle. "Let's go outside and talk it over with her, anyway."

The manager followed them out to the lobby, chiding unrelentingly. "Think you'd be old enough to know better. Coming to a respectable theater with novelty tricks."

"Oh, I wouldn't say it was such a respectable place," said FitzSparrow, turning around. "It's these little fifth-run fire-traps that don't know how to be courteous to —"

"Listen, you. Watch out whose theater you're insulting." In the light, the manager turned out to be a dumpy, hard-bitten woman with henna hair and a ferocious expression. She was so angry that she failed to notice the crowd milling around in the street outside, or the ax-bearing fireman who came into the lobby. "If you're trying to start something —" She gave FitzSparrow a belligerent push.

"Say, Merle," said the fireman. "The paint store's on fire. Thought I better tell you. I don't think it'll spread, but —"

An urchin who had been watching Merle vs. FitzSparrow from the inner door disappeared into the theater. A second later, three or four children raced through the lobby to the front door. Another burst of half a dozen followed close on their heels. One of them brushed against FitzSparrow, knocking him toward the manager.

"Jeez, Merle," said the fireman. "I didn't want to start no panic."

A third volley of children streaked through the lobby. This time several of them bumped into FitzSparrow. He was thrown heavily against the fireman, who lifted his ax to avoid mayhem. FitzSparrow grasped at the ax for support. Another charge of children struck him so violently that he knocked the fireman over and found himself clinging to an unsupported ax. Reeling through the stream of children, he slammed into something yielding and fell to his knees on top of it. There was a momentary pause in the flow of children. He raised the ax over his head to get it out of the way and looked down. He was kneeling on the abdomen of the writhing manager. At that moment there was a flash of light.

"Ransom," he said, struggling to his feet, "is this the time for —"

"It's not me," said Ransom. "Look." He pointed.

A figure holding a black box turned furtively and ran out to the street. Suddenly the significance of the disc on top of the black box struck Fitz-

Sparrow, and he recognized the furtive character in retrospect. "Good God," he said. "Do you know who —" He was interrupted by a squeal of rage behind him. He wheeled and saw the manager, livid, on her hands and knees. He tried to help her up, but she struck out savagely and worked her mouth at him. Another wave of jabbering children drowned out her imprecations and swept FitzSparrow down to the front door. He caught sight of Ransom and MacTate and fought his way to them. They ran down to the next corner.

"There's a taxi," said Ransom. "Hey." He led the way to the cab, and they all tumbled in. "Keep going this way. Fast," he said to the driver. Suddenly he turned to MacTate. "My God. I lost my hiccups."

FitzSparrow groaned. "Forget about your hiccups, Ransom. We're in real trouble now. Do you know who that was that took the picture?"

"Don't tell me it was Murdbloom," said MacTate.

FitzSparrow groaned again. "It might as well be. He's a disciple of Murdbloom's. Was going to be a great actor, but he got married and had to go to work. At the *Chronicle*. Works hand-in-glove with Murdbloom. And he's got a picture of me kneeling on a woman's abdomen with an ax in my hand. Do you realize what that means?"

Ransom gasped. "The front page in Monday's *Chronicle*. And that woman will find out who you are."

FitzSparrow shook his head. "That woman is the least of our worries. Can you imagine how the Board of Trustees will take it?"

"My God, FitzSparrow, that's right. They'll have you up Monday morning."

"Me! Don't forget he probably got both of you in that picture, too. The least they'll do is suspend us from the faculty pending an investigation. And our *Hamlet* —"

"FitzSparrow. They couldn't." Ransom turned agonized eyes to him. "They've got to let us put on our play. They —"

"Ransom." FitzSparrow looked at him. "How long have you been at the University? Do I have to tell you how their minds work?"

"I'm afraid he's right, Ransom," said MacTate. He looked at FitzSparrow. "You don't suppose there's any way of getting to that cameraman before —"

"MacTate." Ransom jabbed a finger at him. "That's it. Wait." He thought for a moment, then turned to FitzSparrow. "FitzSparrow, what's this fellow's name? Could we find him down at the *Chronicle*?"

"Name's Hannigan. But if you're thinking of trying to bribe him —"

"You just leave everything to MacTate and me, FitzSparrow. We've got to go back to the University for something, and then we'll go down to



the *Chronicle* and fix everything up. Can't take you along, because this Hannigan knows you. But don't worry."

"But he's incorruptible. When it comes to Murdbloom, anyway. He —"

"Look, FitzSparrow. I've got a scheme figured out. Let's stop worrying till we see if it works."

They dropped FitzSparrow at the Fine Arts Building and went on to Ransom's office.

"Old boy," said MacTate as Ransom opened his desk drawer. "What are you up to?"

"Oh, nothing much." Ransom took out the brown bottle, opened it, and turned it upside down into the palm of his hand. "Just saving three careers and the faculty play." There were three pills in his hand. He popped them all into his mouth.

"But see here. Are those all the pills you have?"

Ransom nodded. "I need all the intensity I can get for this scheme."

"But what about the play? Don't you have to —?"

"Oh, no." Ransom threw the empty bottle into the wastebasket. "I've been taking them for several weeks. By this time the flash must be a permanently acquired ability."

"But couldn't the fuel, or whatever, be expendable? Like coal?"

"MacTate, I tell you this is a permanently acquired ability. You know, like writing. You feel in your hand that you can write any time you want to. Don't you? Well, that's how I feel about flashing." Ransom laughed. "Anyway, the argument's a little academic now." He patted his stomach. "You just wait till you see me doing the Ghost on the stage. Meanwhile, we've got to go down and catch this Hannigan."

They went down to the *Chronicle*, found out where Hannigan's desk was, and waited. They waited and waited and waited.

"Ransom," said MacTate as it started to grow dark outside. "Aren't you getting hungry?"

Ransom clasped his belly and groaned. "Should we risk sneaking out for a sandwich? I haven't eaten anything since that popcorn early this afternoon. And the pills. I —"

"Just a moment." MacTate pointed. "Isn't that Hannigan coming this way now?"

Ransom looked. "And he has the camera with him. Thank God. Now don't forget, MacTate. Let me do the talking." He put on a pompous expression and stepped up to meet Hannigan. "Mr. Hannigan, I presume?"

Hannigan regarded him with beady eyes.

"I want a word with you, Mr. Hannigan." Ransom took him by the arm and pulled him out of MacTate's hearing. "It's about MacTate here. My

patient. I'm Dr. Ransom, the psychiatrist. You've heard of me, of course."

Hannigan looked at him noncommittally.

"We went to a great deal of trouble to come down here, Hannigan, because the matter is urgent. My patient is suffering from acute narcissism. Worst case I've seen in all my years of practice." He looked over at MacTate, who was gazing innocently around the room. "You'd never think it to look at him, would you?" He moved to stand between Hannigan and MacTate and spoke in an emphatic whisper. "You'd never guess that frustration of his mania often drives him to practically homicidal fury."

Hannigan moved his head to look over Ransom's shoulder. "Then what's he doing loose?" His dark eyes were just a little apprehensive.

"Absolutely essential," said Ransom. "In these cases, incarceration may impede recovery for good. Besides —" he jabbed a thumb against his belly — "I know how to handle him." He turned his head and looked at MacTate thoughtfully. "Most of the time," he added. He turned back to Hannigan with lowered brows. "In fact, my treatment was working wonders with him until this afternoon. Now I'm concerned about both him and — you."

"Me!"

"Nothing to get excited about." Ransom managed to speak soothingly without losing his sinister pompousness. "You see, we went out to the *Arabian* this afternoon to see this movie of *Hamlet*. What I call my poetry cure. We establish a cathexis, through the poetical treatment of character, that distracts the narcissist's fixation on his own ego. You follow me?" He fixed his auditor with a glittering eye and wished he had thought of using a Viennese accent. Hannigan was beginning to look to him like the type Joyce had called "yung and easily freudened." "So we were there," he continued, "when you took the picture of —" he laughed sardonically at human folly — "the wrestling match."

"How did you know who I was?" said Hannigan.

"Oh." Ransom smiled. "Well — as a matter of fact, MacTate is an old classmate of yours. Studied dramatics under Professor — what's his name?"

"Murd bloom." An odd light came into Hannigan's eye. He began to look pleased. Suddenly he looked at MacTate and frowned slightly. "Funny. I don't remember him."

"Oh, no. You wouldn't. That's the strange thing about incipient narcissism. Often found in involuted personalities. But what an impression you made on him. Potentially a second — Edmund Kean. That's what he said you were."

Hannigan tried to look modest.

"So you see, he naturally recognized you at once, and he went practically into convulsions insisting we find you, because he thinks he's in the picture

you took." Ransom paused to let this sink in. "You know how it is with narcissists. Can't stand to think there's a picture of themselves they don't possess."

Hannigan began to look a little indignant. "Well, good Lord, he doesn't expect me to give him the film, does he? He can't —"

"No, no." Ransom shook his head. "Just a clear print, that's all he wants."

"There'll be plenty of them Monday." Hannigan smiled evilly.

"But he insists on having one now." Ransom spread his hands and shrugged. "He's a great admirer of yours, of course, but after all he *is* crazy. And I thought you might feel — safer if you knew there was nothing you had that he wanted. You see what I mean." He cleared his throat. "As a matter of fact, I'm prepared to go even further and offer you a — sum of money for the print."

Hannigan began to look interested. "A sum of how much money?"

Ransom waved expansively. "You name it. I'll put it on his bill."

Hannigan looked at him. "Doc, I don't know whether you're a phony or not, but for a hundred bucks you can have an advance print to use for blackmail, for all I care."

Ransom tried not to look too eager. He rubbed his nose. "That's a little steep. But it's a deal. Oh, MacTate." He turned and crooked his finger. "The man's going to make a picture for us now."

"Wait a minute," said Hannigan. "How about the hundred bucks? Cash."

Ransom took out his wallet and looked into it. "Let me see your wallet, MacTate." MacTate handed it to him, and he looked into it, too. He held out two bills. "Twenty dollars cash and the rest by check, Hannigan."

Hannigan looked at them both disapprovingly. "All right." He grabbed the bills and led the way to the dark room. Inside, he turned on the red light, took the negative off the camera plate, and went over to the developing tank.

"You're sure that's the right picture?" said Ransom. He gave a little grunt.

"Of course I'm sure," said Hannigan nastily. "Say, what's the matter with you? Are you sure *he's* the patient?"

"Sure," said Ransom breathlessly. He gave another grunt.

"Well, you act a lot crazier than he does." Hannigan put the negative into a metal frame and turned to drop it into the developer.

Ransom went over to him. "All right, MacTate. Keep him off as long as you can." His eyes blazed with the green radiance. He snatched the negative out of Hannigan's hands and held it up to his face.

"What the hell are you doing?" Hannigan's voice shook with fury. He lunged out to seize Ransom's wrists, but Ransom turned away from him

and pressed the negative against his nose. As the green light began to fade, he grunted again and renewed it.

Hannigan threw himself at Ransom's back and knocked him to the floor. He grasped Ransom's neck with both hands, but Ransom hunched his shoulders and continued to blaze away at the negative. Gripping the back of Hannigan's coat, MacTate threw his full weight backwards in a series of violent tugs. The first time, Hannigan could not be budged. The second time, he gave a little. The third time, he let go of Ransom's neck and crashed back on top of MacTate. He struggled to get up, but MacTate retained his grip on the coat. He scrambled about on the floor, got his legs under him, and lunged away from MacTate. There was a ripping sound, and a loud thud, and then Hannigan put his hands to his head and groaned.

MacTate looked at Ransom. The radiance had grown much feebler. Suddenly it waned noticeably and all but went out.

"Come on, Ransom. That's enough. He'll be on his feet again in a second."

Ransom got to his feet, opened the dark-room door, and straightened his tie. "Too bad we didn't know he'd be so easy to handle. We could have saved those pills."

"Who was easy to handle?" said MacTate, flexing his cramped fingers.

"All right. But I bet he winds up thinking a poltergeist hit him."

MacTate smiled. "No, old boy. Poltergeists aren't actinic."

They ran out of the *Chronicle* building and headed for the drugstore on the corner.

"Listen, MacTate. We better split up, in case he changes his mind about the poltergeist and gets the police after us. I'm going to call FitzSparrow and tell him what happened. You go on home. I'll see you Monday night at the hospital."

"But there's just one thing," MacTate looked closely at his colleague's eyes. "You're sure you can still flash? In the dark room, you know, the light suddenly seemed to — give out."

Ransom laughed. "MacTate. Will you stop worrying. It was just fatigue. I felt like stopping, and I did. Look." He clapped MacTate on the shoulder. "I won't flash any more till the show Monday. That's nearly two days. Will that make you feel better?" He went into the drugstore and disappeared into a phone booth.

MacTate could not feel reassured. While not aesthetically convinced that his colleague's lightning-bug Ghost was good Shakespeare, he was aware that some such device was necessary to compensate for Ransom's bad memory. All day Sunday, and at free moments Monday morning, he pondered such mysteries as the law of the conservation of energy, and Monday afternoon he went to the library to look up some books on acquired charac-

teristics. At length, however, he gave it up and spent the rest of the afternoon rereading *A Coffin for Dimitrios*. After supper he went out to the mental hospital to take up his duties as prompter.

Every year within memory the faculty play had opened in the auditorium of the Rockview State Mental Hospital, because an audience of its milder cases, uncritical but not unpenetrating, had proved to be almost Platonically apt for warm-ups. MacTate was struck by the contrast between the happy composure of that part of the audience he could see through the curtain hole and the backstage frenzy of the sane. FitzSparrow fluttered ubiquitously about, shattering whatever calm there was. Ransom sat in a corner in his black cloak, muttering weirdly. He looked up as MacTate approached.

"MacTate. My God, I still can't say my lines right. Yesterday I hit them all right once, but then I started trying too hard to do it again. Let me say them over for you till curtain time." He launched into a breathless monotone delivery of his lines as if he were reading modern poetry.

"Briefletmebe," he said. "Sleepingwithinmyorchard, Mycustomalways-intheafternoon —"

"Ransom. MacTate. Oh God, listen. Do you know who's out there?" FitzSparrow, his face made up to look hollow-eyed, dashed up to them.

"Who?" said Ransom. He grinned. "Not Merle of the *Arabian*?" Suddenly his jaw fell. He aimed a finger at FitzSparrow. "Not — Oh, no."

"But he is. I just saw him, sitting beside the attendants."

"Well, he's in the right place."

FitzSparrow clasped his head with both hands. "Ransom. How can you joke about a thing like this? I knew he hated me, but I didn't think he would go so far as to cover a warm-up." He groaned. "Well, let's get it over with." He went out on the stage. "All right. Curtain time. Clear the stage."

The play began well. Francisco was properly frozen, Horatio properly stuffy. Probably driven by some subconscious urge to keep Ransom off the stage as much as possible, FitzSparrow had staged the first scene so that Horatio and the soldiers beheld the silent Ghost at a distance, as they looked over a rampart, and everything flowed smoothly. In the council scene, Hamlet showed from the very first word just who the central character was. Everything went so well that by the time Polonius finished nagging his children, Ransom was sweating with a bad case of nerves.

"MacTate. Do you realize you haven't had to prompt anybody? And when you get to me —"

MacTate, bent over his flashlight and prompt-book in the wings, was only dimly aware of his colleague's buzzing.

"MacTate. Don't you think the stage is too bright for a good flash effect? I've got to see the electrician. Be back in a minute."

Hamlet was explaining to Horatio the significance of Danish dipsomania. "The dram of eale Doth all the noble substance of a doubt To his own scandal."

The next line in MacTate's book said, "Enter Ghost." He looked around. "Ransom —"

Suddenly all the stage lights went out. MacTate could hear FitzSparrow gasp.

"What the hell?" whispered Horatio.

"Keep going," FitzSparrow whispered back. "What else can we do?"

"Okay," Horatio whispered skeptically. "Look, my lord, it comes!"

"Angels and ministers of grace defend us! Be thou a spirit of health or goblin damn'd, Bring with thee airs from heaven or blasts from hell . . ." FitzSparrow's voice was magnificent, and he gave the damn'd and hell a more dramatic meaning.

"MacTate." Ransom was in the wings again, whispering hoarsely. "That electrician. What a stubborn — All I did was push him a little bit, but he hit the ladder and knocked it into the fuses. I didn't —"

"Ransom, do you know you missed your cue?"

"Oh my God. Did I? Look. I'd better go out now and start flashing."

"No. That would make it worse. Wait till the next scene. When you start talking."

"It beckons you to go away with it," said Horatio, "As if it some impartment did desire To you alone."

"MacTate. My God. I'm so nervous I've forgotten the cue. Is it close?"

"Shh. I'll tell you."

"I say, away!" said FitzSparrow. "Go on, I'll follow thee." He stepped into the wings. "Ransom, if that was you fooling with the lights —"

"Just a moment, FitzSparrow," said MacTate. "We're practically at the next scene. Get ready, Ransom."

Ransom grunted.

"Something is rotten in the state of Denmark," said Marcellus.

"Heaven will direct it," said Horatio.

Ransom grunted again.

"Nay, let's follow him." Marcellus left the stage.

"Here we are, both of you," whispered MacTate. "You're on."

FitzSparrow stepped out into the darkness of the stage. "Where wilt thou lead me? Speak, I'll go no further."

Ransom followed him out, but stayed almost within touching distance of MacTate. He grunted again. "Mark me." MacTate could tell by his strained voice that he was trying to flash, but nothing happened. The stage remained pitch-black.

"I will," said FitzSparrow.

"My hour is almost come," said Ransom, "when I to sulphurous and tormenting flames" — he grunted desperately — "must render up myself." His voice trembled with agony. "MacTate!" he whispered.

"Alas, poor ghost," said FitzSparrow, unconvincingly.

"Pity me not," said Ransom, "but lend thy serious hearing To what I — ah — I — (Well, anyway) I am thy father's spirit, Doom'd for a certain term to walk the night, And for the day confin'd to fast in — fires — fires — (MacTate!) — Till the foul crimes done in my days of nature Are — burnt — and purg'd away — (Now, why —?) — But that I am forbid To tell the secrets of my prison-house, I could a tale unfold whose lightest word Would — would —"

"Harrow, Ransom, harrow."

"It's no use, MacTate. I can't —"

"Harrow up thy soul," MacTate said out loud, trying to sound like Ransom, "freeze thy young blood, Make thy two eyes . . ." He read on to "ears of flesh and blood."

"All right, MacTate. I'm all right here," Ransom whispered. "List, O, list! . . . list." He spoke on, letter-perfect, grunting hopefully now and again, but with no visible effect. When he got to "porches of mine ears," he said "arches," but kept on going. Finally he came to "Adieu, adieu! Hamlet, remember me," sighed audibly and came out into the wings.

He took off his cloak and threw it on the floor. "MacTate, read the rest of my lines for me. It won't matter. Just a couple more words in this scene and five or six lines in the third act."

"What do you mean, Ransom? What are you going to do?"

Ransom looked at him. "Hide," he said.

The next morning, MacTate called Ransom's office. There was no answer. After his class he went to Ransom's office and tried the door. It was locked. He turned to go away, thought a moment, then turned back and tapped on the translucent glass pane. "Ransom. Open up. It's only MacTate."

From inside the office came the squeak of a swivel chair. The door was quietly unlocked and opened about an inch. Then it swung wide open.

"Get in quick, MacTate. I'm keeping this locked." Ransom shut the door, locked it, and sat down. He put his elbows on the desk and rested his jaw in his hands.

MacTate sat down and looked at him. "I imagine that vitamin thing was a sort of fuel after all."

Ransom blinked his eyes. "I imagine it was."

"Well, don't take it so hard as all that, old boy," said MacTate. "The play wasn't at all bad after — That is, even in your scene, for instance, the

audience probably just took for granted that something had happened to the lights."

"Something did."

"Well, don't worry about it. I don't think FitzSparrow is permanently disaffected. He even seemed a little cheerful, just after the play was over. Besides, I never thought so much of that lightning bug idea, anyway. When you go on tonight —"

"Tonight! Listen, MacTate. Do you actually think anybody's ever going to get me on a stage again?"

"But —"

"Don't be silly. You take it from now on. You did last night."

There was a knock at the door.

"Shh. I'm not in. You hear?" Ransom all but held his breath.

The knock came again. "Ransom. Open up. I know you're in there." It was FitzSparrow's voice. Ransom closed his eyes.

FitzSparrow knocked harder. "Ransom. Let me in. I know you're there because I saw MacTate go into the building, and he hasn't come out."

MacTate smiled apologetically. "Why don't you let him in?" he whispered. "You'll have to sooner or later."

"All right." Ransom sighed wearily and went to the door. "Now understand me, FitzSparrow," he said as he opened it, "I'm not going to apologize."

"Apologize?" FitzSparrow's eyes were shining. "Whatever for? Haven't you seen this morning's *Chronicle*?"

Ransom's jaw fell. "What happened? Did they decide to keep Murdbloom at the asylum?"

FitzSparrow perched on the desk. "Let me read you the drama page." He took the newspaper out of his pocket and opened it. "Here. Listen to this. 'The Tragedy of Hamlet, Prince of Denmark, which is attributed by the vested interests of Stratford-on-Avon to the illiterate actor, William Shakespeare, has been so frequently performed that one approaches a new production of it expecting reinterpretation in the nuances rather than the fabric of the drama. Last night's performance at the Rockview State Mental Hospital was, therefore, a surprise, since, in spite of an undistinguished performance in the title role by Ellsworth FitzSparrow' — I got off easy — 'the staging of the ghost scene marked what may safely be called the first new departure since it was played by the actor to whom the vested interests of Stratford-on-Avon assign the authorship of the work.'"

FitzSparrow cleared his throat. "It has long been customary, in one school of the so-called Shakespearean dramaturgy, to omit the presence of Banquo's ghost in the third act of *Macbeth*, on the ground that its manifestation is the creation of the protagonist's overwrought imagination. On the



other hand, by some dubious logic, the same school has always shown the ghost of Hamlet's father on the stage, possibly because it is a speaking part. With unerring insight, the planners of last night's performance dispensed with the, at best, puerile device of materializing the Ghost, without foregoing the cogent poetry of its lines. On Horatio's "Look, my lord, it comes," the stage was plunged into utter darkness, as if symbolizing a transition of the setting to the fear-darkened depths of the hero's mind, while the disembodied voices of his companions entered distortedly through the "porches of his ears." " " "

FitzSparrow darted a glance at Ransom. "Now get this. 'The speeches of the Ghost itself, in the most felicitous rendering within the memory of this reviewer, were charged, perhaps overcharged, with ineluctable agony. The voice seemed to be straining against some indescribable frustration, and from time to time broke in obscure, tortured mutterings. In alluding to the pains of Purgatory it actually changed timbre for some six or seven lines. It is by no means habitual for this column to bestow indiscriminate accolades, but —' " He looked up and beamed at Ransom. "That enough?"

"Well, I'll —" Ransom looked at MacTate. "MacTate. We're in. Both of us. Maybe when this show's over we can do one of those horse routines —"

"Don't!" FitzSparrow raised an admonitory hand. "Don't even think about anything but this show. This Darkened-Stage *Hamlet*. I —"

The phone on Ransom's desk rang. He picked it up.

"Hello . . . Yes . . ." Suddenly a look suggestive of Kean's Hamlet spread over his face. "What! . . . But how do you know? . . . Oh my God. No. What can we do but wait? I'll look you up when it happens." He put the phone back and stared helplessly at MacTate and FitzSparrow.

"Ransom." FitzSparrow grabbed him by the arm. "Good Lord. Why are you looking like that? What's happened?"

"The rat." Ransom's voice was choked. "It's turned green. And I —"

"See here, old boy." MacTate looked worried. "Not the one that —"

Ransom nodded lugubriously. "Some sort of delayed reaction. It didn't —"

"Ransom." FitzSparrow shook his arm impatiently. "What are you talking about? What rat? What could a rat —"

"Wait." Ransom's dolefulness began to disappear. "What did you say?"

FitzSparrow frowned. "I said what could a rat do to make you —"

"No, no. The ghost, I mean. You said something about a ghost."

"I said you look as if you'd seen one. What's that got to do —"

"Listen." Ransom's eyes gleamed. "I have. Seen one, I mean. A new, improved, super — Listen, FitzSparrow. You're all wrong about that darkened stage business. We need light. Look. When I turn green . . ."

*This is the era, in fiction if not in fact, of The Private Eye. The private detective and consultant has an honorable and long lineage, stretching back to the prophet Daniel and advancing through Sherlock Holmes to the Continental Op and on to such noble moderns as Carney Wilde and Lew Archer. But the drab and hackneyed quality of most contemporary private eyes on radio and television, the contemptible viciousness of Mike Hammer and his pornographic colleagues in paperbound books have brought a fine profession at once into financial popularity and critical disrepute. New blood is needed — and hereby appears in the person of Professor Cleanth Penn Ransom, the eminent mathematician who has also been, in his time, a cyberneticist, a basketball player and a Shakespearean actor. Now he becomes (aided of course by the invaluable MacTate) at once a private detective and a marriage counselor — an odd combination, perhaps, to us Terrans; but such are the mores of Mars, as you'll learn in one of the most absurdly hilarious episodes in the entire Ransom saga.*

## *The Factitious Pentangle*

*by* H. NEARING, JR.

"SUPPOSE YOU WANTED to get to Mars," said Professor Cleanth Penn Ransom, of the Mathematics Faculty. "What would you do?" He stuck out his little belly and began to swing in his swivel chair.

Professor Archibald MacTate, of Philosophy, smiled with half his mouth. "I suppose I'd see my psychiatrist," he said.

"No, no." Ransom stopped swinging and waved a reproachful hand at him. "You know what I mean. How would you get there?"

"Oh. Well —" MacTate crossed his long legs, folded his arms, and regarded the ceiling thoughtfully. Then he looked at his colleague and cocked an ingratiating eyebrow. "Fourth dimension?"

"Fourth dimension." Ransom's tone was acid. He began to swing again. "Every time you ask anybody a hard question, they say 'fourth dimension.' As if that meant anything. Why don't they —?"

"Very well." MacTate shrugged. "I give up. How would *you* get to Mars? If you wanted to?"

Ransom stopped swinging and faced him. "Now that's better. Don't

throw some silly word around just because it sounds scientific. You can't get to Mars through a word." He aimed a finger at MacTate. "You've got to get there through — You've got to use — Well, as a matter of fact it *is* the fourth dimension. Sort of." He frowned accusingly. "But you had no way of knowing that, MacTate. You just picked a word out of —"

"I apologize, old boy." MacTate held up his hands. He looked somewhat nervously around the room. "I presume you've already worked out a fourth-dimensioner?"

Ransom nodded. "Over there." He pointed to a black box, the size of a large suitcase, that sat next to the door. "You plug that in, and the door opens on Mars."

MacTate looked at the door. "You mean you just open the door and there'll be a planet in it. Just like that?"

"No, no." Ransom waved a hand at him. "You know what I mean. It'll open on some place on Mars."

MacTate eyed the box dubiously. "What place on Mars?"

Ransom smiled. "Who was that fellow that wrote about the red and yellow towers of Helium? Edgar Allan Burroughs? Something like that. Well, maybe that's where it'll be. How do I know?" He threw his colleague a reproachful look. "My God, MacTate. Give me credit for hitting the planet."

MacTate nodded. "You're right, old boy. Congratulations. I simply supposed that you'd already been out and seen what the door opened on."

"MacTate. You think I'm crazy? How do I know Mars doesn't have a fluorine atmosphere?"

"But wouldn't the spectroscopists have — ?"

"Oh." Ransom waved contemptuously. "They don't know everything. Anyway, I'd have to get a space suit. Did you ever hear of anybody going to Mars without a space suit?"

MacTate looked at him quizzically. "The man in the Edgar Rice Burroughs stories didn't have one."

Ransom jabbed a finger at him. "That's the name. Edgar Rice Burroughs. You read those stories, MacTate? Good stories, but —" he made a face — "fantasy. How'd he get to Mars? Sent his astral body or something, didn't he?"

"Something like that." MacTate's eyes twinkled. "Is that what your machine does?"

Ransom grinned. "As a matter of fact," he said, "You won't believe this, but I go by hysteresis." He gestured vaguely toward the window. "You remember when I went over to see my nephew in New Jersey last summer? He works at that place where they dig willemite."

"Dig what?"

"Willemite. It's a sort of silicate of zinc, with manganese and some other stuff. Comes in long crystals. Well, he had a piece of it there that wasn't like regular willemite at all. It was dark blue and sort of metallic-looking, which real willemite isn't, and under the X-rays it shone with a violet light, instead of green like the regular stuff. He couldn't figure it out, so he gave it to me to study." Ransom looked at the black box thoughtfully. "I still don't know what it is, but I found out what you can do with it. Put it through all sorts of tests. Among other things I put it in a solenoid and —"

"I thought that was a disease."

"Now, MacTate, you stop being funny. You know perfectly well what a solenoid is. You've seen an ignition coil on an automobile, haven't you? Lot of wires wound around an iron core?"

"Magnet, isn't it?"

"*That's it.*" Ransom nodded. "Now. When you run a current through a regular solenoid to magnetize the iron inside, and then shut the current off, the iron doesn't lose its magnetism as fast as the wires lose the electricity. That's hysteresis. But this blue willemite" — he stopped swinging and aimed a finger at MacTate — "*gained* in magnetism as the current went *down*. It wasn't the *amount* of electric current that induced the magnetism, but the *change* in current. What do you think of that?"

"I think it's very interesting."

"Interesting! Listen, MacTate, it's insane. How about the law of conservation of energy, for instance? Where was all that extra magnetic energy coming from?"

MacTate looked at his colleague. He decided to take a chance. "Fourth dimension?"

"Right." Ransom jabbed a finger at him. "This time you're almost right. Look." He took a pencil and a piece of paper from the top desk drawer and drew a circle with two dots inside. "Here's the universe. This circle. Just imagine it's two-dimensional. These dots —" he pointed — "are the Earth and Mars. Now suppose you've got a line of force between them that begins to contract and pull them together." He drew a line between the dots. "Your two-dimensional universe bends through the third dimension. Right?" He folded the paper so that the two dots touched each other. "And your universe can go on expanding, or whatever it's doing, without any interference."

"But what about orbital motion? Don't the Earth and Mars move at different velocities?"

"Sure. But it just means shifting the fold in the universe. See, no matter where these two dots are, you can draw a line midway between them. The

only difference in the case of the planets is that you've got a three-dimensional universe folding through a fourth dimension."

MacTate looked at the paper. "And you do all that with — that?" He pointed at the black box.

"Seems too little, doesn't it?" Ransom's eyes gleamed. "But it's got an enormous appetite. Eats up space-time and converts it to magnetism. Like pulling something with a rope. You trade yanks for rope-length."

"But in this case, where do the yanks come from? Doesn't there have to be a loss of something or other somewhere along the line?"

"Sure. The loss is in space-time between here and Mars. It's converted into a magnetic field in a proportion of — well, you wouldn't believe it anyway. The electric current is just a sort of catalyst."

"But doesn't that make it a perpetual-motion machine? I thought you couldn't —"

"No, no. There's other kinds of loss. Heat, escaping sub-atomic doodads, that sort of thing. But it won't give out for a long time. I figured it out by tensor calculus." Ransom smiled demurely. "You know the curvature tensor Einstein explained gravity with? Well, I worked out a folding tensor."

"But, Ransom." MacTate pointed at the drawing. "How do you know it's Mars that's on the other end of that line? How do you know it isn't —"

"The sun?" Ransom laughed. "Wouldn't that be something. But don't worry. I took care of all that in the figuring. In this tensor I worked out you've got to include energy values in the equation for finding the geodesic of the fold, and since the masses of the Earth and Mars are unique in this particular field —"

"All right, Ransom." MacTate held up his hands. "When are you going to get a space suit?"

Ransom was excited from hearing his own explanation. He looked at the black box. "MacTate. You don't think there *could* be fluorine in the atmosphere? On Mars?"

MacTate shrugged. "Old boy, I'm really in a better position to advise you concerning Hottentot epics."

"Listen." Ransom faced him. "Why don't we just plug it in for a second and take a peek. If anything's wrong, we could pull the plug right out again. Couldn't we?"

MacTate looked at the black box apprehensively. "I don't know, Ransom. I don't think I'd —"

Ransom was already at the door. He bent over and plugged the wire of the black box into a floor socket. "Oh, it won't hurt to try it for just a second. In a few minutes it'll warm up, and —"

"But good heavens, Ransom." MacTate suddenly found his mind swarm-

ing with objections that the theoretical discussion had failed to awaken. "What will we do when Mars comes crashing down on us? What will —?"

"Now take it easy, MacTate." Ransom waved his hands soothingly. "Look." He came back to the desk, turned the paper over and drew two dots at opposite ends of it. "Here's the Earth. Here's Mars. Now suppose the universe is two-dimensional again." He picked up the paper and rolled it into a cylinder so that the dots were superposed. "And suppose it's curved through the third dimension like this. The dots are touching, but if you were a two-dimensional character living on one of them, and light curved through the continuum represented by the cylinder, where would you see the other one?"

MacTate ran a finger around the cylinder. "Away off here."

"Right." Ransom pointed to the door. "The place where we're touching Mars is right there, but to everybody outside, Mars is still up in the sky."

MacTate looked at the door and nodded. Then he pursed his lips. "But if Mars is where the hall ought to be, what happened to the hall?"

"Oh, it's still out there, only —"

Suddenly the door opened a little, and a head appeared around it.

"Are you Ransom the marriage counselor?"

"See," said Ransom, "the hall's still there, only you can't —" He looked at the visitor, who had opened the door wider. "Am I what?"

The visitor stepped into the room. "This must be it, Joe," he said, without moving his lips. A companion followed him in and closed the door. They looked from Ransom to MacTate. "I say," said the first one, "are you monsters?"

MacTate stopped wondering about the hall. The visitors were tall, bug-eyed, and barrel-chested. They had slender legs and tentacled hands. Their ears, which fluttered nervously about their heads, looked rather like fleshy ferns.

"My God," said Ransom.

The first visitor was looking at MacTate. "Is this your mate?" he said.

"Wait, Connie," said the second visitor. "If they're monsters, perhaps we —"

"No, no," said Connie. "I know a triple who went to a monster physician. Very satisfactory. They have a certain — perspective sometimes." He reached for a chair and sat down, sniffing the air with distaste. "Awfully stuffy in here," he said. "And heavy. Gravity machine, no doubt." He looked at Ransom and MacTate. "I guess you work together on your cases. Let me tell you right at the start that money is no consideration. Joe and I have very good positions in the Red Tower. And we're so unhappy about Helen that if you can help us in any way at all —"

"Yes," said Joe, who had dropped into a chair in the corner. "You must understand that this was no ordinary marriage. It was as if we had been — meant for one another." He began to sniffle and wiped away a tear.

"Joe, dear," said Connie. Joe stopped sniffing. "As Joe says," Connie went on, "it was a beautiful marriage. Purely for love, all three of us. But you never can tell what goes on in the mind of even a mate. When I found the —"

"Sometimes I think if we had had an egg right at the start, this wouldn't have happened," said Joe. He began to sniffle again.

"But we were young and fond of pleasure," said Connie, sighing. "You know how it is. Good jobs, deluxe rocket ships, jewels and parties. We were intoxicated with our youth and our romance. We wanted to live, and children were something to come later."

"If only we had known," said Joe. "Now it's all a hollow mockery." The sniffles became sobs.

"Joe, dear," said Connie. He turned back to Ransom and MacTate. "As I was saying, when we found the beard-ribbon, we couldn't believe it. It was in the garden, under —"

"And the petunias had bloomed," sobbed Joe. "Our anniversary. It was cruel, cruel." He buried his face in his tentacles.

"Joe." In Connie's tone there was a hint of impatience. Joe controlled himself. "This beard-ribbon," Connie continued, "was in the garden, and it had Helen's name on it. We knew Helen hadn't bought it, because the jewels in it — Well, we knew Helen's tastes pretty well, you know, and it simply wasn't the sort of thing —"

"Not at all the sort of thing," said Joe, looking up. "We've rather — cultivated Helen, you know. Made her tastes like ours."

"Exactly," said Connie. "Good books, good music, superior clothes and dishes. And fine jewelry. We taught Helen to appreciate them. So when we found this cheap beard-ribbon and then the night-club souvenirs and the book of erotic verses — all incredibly vulgar, you know — we knew instantly that some roving couple had begun to reawaken that strain of bad taste we had taken such pains to —"

"Yes," said Joe, "we never felt that Helen had been inevitably converted. And the nature of the evidence — jewelry, night-clubbing, love poetry, all that — it all pointed toward a couple — on the prowl, as the expression goes."

"But they're not going to get away with it." Connie's tone was suddenly ferocious. His eyes blazed for an instant, and the tentacles on his hands twined together excitedly. Then his mouth twisted into a mysterious smirk. "We care too much for Helen to let that happen."

"So we want you to find out who this couple is," said Joe, "and we don't care too much how you go about it. So long as you get results. Stop at nothing and spare no expense. You see?"

"Yes," said Connie. "We're rather in a hurry about it. Can't let it go too far, you know. So we'll leave you now, and you can get right to work. Helen's at home. Supposed to be, that is. The address is polar coordinate five point three angle two six four." He and Joe rose to leave. "Get in touch with us there as soon as you find anything."

Suddenly Ransom found his voice. "But —"

"Oh," Connie waved a tentacle. "The retainer. Of course. We'll have our broker file an increment to your account at once. I suppose your Yellow Tower address will do." He twined a hand around Joe's arm. "We'll expect to hear from you very soon. Come, Joe." They went out and closed the door.

Ransom looked at MacTate.

MacTate looked back at him. "Martians, I presume. Garrulous sort, don't you think?"

Ransom winced. "But did you watch their mouths?" he said. "Didn't open once. For all that talking they did."

"I think it was those ferny things on their ears, old boy. Must have sent some kind of waves to our cortical cells. It seems to be a remarkable system of communication."

"They're remarkable people." Ransom began to swing in his swivel chair. "But I don't trust them." He looked at MacTate. "All that stuff they were telling us. Do you?"

"You mean their motive for worrying about Helen?"

"Yes. That Joe. Did you notice how heavy he was hamming a broken heart till what's-his-name shut him up? If he wasn't overacting a part —"

"Well —" MacTate pursed his lips. "But don't you think it's possible he's just a bit emotionally unbalanced? People of that sort do sometimes seem to be overacting when they're only —"

"All right." Ransom aimed a finger at him. "How about the way they talked to me? About this case or whatever you want to call it. Didn't it sound to you as if they thought I was a private eye? Now use your imagination. If you had a real broken heart, would you go to a detective?"

"But when they came in, they asked if you were a marriage counselor. Perhaps the two functions are merged in their society." MacTate looked at the door. "Though I wonder how they knew who you are."

"Oh, that's easy." Ransom waved a hand. "I was sitting behind the desk when they came in, so they figured it must be my office. And when they said a name, we heard it as the name *we* call me."

"But what made them think you're a marriage counselor?"



"Well —" Ransom pointed at the door. "If the point of contiguity is a door on this side, it's possible that it's a door on the other side too. Right? Presumably there's a sign on the other one saying that Dr. Cyclops or somebody, Licensed Marriage-Counseling Detective, plies his mystery within. Only Cyclops is in the same fix as the hallway out there, because" — he jabbed a thumb into his belly — "I've got his spot in the fourth dimension." He grinned. "After a while, he'll get tired of waiting for customers and go home, because they're all getting sidetracked into here."

"And of course you realize that you're disrupting the social organization of Mars by usurping Cyclops's spot." MacTate's eyes twinkled. "Or do you really intend to go looking for Helen?"

"MacTate." Ransom looked at his colleague soberly. "What's a beard-ribbon?"

MacTate looked at the door. "You have me there, old boy. What is it?"

"How should I know? But you heard them talking about it, didn't you?"

"Yes. They said it had jewels in it, or something like that. I suppose it's a hair ribbon that's worn in the beard." MacTate started to get up. "Why don't we look out the door to see if anyone's wearing —"

"But they didn't have any beards. Joe and what's-his-name. They had faces like babies. And they said the beard-ribbon belonged to *Helen*."

"Well —" MacTate shrugged. "They seem to be trisexual. I suppose you can't expect any of their biological features to be quite comparable to ours. Though they did speak of having children. Or eggs or something."

Ransom stopped swinging and stared past MacTate's shoulder. "You know, MacTate. That's what really puzzles me about those people." He looked a little embarrassed and lowered his voice. "How do you suppose they —?"

Suddenly the door opened. Ransom and MacTate looked up. The newcomer was much like Joe and Connie, except that most of his face was obscured by a glossy black beard, tastefully intertwined with a fine sequined ribbon in which multicolored jewels sparkled at regular intervals. He came into the room and closed the door. "It says you're Ransom the detective," he said.

Ransom waved at a chair. "That's right. Sit down and tell me about it."

The visitor sat down and wiped his forehead with a cluster of tentacles. "You monsters sure do like it hot and heavy." He sniffed the air. "And stuffy. Wouldn't hurt them to spare a few eugenicists from those silly animals to adapt you. But then, you're only taxpayers, so naturally they don't worry about you."

Ransom cleared his throat. "You wished to consult me about a matter concerning the Bureau of Internal —?"

"Don't be silly." The visitor's sneer, while not visible, distorted his tone. "You know perfectly well what I'm here about. I'm Helen."

"Helen!" Ransom eyed the beard. He had not pictured anything so luxuriant.

"Don't pretend you haven't heard all about me," said Helen. "I know Connie and Joe were here to see you."

"Well," said Ransom, "if you're here to clear up the —"

"Clear up nothing," said Helen. "If you think you're going to talk me into releasing the dowry, you're crazy. You think I don't know what they're up to?" She snorted. "I should have my head examined for getting married in the first place."

MacTate looked at her. "It seemed to me that Joe and Connie were genuinely sorry. Especially Joe. When Connie was telling —"

"Don't give me that stuff," said Helen. "Joe couldn't fool a moron with that act he puts on."

MacTate cocked an eyebrow. "Why would Joe think it necessary to put on an act?" he said. He put a cigarette into his mouth.

"Why would —" Helen stared at him. "Look. I thought you knew all about this. I still think you do. But if we're going to play games —" She twined the tentacles of both hands together and leaned back in her chair. "In the first place, they married me for my money. Or didn't they bother to tell you that? Stooped way below their class to do it, of course. The damned snobs. My old man made his money selling thoat steaks in the black market during the Warhoon war. Theirs lost their money in the ray-gun business when whoever it was fused the mercury atom. So even if I wasn't refined, I had a big enough dowry to support them in the manner to which they were accustomed. And you'd be surprised how quick I got clasped to the bosom of culture."

MacTate reached into his pocket. "But I understood your tastes had become similar to theirs." He took his hand out of his pocket and looked at Ransom. "Do you have a match?"

Ransom reached into the top desk drawer, took out a cigarette lighter and flicked it. "He's right," he said to Helen. "They seemed to think they'd worked on you enough to —"

"Sure," said Helen. "They poured culture on me, all right. The way you'd spray a bug with insecticide. And I had to play along to keep peace in the family. But don't think I was fooling them. They knew I was still a sow's ear at heart."

Ransom lit MacTate's cigarette and put the lighter on the desk. "So you went and found another couple? That you've got more in common with, I mean?"

"Another —! Listen, do you think after — them I'd ever want to get married again?" Helen scowled. "Ransom, you *are* a monster. Everybody laughs at old maids, but there's lots of things worse than being an old maid. I wish —"

"Wait." Ransom's tone became accusing. "Joe and Connie told us you were carrying on with another couple. All the evidence pointed to it." He held up a forefinger and squeezed it with his other hand. "Cheap beard-ribbon." He squeezed another finger. "Night-club souvenirs." He squeezed a third finger. "Book of purple poems. Now where did all that stuff come from if you're not involved in a — pentangle? Joe and Connie seemed awfully disappointed to —"

"Disappointed! I'll say they were disappointed. Why," — Helen mimicked a shocked socialite — "how could they mingle me with their friends if I had such *vulgar* tastes. It was only my money that mixed good with their friends." She smiled sardonically. "So it all came out as a problem of simple division. Divide me from my money, and everything would be lovely. That's why they came to you."

"But why should they come to me about that? They didn't say a word about —"

"They didn't say anything about shadowing me, or making it worth your while to find out what I was up to? Don't give me that." Helen waved a disgusted tentacle.

"Well, if they didn't think I'd catch you with another couple, what *did* they think?"

Helen stared at him. "What do you mean?"

"I mean what did they suspect I'd catch you doing? That would be to their advantage?"

A furtive look crept into Helen's eyes. "Let's not get nosy, Ransom. You're still working for them, you know. What do you expect me to do? Just drop the fee into your lap?" She blinked her eyes and turned her head away. "Besides, you wouldn't catch me doing anything."

"By the way," said MacTate. "May I ask what did bring you here?"

"Now that's more like it." Helen leaned forward. "Let's skip the games and get down to business. First, how much did they offer you to get something on me?"

Ransom frowned reminiscently. "They didn't —"

"Hold on, old boy." MacTate held up a warning hand. He ground out his cigarette and turned to Helen. "Surely you can't expect us to give you confidential information of that nature. We have a duty to our clients to —"

"All right." Helen pointed a tentacle at him. "Whatever it is, I'll double

it. You lay off me, and I'll pay you twice as much, twice as much."

Ransom's eyes narrowed. "Wait." He aimed a finger at Helen. "If you're not doing anything illegal, why do you want us to lay off you?"

The furtive look returned to Helen's eyes. "Why —" Her left-hand tentacles twitched nervously at the chair arm. "I just want to be left alone. All I want to do is live and let live. It's worth money to me to get you off —"

"Wait." Ransom fixed her with a prosecutor's eye. "If all you're doing is living and letting live, then where did that junk come from? The evidence, I mean. How did that cheap beard-ribbon with your name on it —?"

"Stop it." Helen clapped her tentacles over her antennae, then waved them frenziedly in the air. "You can't talk that way to me. I'm not on trial. Who do you think you are? I come in here with a business proposition, and before I know it I'm getting the third degree." Suddenly she stopped waving her arms and dropped them helplessly. "Look. You've got to help me. Stop making me lose my temper. I can explain how I got all that junk. It's — because I liked it. They kept throwing this cultural stuff at me all the time, and finally I just got sick of it and went and picked up some things I liked for a change. That's all."

"You got yourself the beard-ribbon?"

"Sure. I couldn't stand all that culture any more, so —"

"But why didn't you tell Connie and Joe about it? Didn't you stop to think how it would look to them when they found that stuff?"

Helen's eyes shifted. "Well, no. I — It wasn't any of their business, was it? You know what snobs they are. Can you blame me for —?"

"Helen." Ransom looked at her earnestly. "How did you get that beard-ribbon?"

Helen looked down at her nose for a moment, then sprang to her feet, came over to the desk, and pressed her tentacles firmly on the edge. "Listen here, Ransom. I don't have to answer all your silly questions. Now I'll put it to you for the last time. Do you want to make twice as much money as they'd give you, or don't you?"

"Helen," Ransom said sadly, "money doesn't mean as much to me as — Look. If you'd just take the chip off your shoulder and tell me the truth so I can decide what we ought to —"

"All right." Helen pointed a tentacle at him. "I'll tell you the truth. They're trying to get me committed. So they can get my money. How do you like that? You think that's right?"

"Committed? For what?"

Helen kicked the desk angrily. "There you go again. 'What.' 'Why.' Always questions." She waved her arms. "Look, Ransom, you're too

damned full of friendly advice to talk sensible. When you wake up and think of the fee I'm offering you, you know where to get in touch with me." She turned and went toward the door. "Think it over." Suddenly she stumbled over the black box. "Booby traps yet." She eyed the box curiously and sniffed the ozone around it. "Perfume. Say —" Opening the door, she sniffed the air outside and then the air inside again. "No wonder you act crazy." She went out and closed the door.

Ransom stared after her. "Now I don't trust any of them." He started to swing in his swivel chair. "And the trouble is, it bothers me. I get so wrapped up in their damned pentangle, or whatever it is, that I forget to ask them all the things you'd want to ask people. On another planet."

"We're certainly finding out something about their family life." MacTate put another cigarette into his mouth. "While your clients are gone, why don't we take a look outside and see if their other institutions —" He looked at the desk top. "Where is your cigarette lighter, old boy?"

"The lighter?" Ransom glanced over the desk top. "I didn't do anything with it. Don't you have it?"

"Look in your drawer. Maybe you put it back."

"I don't —" Ransom opened the drawer and looked into it. "No." He looked up. "Wait a minute. Helen was standing over here just before he left. She, I mean. Maybe she knocked it off the desk." He looked at the floor around the desk. "Not there. Well, maybe it got caught in one of his tentacles. Her tentacles." He grinned. "We'll get it when she comes back."

MacTate raised an eyebrow. "You think she's coming back?"

"Sure. She's scared to death we'll find out how she got that beard-ribbon and the other stuff." Ransom began to swing. "I wouldn't even be surprised if she raised the ante next time."

MacTate nodded thoughtfully. "She must have quite a bit of money. Perhaps she's right about their motive for marrying her. But it's not clear to me why she married them. Did you get that?"

"Oh, I guess it was coercion by her old man, as she calls him." Ransom waved a hand. "You know. Made a lot of money and —"

"On the other hand, it might have been sexual attraction." MacTate smiled. "She's apparently fed up with them now, but who knows how Joe and Connie might strike a third sex at an impressionable age."

"You know," said Ransom, looking a little embarrassed, "as I was saying before, that's what really puzzles me about them." He lowered his voice. "How do you imagine they —?"

"Ransom!" The door had opened, and Connie and Joe came into the room. "Ransom," said Connie, "was Helen just here to see you?"

"We saw her coming out of the tower," said Joe, dropping into a chair.

"There's absolutely no business we can think of she might have —"

"What did she want?" Connie sat down and looked at Ransom narrowly. "Does she know we suspect her? Who's she carrying on with?"

"Wait." Ransom raised a commanding hand. "Let's not get excited. We can't answer more than one question at a time, can we?" He put on an oracular expression. "Now. In the first place, you're right. About Helen being here. Left just a few minutes ago. But in the second place" — he looked at them sternly — "she says there isn't any other couple."

Joe and Connie gaped at him. "But that's ridiculous," said Joe. "You didn't actually expect her to tell you the truth, did you? How did she explain the beard-ribbon and the other things?"

"She said she bought them. She said your uplift campaign —"

"See here," said Connie. "That's an out-and-out lie. If she'd bought those things, we'd have seen the purchase records on our broker's report."

"I can't help it," said Ransom. "Isn't that what she said, MacTate? That she bought that stuff herself?"

MacTate reflected. "Well, Ransom, I'm not sure she actually said —"

The door flew open. "I *knew* you'd be here again. Thought I didn't see you sneaking into the tower, didn't you? You damned little rattlesnakes." Helen came in and banged the door. "What have you told them, Ransom? I never saw anything like it. You can't even trust a dumb monster any —"

"Listen." Ransom scowled. "Who are you calling —"

"Just a moment, old boy." MacTate looked Helen in the eye. "Helen," he said, "refresh my memory, will you? Did you or did you not tell us that you had purchased the beard-ribbon and the other items in question?"

Helen stared at him, then glanced apprehensively at Joe and Connie. "I —" Suddenly she pouted. "I don't remember what I said."

"Well. *Did* you purchase them?"

Helen looked up and glared at him. "That's none of your business. Who are you, anyway? I came here to talk to Ransom."

"All right," said Ransom. "Tell me, then. Did you buy that stuff?"

Helen looked at him indignantly for a moment. Then her eyes shifted.

"You see what we mean," said Ransom. "If you didn't buy the stuff, and it wasn't given to you, then you must have —"

"No!" Connie stood up.

"Helen!" Joe stood up too.

They looked at Helen incredulously.

"And I thought —"

"And all the time —"

"A — a klepto —" Joe could not finish the word. He gasped and sat down.

"Helen." Connie moaned and sank into his chair too.

Helen looked at Ransom. "Ransom, I want to apologize for calling you a dumb monster. You're not half as dumb as I am. If I hadn't come here in the first place —" She turned to Joe and Connie. "All right. Go ahead and commit me. That's what you always wanted, anyway. Go ahead. You don't have to sit there like it was a wake. When you're tickled to death that —"

"Commit you!" Connie looked up. "Helen. Whatever are you thinking of? What would our friends —"

"Say!" Helen's eyes widened. "That's right." She flicked a tentacle. "What would your friends say. Of course. Why didn't I think of that?" She darted a venomous glance at her mates. "Well, now that sort of changes things a little, doesn't it?" She sat down, twined her tentacles together, and smiled malevolently. "What are you going to do about it?"

"The first thing we're going to do," said Connie, "is get you to an ethician. If you're out of your mind —"

"Watch out. Your friends might find out you're taking me."

"Not a chance. I know a very trustworthy —"

"Listen, Connie. Use your head. You think I didn't know what I was doing? I was going to give all that stuff back after —"

"That's what they all say," said Joe. "The sooner we can get you to an ethician —"

"They're right, Helen," said Ransom. "You thought they were going to commit you. You wouldn't have stolen those things if you weren't a klepto —"

"All right." Helen glared. "Just for the sake of argument, let's say you're right. What happens afterwards? Am I supposed to go back and live with them again? I tell you, I can't stand it. I'd sooner —"

"Wait." Ransom looked at Joe and Connie. "How about a separation? Would that make everybody happy? If we could draw up a settlement —"

The trio looked at him sharply. "A settlement on who?" said Helen.

"Connie," said Ransom, "how much were you paying me for this job?"

Connie looked puzzled. "I didn't —"

"Just a moment." MacTate looked at Ransom. His eyes were twinkling. "It was about 50,000, wasn't it?"

"You're lying!" Helen turned to him with blazing eyes. "That's crazy. Even with prices what they are —"

"My dear Helen," Joe said nastily, "you underestimate your value to us."

"I don't care. It's a lie. 50,000! You wouldn't —"

"Wait a minute, Helen," said Connie. "Let's hear what he has to say."

"All right." Ransom folded his hands across his belly and turned to Helen. "You said you'd double their fee if I'd lay off. So if you don't want me to tell everybody you're a kleptomaniac, you go invest 100,000 in Joe and

Connie's name and live all by yourself just the way you want to."

"A *hundred* thousand." There was a desperate look in Helen's eyes.

"Helen, you told me it was worth a lot of money to you. Not to be annoyed. Just how much *is* peace and quiet worth to you?"

"Helen." MacTate looked at her. "If you care to have another opinion, I think I may say that you're the one we're primarily interested in helping. The way you've been talking, I'd think you'd find a separation cheap."

Helen looked at him. Then she looked at Joe and Connie. "You know," she said, "you might have something there at that." Suddenly she turned and squinted at Ransom suspiciously. "But then what's in it for you?"

Ransom leaned back in his swivel chair and waved a magnanimous hand. "Helen, your money wouldn't do me much good, anyway. I tell you what. Between your treatments at the — whatever it is they're taking you to — you show us around the city and explain everything. We're a little new in these parts, and if you'd sort of take us around —"

"Ransom." Helen stared. "I don't . . ."

"Helen, wait." Joe and Connie sprang up beside her and grabbed her.

"Don't say any more. He made an agreement."

"We're witnesses. He can't charge us now."

"If he doesn't want a fee, don't argue with him."

Ransom looked at them open-mouthed. Then he scowled. "All right. If you want to get nasty about it, suppose I go tell everybody Helen's a kleptomaniac." He jabbed a finger at them. "You know, I think that's a good idea. I'm just damned mad enough to —"

"Listen." Helen scowled back at him. "I didn't say —"

"Don't argue with him, Helen." Joe tugged at her arm. "He can't do anything. We'll have you taken care of at the ethician's and sue him for slander if he talks."

"Yes," said Connie. "I know just the attorney to shut his mouth. Don't worry about a thing. You come with us to the ethician's now, and then we can draw up that settlement you have in mind."

They turned Helen around and pulled her to the door. "Don't answer any more of his insults," said Joe. "It's never safe to —"

As they went out, Helen broke away and stuck her head through the door. "Ransom," she said, "I'll come back to take you around, if that's what you want. After I get rid of them." She jerked a tentacle over her shoulder. "Meanwhile" — her eyes shifted — "I just want to ask you one thing." There was an odd expression on her face. "What's that paper you have on your desk?"

Ransom and MacTate looked at the diagram of the folding universe. Ransom picked it up. "This?" He laughed. "Oh, that's just a drawing I



made. I was explaining something to MacTate here. It's a sort of drawing of the universe. You see —" He looked up. "Helen!" She was gone.

Ransom looked at MacTate. "Where did she go?"

"I don't know, old boy. I was looking at the diagram. Perhaps Joe and Connie got tired of waiting."

Ransom got up and went to the door. He flung it wide open. "MacTate." He leaned out and looked around. "What happened to Mars?"

MacTate joined him.

"Did your hysteresis thing give out?" MacTate turned to look for the black box. "I say, old boy, what happened to it?"

Ransom looked down. The black box was not beside the door. "What —?" He looked around the room. "MacTate. Where is it?"

MacTate pursed his lips. "Old boy, are you sure that thing was a space folder? I mean, are you sure it didn't simply operate on our minds?"

Ransom looked at him. "You mean we *imagined* all this?"

"Well, you could make out a plausible case for it. Those allusions to a red and yellow tower, for instance. And eggs. And Helen's remarks about thoats and Warhoons. All that's in Edgar Rice Burroughs, you know."

Ransom scowled thoughtfully, then shook his head. "No, no. They just talked about things that registered with us through a sort of Edgar What's-his-name vocabulary." He looked at the spot where the box had been. "Anyway, the box didn't make us imagine itself. You saw it before I plugged it in, didn't you?"

"Could it have disintegrated?"

"Plug and all? How could it?" Ransom shook his head. "And what about the cigarette lighter? There's not a trace —" Suddenly his eyes widened. He turned to MacTate and pointed a finger at him. "MacTate. That Helen. She did steal my cigarette lighter, didn't she?"

MacTate looked at him curiously. "I suppose she did."

"And she thought the ozone around the box was perfume, didn't she? Remember? She seemed to think it was kind of heavy, but she did call it perfume."

MacTate rubbed his jaw. "Yes, I —"

"And remember how funny she looked when she asked me what the drawing was on my desk? As if she was trying to distract our attention. Didn't she?"

"You mean —?"

"Sure. She stole the box, too." Ransom slapped the top of his head. "My God, what a character. Now who'll ever believe me about the folding tensor?" He sank into the swivel chair. "And they had the nerve to call us monsters."

"That reminds me," said MacTate, sitting down again. "I wonder where they thought we came from? They took it as a matter of course that we were used to heavier air and gravity. And they seemed to know we were bisexual, too, because they asked if I were your mate, and not one of your mates. You'd think a trisexual people would —"

"MacTate." Ransom looked a little embarrassed and lowered his voice. "That's what really puzzles me about them. How did they —"

"Old boy." MacTate smiled. "That's the third time you've wondered about that. Let me set your mind at rest. Being neither a biologist nor an engineer, I haven't the slightest idea —"

"What are you talking about?" Ransom looked at him. "You get the craziest ideas, MacTate." He shook his head reproachfully. "What puzzles me is how they figured we were mates. They seemed to know we were bisexual, like you said. But in that case" — he frowned and lowered his voice again — "which of us did they think was the female?"



*The Mad Scientist we have always had with us; even that greatest of science fiction protagonists, Professor George Edward Challenger, was mad at least north-north-west. But H. Nearing, Jr. has created, in Professor Cleanth Penn Ransom, something far more dangerous: the Sane Scientist. Ransom is a logical man, unaffected by the poetry and philosophy that can influence his colleague MacTate; when ideas impinge upon him, he follows them through, as a resolute logical mathematician who has a decent smattering of other sciences. And the results are far more devastating than anything that could be achieved by madness. You've read in earlier issues of Ransom's construction of a poetry machine, and of his attempts (unswervingly logical) to teach mathematics by means of a voodoo doll. This time Ransom speculates on the nature of the fifth dimension and tries to produce the crystalline opposite of scopalomine — seemingly harmless occupations, both of them; but no Mad Scientist ever produced such maddening and delightful results.*

## The Embarrassing Dimension

by H. NEARING, JR.

"I HAVE just — what do you call it — excogitated it," said Professor Cleanth Penn Ransom of the Mathematics Faculty. "The fifth dimension, I mean."

Professor Archibald MacTate, of Philosophy, fumbled in his coat pockets. "Do you have a cigarette?"

Ransom opened his desk drawer, handed a crumpled pack to his colleague, and struck a match. "Nothing to it once you get away from physics," he said, holding out the match. "The fourth dimension relates time and space. You know, Einstein. So I figure the fifth dimension does the same with mind and matter."

MacTate drew on his cigarette, blew a delicate stream of smoke over Ransom's head, and regarded him with calm expectancy.

Ransom held up his left hand and touched the pudgy thumb with his right forefinger. "You know the analogy. You say you'll meet somebody at Forty-Second and Broadway. Two dimensions." His right hand grasped the left thumb and forefinger. "But your friend might be upstairs in the Times building, so you have to think of three dimensions. When you say you'll meet him, I mean." He pinched the middle finger of his left hand. "But if

he comes at two o'clock and you come at three —" He curled his right forefinger around the left ring finger. "Fourth dimension. Time." His eyes gleamed, and he pointed his forefinger at MacTate. "Now." He bent back the little finger of his left hand with the right forefinger. "Suppose you meet this person on the right floor at the right time. Suppose all four dimensions click, I mean, *but you don't recognize him.*"

The ash of MacTate's cigarette fell on the desk top. He started, bent over to blow it off, and looked up at Ransom again.

"Recognition, the fifth dimension." Ransom thrust out his little round belly and began to swing in his swivel chair.

"But my dear Ransom —" MacTate waved his cigarette deprecatingly.

"Wait." Ransom stopped swinging and leaned over the desk. "You've been lost sometime. In the woods, I mean. And you didn't know what time it was. All the space-time dimensions were there, weren't they? You were somewhere east, somewhere north, somewhere in altitude, at some time of the day. But you weren't — related to them. You didn't recognize them."

"But —"

"What I mean is that pragmatically speaking you didn't exist. You were lost, which is like being instantaneous or infinitesimal. You miss one dimension and you miss them all. See?"

"But obviously I found my way out of the woods." MacTate held up his hands to call attention to his existence.

"Sure. You got back into the dimensional continuum again. Like speeding up a slow electron to give it the same mass as a faster one. It's all relative."

"But look at it the other way." MacTate ground out his cigarette in an icosahedral ashtray on Ransom's desk and tapped the desk with his finger. "I have gone to places that I felt I had visited before, and yet I knew I hadn't. How do you account for that?"

"Easy. A fifth-dimensional equivalent of thinking it's Wednesday when it's Tuesday. Or taking the wrong train. You think you're going to New York when you're really headed for Miami or someplace." Ransom warmed to the explanation. He flung out both arms, pointing in the two relevant directions. "You ride along all right for a while. No worry at all. Then you begin noticing the scenery out the window. Looks funny. Different, I mean. You begin to think. Then you hit Baltimore. See the station sign. My God. It comes to you like that. Your mind has been traveling in one dimensional continuum while your matter was off in another. You've been crazy. Temporarily crazy."

"But why didn't I cease pragmatically to exist, as I did in the woods?"

"Ah." Ransom leaned back in his chair. "Because on the train you were occupying two continua at once. Before, you weren't occupying any. In

the woods, I mean. As a matter of fact" — he reached into his inside coat pocket — "I've been fooling with an idea for combining two continua any time. Over in the chemistry laboratory." He took out a little jewelry box, opened it, and set it on the desk. In it was a crystal, something like a diamond, though there was no sparkle. Instead, it seemed to emit waves of force that almost imperceptibly distorted the parts of the room caught in the corner of the eye.

MacTate leaned forward to examine it. "Odd-looking, isn't it? You say you can merge two continua with it?"

"No. Not yet, I mean." Ransom picked the crystal up and squinted through it at the window. "This one didn't work out right. You see, I figured that if this stuff they give you to make you forget an experience — scopalomine, *you* know — I figured that if scopalomine would make you forget an experience, then the opposite of scopalomine would make you recognize experiences you never had. I'm oversimplifying, I know, but you see what I mean. Anyway, all you have to do is discover the opposite of scopalomine, right?"

MacTate stared at him.

"Well, it happens that scopalomine can be crystallized from ether, and the crystals make polarized light turn counterclockwise. What do you call it? Levorotatory. Well" — Ransom put the crystal on the desk and pointed his finger at MacTate — "suppose you could make an isomer of scopalomine that turned polarized light *clockwise*."

"My dear Ransom —"

"Wait. Do you remember what happened when those Frenchmen shot a beam of electrons through a crystal? Diffracted. The electrons, I mean. Just like light waves. I tell you, MacTate, the inside of a crystal is a weird thing. So why not clockwise?"

"But what connection is there between the physical structure and its chemical effect on the body — or the mind?"

"Look, MacTate. What's the connection between hydrocarbons and life? I don't know. All I know is that you can't have one without the other. I've got the right to fool with an hypothesis, haven't I?"

MacTate pointed at the thing on the desk. "But what's this? You say it didn't —"

"That's right. I got the research boys in the laboratory to synthesize a hydrocarbon chain, one I worked out. But instead of dextrorotatory scopalomine, we got this. It isn't much like scopalomine at all. Has a melting point something under 59 C. and doesn't seem to do anything to polarized light." Ransom looked queerly at the abortive crystal and poked it with his finger. "I don't know —"

There was a banging on the door. Ransom and MacTate looked up. The knob rattled and the door, which seemed somehow a little larger than usual, flew open.

"Professor Ransom. I am gratified to find you in your office. It is a privilege to see you, sir."

The newcomer was a portly personage of florid complexion. He swept off a black fedora to reveal white hair, almost yellow in spots. Ransom gaped at him. MacTate waved numbly toward a chair.

"I thank you, sir." He stowed his amplitude in the chair and held out a handful of cigars. "If I may take the liberty, Professor, of engaging a few moments of your time, I have a proposition which I am confident will compel your interest." He pocketed the cigars, which Ransom and MacTate ignored, and rubbed his hands together. "As I was saying to the other senators in the cloak-room last night, what our country needs in this time of peril — and I refer, Professor, to those insidious perils which threaten our interior economy as well as those from foreign shores, get me? — what our country needs in these perilous times is a realistic, rational attitude toward the facts of political, economic, and atomic life. What does this country of ours need most desperately in this crucial age?" He stabbed a finger toward the ceiling.

"Televised Congresses?" said MacTate.

The senator brushed an imaginary speck from his shoulder and turned back to Ransom.

"What, I repeat, is the crucial need of our country in this desperate age, Professor?" He pounded the desk to emphasize the answer. "Logic. Get me? Just plain, ordinary old logic. But the rarest commodity this country produces, Professor. Rarer than uranium, rarer than plutonium, rarer than — neptunium. Logic."

He paused impressively, thrust a cigar into his mouth, and crossed his legs.

"And how, Professor, can we step up our production of this rare commodity? That is the question I asked my colleagues in the cloak-room. From what mine is it dug? From what operators can it be purchased?" He beamed at Ransom. "You know the answer to that, Professor. You and those other chosen few who, in obscure and often thankless toil, keep alive the flickering spark of logic in the gloom of these perilous times. The mathematicians, Professor, the mathematicians."

Ransom glanced vaguely at the desk top as if looking for a goblet to raise.

"What this country needs," said the senator, suddenly stern, "is a Bureau of Mathematics." He shot out a finger at Ransom. "And you, Professor, are the man to head it."

MacTate looked at Ransom. "Congratulations, old boy."

"Wait." Ransom's eyes narrowed. He fingered the crystal on his desk.

"Don't say a word, Professor." The senator smiled understandingly. "Not right now. I realize only too thoroughly that you must have time to consider a momentous step of this kind. The terrible responsibility, the sacred trust. I know." He nodded sympathetically as if to a fellow martyr. "But in a few days — get me? — the Chief Justice and I, and maybe the President, we'll be here for your answer. And I am confident, Professor —"

At that moment the door flew open and a tall black figure leaped into the room. Beating thunderously on a hand drum attached to its waist, it hopped ecstatically about, first on one foot, then on the other, the gold rings around its wrists and ankles jangling rhythmically to the drum.

The dancer hopped to the front of Ransom's desk, flung out his arms, bowed, and stood erect again. Nearly seven feet tall, his glistening body was nude except for a leopard-skin breech clout. Two circles of yellow and blue paint were smeared on his chest, four lines of red paint on his cheeks. In his swollen underlip was imbedded a diamond chip, and stuck through his woolly topknot was an immense bone. He exuded an odor of the deep jungle.

"Bwana," he boomed, and bowed again. "Bwana, Mbongo hear you sick in head. Come make ju ju. No be sick." From his leopard skin he drew a long needle. "Bad god, he inside bwana. This make bad god go way. Big ju ju." He stepped around the desk.

In Ransom's face astonishment gave way to terror. "MacTate —!"

MacTate started from his chair and seized the witch doctor's arm. "Mbongo, wait." He pondered how to speak to the giant. There was little time to spare. "Mbongo, no make ju ju. White ju ju man just here. You see him. He say no make ju ju today."

The witch doctor looked at MacTate with suspicion. He thrust out his lips. "Make ju ju," he said stubbornly.

Ransom had crawled to the other side of the desk. "MacTate, listen. You can't —"

"Mbongo," said MacTate. "You good boy, come make ju ju. But not today. White ju ju man say bad god sleep today. You wait till god wake up. Next week, maybe. Then you make ju ju." He nodded vigorously to emphasize his point.

Mbongo began to look more hurt than suspicious. His great lips pouted with disappointment.

Suddenly he brightened. "Mbongo wake god up," he said. He jabbed his needle into the air demonstratively.

MacTate shook his head gravely. "No good. God sound asleep." He imitated a snore. "White ju ju man try."

Mbongo looked disconsolately at the needle and put it sadly back into the

leopard skin. He sighed. "Mbongo come next week. God wake up. Make ju ju."

"That's the idea." MacTate led him to the door. "Mbongo good boy. We see Mbongo next week." He shut the door behind the witch doctor and snapped the lock. "Whew!"

Ransom plopped weakly into his chair and wiped his face with a handkerchief. "MacTate, what is this? Are we both crazy?" He twisted the crystal on his desk nervously. "What do you —?"

"I say, Ransom, what happened to the senator?"

Ransom looked vaguely about the room. "The senator? I don't know. I didn't see him —"

There was a series of thumps on the door.

"Oh, no." MacTate turned wearily.

"MacTate, don't let that ju ju thing come in again." Ransom was nearly hysterical.

"All right. Just keep calm." MacTate unlocked the door and opened it a crack to peer out. He was thrown violently back as a clanging blow knocked the door open.

A short, massive figure in rusted armor stalked into the room, carrying a visored helmet under one arm. His head was bullet-shaped, the hair cropped short. His face, smooth-shaven, bore an unpleasant expression.

"God den, varlet." The tone was grim. He was followed in by a lanky, dull-eyed youth dressed in green jerkin and hose.

The knight squinted disdainfully at MacTate and addressed himself to Ransom. "Thy lackeys want courtesy, my lord almagester. But enough. I desire thy skill, to speak plain. An thou readeest me well the stars for to vanquish the Douglas, thou hast made thy fortune."

Ransom looked at MacTate helplessly.

"He wants you to cast a horoscope," said MacTate. "Apparently it's about a propitious moment for a battle he has in mind."

"Aye," said the knight, flapping a gauntlet toward MacTate. "He speaks less fool than acts. I would have this devil of a Douglas artoast on my spit." He tapped the blade in his belt. "See what he hath done. Up hand, lad."

The tall youth raised his right hand. The second and third fingers were missing.

"Hath caught Jenkin here and snatched off his bowstring fingers. Fiend of hell. Read me the stars, for I will see his entrails smoking on the ground."

Ransom's eyes were frightened and wild. MacTate thought quickly. He stepped forward.

"My lord keeps vows of silence this day, sir knight," he said. "Give me the figures and we'll work it out for you." He took a notebook and pencil



from his pocket and looked interested. "Now, let's see. Where were you born?"

"Pomfret Castle," said the knight.

MacTate made a note. "And when was it?"

The knight rubbed his chin. "Michaelmas Eve, it was," he said. "Me-thinks it was in the twelfth year of the king's father, the old king that was."

MacTate scribbled briskly, then looked up. "And what is the birth date of the Douglas?"

The knight smiled sardonically. "Sayst thou? Am I his sib to know when the fiend gave him life?"

MacTate put on a worried expression. "That's so. I shouldn't think you would. But can you find out? It's really necessary for the almagest."

The knight frowned evilly. "Almagest me no almagest, scribeyn," he roared. "Read me the stars for to kill any man, and at the hour I will slay the Douglas."

MacTate looked at the ceiling judiciously and then shook his head. "I'm afraid it's not that simple," he said. "You see, we have to find a time when you're strong and the Douglas is weak. We couldn't tell when you'd be stronger than everyone else unless we read the stars for all the people in the world. You want it to be a sure thing, don't you?"

The knight looked frustrated. He glowered at the maimed youth as if trying to think of a way to blame him for the impasse.

"I will mean a pining of prisoners that else were ransomed," he said. "Warlocks and the Douglas. Of a kind." He sighed. "Come, lad."

He looked at MacTate darkly and turned toward the door. MacTate started to follow.

"Stand off!" The knight raised his gauntlet. MacTate fell back.

As soon as they had gone, Ransom pushed back his chair. "Let's get out of here."

"I suppose we'd better," said MacTate. "Who do you suppose that was? He said Pomfret Castle—"

Ransom looked at him and shook his head weakly. "That, right now, is the thing I care about least in the whole world." He pushed the crystal aside to put his elbows on the desk and hold his head in his hands. "I just want —"

There was a sound at the open door. In it stood a majestic woman clad only in a garment which was about to slide from her hips.

"Χαίρετον Κυρίω," she said.

"MacTate!" Ransom leaped to the door, knocking the crystal off the desk. He slammed the door in the woman's face and locked it. "Go away, please just go away," he breathed.

"Ransom, did you see her arms?" MacTate was staring at the closed door.

"I didn't see anything. I just want to keep it shut. The door, I mean. Let's just not open it any more. For anything."

"Listen, Ransom. I didn't see her arms either. *Because she didn't have any.*"

Ransom stared at him. "No arms? You mean like the Venus de —?"

MacTate nodded. "That's right. There's a lifesize plaster cast of her in the hall just across from your office. Does that mean anything to you?"

Ransom's mouth was open. His eyes were glassy. "Wait." He jumped up, unlocked the door, and looked out. Venus stood calmly on her pedestal, her garment clinging safely to her hips. Cold plaster.

MacTate, who was looking over his shoulder, sighed and went back to the desk. Ransom closed the door and locked it.

"MacTate, what —?"

"I say, Ransom." MacTate was staring at the desk. "What's happened to the crystal?"

"I don't know. I think I knocked it off when —" Ransom bent over to reach into the wastebasket that stood beside his desk. "Here it is." He held it up.

A megathelial bellow thundered in the hall outside. Ransom dropped the crystal and stood paralyzed.

When the last reverberation had died away, MacTate tiptoed to the door, unlocked it noiselessly, and opened it a crack to peer out. He opened it a little wider, then all the way. "Nothing there." He looked at Ransom. "Give me another cigarette." He opened the desk drawer, took out the cigarettes and lit one. "You know, this is as bad as the train to Baltimore, really. You notice — what was it you said? Strange scenery. Strange characters."

"Like the senator," Ransom said.

MacTate nodded. "And Mbongo, and Jenkin's friend."

"And the Venus de — No. *She's* plaster. I just saw her out there."

"But what was it you said about the fifth dimension relating mind and matter? Presumably a continuum could exist in which a mental afflatus informing plaster with —"

"Wait." Ransom looked at the door. "How about that noise? Can a continuum exist that's inhabited by disembodied bellowings?"

"For all we know, it was a dinosaur." MacTate shrugged.

"But why wasn't it there when you looked?" Ransom's voice was agitated. "And how did it get there in the first place? That's what I want to know. How did they all get there? What's making this happen, MacTate?"

MacTate looked at him thoughtfully. "Let's see, now. Let's reconstruct it. Starting from this end. What did you do when you heard the noise?"

Ransom looked puzzled. "I don't know. I just stood there." He turned

toward the desk. "I'd just fished the crystal out of the wastebasket, and when I heard the noise, I — The crystal. I dropped the crystal, and —"

"What were you doing when the Venus came to the door?"

"Why, I was sitting at the desk" — Ransom sat down at it — "with my elbows on it like this."

"And you moved the crystal to make room for your elbows?"

"Yes. Say." Ransom got up. "Where is the crystal? When I heard the noise, I dropped it. Here." He bent over to pick it up.

"Ransom! Just a minute. *Don't touch that thing.*" MacTate took the jewelry box from the desk and placed it carefully, upside down, over the crystal on the floor. "Now." He scooped up the crystal with the box and snapped the lid shut. "I should advise you to keep this insulated, if that's the word for it. The box apparently serves. It's safe only when in contact with continua in which nothing happens."

"What do you mean?" Ransom took the box and cupped it in his hands. "It's just a good-for-nothing alkaloid crystal that won't even warp polarized light. What harm —?"

MacTate looked at him patiently. "Don't you see, old man? Every time you moved that crystal, we had a visitor. Fortunately, you dropped it before the last one became anything more than a noise." He shook his head. "Of course it doesn't warp light. It warps space-time continua."

"That's very neat, MacTate. Very neat. There's just one little thing wrong. How did those people know who I am?"

"Well, I suppose there must be someone corresponding to you in those respective continua. Avatars, so to speak."

"Then why don't I remember any of them?" Ransom thrust out his belly challengingly.

"Oh, have you forgotten the second floor of the Times building? Temporary insanity and all that? Anyway, I think avatars aren't supposed to recall one another's experiences. But —" MacTate's eyes twinkled. He took the jewelry box from Ransom's hands. "It's perfectly easy to find out how they recognized you. We'll get them back and ask them."

"MacTate!" Ransom turned pale. He grabbed the box from MacTate and clasped it to his bosom, almost snarling. "You wouldn't. You wouldn't. But I'll make sure." He took a sheet of paper from his desk drawer, crumpled it around the box, and set it on the icosahedral ashtray. Then he struck a match and lit the paper. The flames shot up brightly. The box appeared through the charred paper, blackened, and lost shape. Ransom sank into his chair once more and wiped his face with his handkerchief. "That's the end of *that*," he said. "Thank God that stuff has a low melting point."

*Members of the faculty of that unnamed university where Cleanth Penn Ransom holds down the chair of mathematics lead a harried life; at any moment the great man (oblivious of any protestations from Professor MacTate!) may include them and their departments in his blithe disruption of the established order of time and space. (You'll remember that such diverse departments as those of athletics and the drama have felt the impact of Ransom's genius.) Observe now the good Colonel Flowerbottom, head of the university's ROTC, one of several innocent victims tripped up by the chain of events that began when Ransom started out to invent "an automobile tire you could change without twisting a lot of nuts."*

## *The Maladjusted Classroom*

by H. NEARING, JR.

"GIVE ME a place to sit," said Professor Cleanth Penn Ransom, of the Mathematics Faculty, "and I will move the world." He leaned back in his swivel chair, stuck out his little belly, and looked at his wristwatch.

Professor Archibald MacTate, of Philosophy, lit a cigarette and regarded him poignantly. "Really, old boy, isn't the world in a bad enough fix without your —"

"No, no, MacTate." Ransom laughed. "I just wanted to see if you'd catch me. It ought to be 'stand.' *You* know." He folded his arms behind his head and began to swing back and forth. "And the world is just a figure of speech, because I'm only going to transpose the United States Army. Part of it. But of course since I'll probably be sitting down —"

"You're going to what?" MacTate pulled the icosahedral ashtray across the desk, purging his memory for any possible connection between Ransom and the military.

"I'm going to transpose Colonel Flowerbottom's ROTC class." Ransom looked at his wristwatch again. "We got scheduled in the same classroom at the same time. By mistake. So we've got to make some adjustments to fit into it."

"We?" MacTate looked up suspiciously.

"The Colonel and me. I've got a class in analysis situs, and he —"

"Analysis what?"

"Situs. Geometry of position. Suppose you want to make a tube with no inside and no outside —"

"But does anybody actually want to study that?"

"Sure." Ransom blinked with dignity. "Five men signed up for it."

"And you're displacing a big ROTC class for the sake of five people?" MacTate eyed his colleague reprovingly.

"Not displacing," said Ransom. "Transposing. Into another dimension. The only other room open at that hour is over next to the new hydroponics building they're putting up. Too much racket to hold a class there. So we agreed to both stay upstairs in 417 where we were assigned. The Colonel and me."

"And what dimension are you going to transpose them into?" said MacTate. "As if I didn't know."

Ransom grinned. "Look. Here's a two dimensional classroom." He took a tablet and a pencil out of his top desk drawer and drew a large rectangle on it. "With two dimensional students in it." He sketched in a series of circles, putting a smaller circle on top of each one for a head and two sticks underneath for legs. "Suppose you want to get another two dimensional class in at the same time. All you've got to do is swing each student out at right angles to the plane of the room, and the other class can come into the vacated spaces. Right? Of course the transposed students have to leave one foot in the room so they can pivot back again. But the other class won't be disturbed by a bunch of shoes."

MacTate studied the sketch. "And the teacher?"

"Swings right out with them." Ransom drew a two dimensional teacher at the front of the classroom. "If he doesn't twist out at the same angle as they do, he might look at them broadside and see a cross-section of their insides." He pointed at the center of one of the circles. "See, these outlines represent their skins, and the bounded regions are their insides. But that shouldn't bother the Colonel."

MacTate smiled. "So now all you have to do is discover a method for swinging the students out of their continuum."

"Oh, that's easy." Ransom looked up. "The tough part was talking the Colonel into trying it out." He reached into his top drawer again and tossed a thick packet of memorandums over to MacTate. "That's his correspondence on the subject."

MacTate read the first and last memorandums. The first said:

"Dear Ransom: In re the bi-occupancy of room 417 by your class of 5 and ROTC section 2C. This is to advise you that the Fifth Army does not tolerate bi-occupancy of this nature in the administration of the ROTC program. As of this date you will evacuate your class of 5 from the room

indicated in order to immediately make it available to the ROTC section. It is hoped that it will not be necessary to report this matter to the Fifth Army. J. R. Flowerbottom, P.M.S. & T."

The last said:

"Professor Ransom: Due to the fact that the Dean has not seen fit to concern himself in the matter of the bi-occupancy of room 417, and it is wished to delay reporting this situation to the Fifth Army until all available solutions have been investigated, you may proceed with plan B at 1400 on 7 October only. It is understood that your class of 5 will be de-activated for the testing period. Be advised that the decision of the Fifth Army as to subsequent procedure will depend on the success of this demonstration. J. R. F., P.M.S. & T."

MacTate looked up. "What was plan A?"

Ransom grinned. "That he should move over next to the hydroponics thing. He decided right off that the Fifth Army wouldn't tolerate that either."

"And so you're going to try plan B on" — MacTate glanced at the date in the memorandum — "why, that's today. See here, Ransom, you don't mean you actually have a method for —"

"Transposing them." Ransom nodded. He drew two concentric circles inside the two dimensional classroom on his tablet. "See, you take a two dimensional ring like this, cut through it at one place, and put a magnet on each side of the cut with similar poles facing each other. What will happen? The magnets will swing around so the opposite poles can come together, and you've got a Moebius strip. Two dimensional thing that twists through the third dimension. So if a two dimensional student sticks one hand up around the twist and then reaches out with the other hand to clasp them together, he can pull himself out into the third dimension."

MacTate frowned. "But if it's a three dimensional student that aspires to the fourth dimension — I trust it *is* the fourth dimension you intend to put the Colonel in? —"

"That's right." Ransom nodded. "You simply make a three dimensional Moebius strip that twists through the fourth dimension. It's called a Klein bottle." He opened his bottom desk drawer. "Suppose you took a bicycle tire, cut through it, and stuck electromagnets in the two holes, positive poles out. Under certain conditions the magnets would twist around through the fourth dimension to join the ends of the tire together while they're facing in the same direction, like two hoses running into one nozzle, and you'd get this." He reached into the drawer and held up something that looked like a section of a bicycle tire, though the ends were indistinct, like a badly focused photograph.

"What's wrong with the ends?" MacTate crushed out his cigarette and leaned forward to peer closely at the curved cylinder. "What makes them shimmer like that?"

"They're not ends. They're intersectorors of the fourth dimension." Ransom ran a finger along the tire. When his finger reached the end of the visible section, the tip disappeared. "See. It's a whole tire, only part of it's twisting through the fourth dimension so you can't see it. If I ran my hand on up around it and then reached out with the other one —"

"No, no." MacTate grabbed convulsively at Ransom's sleeve and pulled his hand away from the tire. "If you're going to float away into hyperspace, I want witnesses around to testify I had nothing to do with it."

Ransom grinned. "Look, MacTate. You don't float away into hyperspace. You keep one foot in this continuum, see? So you can always come back when you want to."

"How?"

"Well, take this fellow for instance." Ransom pointed at one of the two-dimensional students on the tablet. "Since a plane is determined by three points, all he has to do is grab his pivot foot with both hands, so three parts of him will be back in the continuum, and then three of his friends can pull him all the way back. Your three dimensional student just has to add the other foot so you can stretch four points of him out."

MacTate stared at the tire. "How on earth did you make a thing like that?"

"Like I told you." Ransom leaned back and started to swing again. "I cut the tire and stuck magnets in the holes." He looked at the section with a hint of perplexity. "It was really sort of an accident, I guess. I was trying to work out an automobile tire you could change without twisting a lot of nuts. Like chains. You know. Just wrap it around the wheel and snap it shut. Only I was using a bicycle tire, because it's smaller and easier to experiment with. Well, I must have got one of the magnets in backwards by mistake, because all of a sudden there was a big bang and here was this thing."

"Why didn't you take it apart to see?"

Ransom shook his head. "Remember the story about the mechanical leg Benjamin Franklin made for Captain Dogbody? They took it apart to see how it worked, and couldn't ever get it back together again. See, I was experimenting in a cold box. Had it good and cold to simulate the worst possible weather you might have to change a tire in. The trouble is, I'm not sure just what the temperature was. At the time of the bang, I mean. Afterwards it was different, on account of the heat released by the thing twisting around like that. So when I tried it with another tire, it

wouldn't work. The temperature that first time must have been just right for weakening the continuum enough to let the ends fly —"

He was interrupted by a knock on the door. "That must be him now." He looked at his wristwatch and then at the door. "Come in."

A young man dressed in an ROTC uniform opened the door and looked uncertainly at Ransom, as if wondering whether to salute him. Finally, with a nothing-to-lose expression, he did. "Sir, the Colonel said to tell you he's ready."

"Right." Ransom grinned. "You go on ahead and announce our entrance." He got up and grabbed the Klein bottle. "Come on, MacTate. It's zero hour."

"But old boy. Do you think the Colonel —"

"Sure. You're an official observer. For our side."

The chair behind the teacher's desk in room 417 was occupied solidly by a person who had learned to live with suspicion. It was in his eyes. He had an apoplectic complexion and close-cropped gray hair.

Ransom and MacTate marched down the aisle between the rows of uniformed students. "All right, Colonel," said Ransom. "Ready for the big push?"

The Colonel eyed the Klein bottle in Ransom's hand. "Now get this, Ransom." He plunged a stubby finger at him. "If this idea of yours isn't completely satisfactory —"

"I know, I know." Ransom waved at him soothingly. "The Fifth Army and all that. But you'll be delighted with it. The arrangement." He looked around at the students. "Here, let's start with this man." He pointed to a student in the front row and went over to him. The student rose to attention. "Look." Ransom grabbed his right hand and put the Klein bottle into it. "Slide your hand up around this till you feel a twist in it, then let go and straighten your arm over your head."

The boy looked startled when his hand disappeared, but followed Ransom's instructions and turned to him, wide-eyed, with his whole arm invisible.

"That's it." Ransom pulled the Klein bottle away. "Now hold your right arm steady and reach up with your left hand till you can clasp your hands together."

The boy squeezed his lips together grimly, twisted his shoulders, and began to grope in the air with his left hand. "Can't find it," he grunted.

"Sure you can," Ransom said enthusiastically. "Keep trying."

The boy writhed and grimaced like a uniformed Laocoön. His forehead grew damp. "I can't do it," he said. "It's like trying to find a keyhole in the dark."



"Look." Ransom jabbed a finger at him. "Forget you're in a classroom. You're a boxer. Heavyweight. You're meeting the champion. For the title. Madison Square Garden, fifteenth round. Suddenly you see an opening. Out snakes your left. He staggers. This is it. You follow up mercilessly. Right left, right left. He's down. Neutral corner. Now the referee. One-two-three-four — *ten*. He's out. You're champion. Champion. The crowd goes wild. You raise your arms in triumph, high over your head —" Ransom swung his arms up. His glassy-eyed auditor imitated his motion, and abruptly there was nothing left of the boy but a leg. Ransom lifted his foot and kicked the rigid extremity gently behind the knee. All of it disappeared but the shoe.

Ransom pinched his nose and regarded the shoe thoughtfully. "There must be some easier way to —"

"Now see here, Ransom." The Colonel got up and walked stiffly over to face him. "If he's — out there, how can he see me?"

Ransom raised his eyebrows. "You go out with him."

"I go —? Now see here, Ransom." The Colonel fixed him with his eye and shook his head ominously.

"Here. Try it." Ransom seized the Colonel's hand and put the Klein's bottle into it. "It may seem a little — odd. At first. But when you get used to it, you won't want any other arrangement. Makes cribbing in tests next to impossible."

The Colonel looked at the thing in his hand with open hostility.

"Slide your hand up. Like this." Ransom grabbed his elbow and pushed it up. The Colonel's arm disappeared. "That's it. Now clasp your hands together." Ransom pulled the Klein bottle away and stepped back. The Colonel lifted his other arm and groped spasmodically in the air, twisting like an eccentric dancer.

Ransom leaned toward MacTate and spoke without moving his lips. "Wonder if we could sort of startle him into swinging out."

MacTate frowned dubiously. "I don't know, old boy. I don't think I'd —"

"Well, we've got to figure out some efficient way to get them out there. It's an experiment. He'd understand."

"All the same, I don't think — No, Ransom. Don't —"

"*Achtung*, Colonel." Ransom swung his arm back and hurled the Klein bottle, like an oversize quoit, straight at the Colonel's diaphragm. There was a thud and an explosive "Oof," and the Colonel's arm reappeared. But his head was gone.

"Didn't work," said Ransom. "Here, MacTate. Help me pull him back and we'll start over." He grabbed the Colonel's arm and gave it a violent jerk. The head did not reappear, but both legs vanished up to the knees.

"Come on, MacTate. I can't do it by myself." Ransom grasped the arm again, but it was snatched angrily away, and forthwith all of the Colonel disappeared except the hand.

"I thought you said it took four people, old boy." MacTate looked apprehensively at the Colonel's hand, which had doubled into an irate fist.

"My God, that's right." Ransom surveyed the students, some of whom had risen to watch the proceedings with macabre glee while their less scientific classmates sat in stunned horror. "Let's see. You" — he pointed to one of the more avid expressions — "and —"

"Look, Ransom. He's — churning about." MacTate pointed.

The Colonel's fist was replaced by a knee, a shoulder, and an unidentified portion of the anatomy, all in rapid succession. At last a patch of gray bristle appeared and rolled up to reveal his head. His eyes were popping.

"Ransom," he bellowed. "You lunatic! You butcher! You've murdered him. Blown him to bits."

"Him?" Ransom looked confused. "Who?"

The Colonel's hands appeared beside his cheeks, and he extended his arms back into the third dimension. "Him." He pointed at the patient shoe of Ransom's first victim. "Poor chap. And I let you do it. His organs, floating all over out there — It's horrible. It's —"

"Oh, my God!" Ransom turned to MacTate. "I forgot to tell him about looking through the insides of the class. Look, Colonel." He turned back to the head and arms. "The boy is all there, only —"

"Only in a hundred fragments. You criminal." The Colonel's arm shook an agitated finger at Ransom. "Mark my words, Ransom. This is not mere disrespect for the Fifth Army. This is an atrocity. You have a man's blood on your —"

"Look, Colonel. If you'll just let me explain —"

"Explain." The Colonel's head snorted. "I recall only too well your plausible explanation of plan B." Suddenly the cold fury in his eyes turned hot. "But you'll blow no more innocent men to bits." His arms reached down for the Klein bottle.

"No, look, Colonel. It didn't do anything to *you*, did it? This boy — No! Wait —"

The Colonel's hands had disappeared at the top of the Klein's bottle. His red face showed signs of extreme muscular exertion. Suddenly there was a miniature thunder clap, and the space the Colonel had occupied was entirely empty.

"The Klein bottle. He broke it." Ransom picked up a severed bicycle tire with iron bars stuck in its ends. "Look at it. All three dimensional." There

was a hint of hysteria in his voice. "God knows how we'll ever get it together again. Benjamin Franklin's leg —"

MacTate was not listening. With a horrified glance at the place where the Colonel had been, he grabbed the experimental student's ankle and began to tug at it. Nothing happened. With a sorrowful shrug he took a pack of matches from his pocket, inserted a match, head out, just above the insole of the shoe, and lit it with another. As the flame approached the leather, the shoe shook violently and two hands materialized to slap at it. "Grab them." MacTate motioned two students to seize the hands. "Three points. Now let's — maneuver him." They began to worry the hands and foot this way and that. Suddenly a wisp of fuzz appeared in the air. "There's his hair." MacTate motioned to another student to seize it. "Four points. Now stretch him out." The experimental student reappeared entirely and fell to the floor. "There." MacTate took out his handkerchief and wiped his brow. "The boy's intact. But the —" He turned to Ransom. "Good heavens, Ransom, what shall we do about the Colonel?"

"I don't care what you do about the Colonel." Ransom was still scowling at the tire. "Damned fathead, busting the bottle like that. This class," — he glanced angrily around at the students — "this class is dismissed. Plan B is all over." He strode down the aisle muttering over the tire.

"But Ransom —" With another anxious look at the recent site of the Colonel, MacTate hastened after his departing colleague.

Ransom was back in his office before MacTate could catch up with him. He took a pair of pliers out of his desk drawer and began to fiddle with the ends of the tire. "Maybe if I put a bigger magnet in one end —"

"But, Ransom," said MacTate, "even if you do reconstruct it, how can you bring him back with it?"

"Him?" Ransom looked up. "Who?"

"The Colonel. Good heavens, man, don't you realize we're responsible for his — departure?"

Ransom looked at him for a moment, then put the pliers down and sank into his swivel chair. "My God, that's right. I hadn't thought of that."

"What do you suppose they'll do to us? Can they court-martial civilians?"

"No." Ransom jabbed a finger at him. "Look. They can't do anything to us. What crime did we commit?"

"Defenestration. Into the fourth dimension."

"Where's the body to prove it?" Ransom began to swing back and forth.

"Very well. Abduction then. Whatever you like." MacTate wiped his brow. "The fact is, a roomful of students saw us do away with the Colonel. A keen prosecutor might even find a subversive motive in it."

Ransom stopped swinging and paled slightly. "You mean we attempted

to undermine the armed might of — My God, MacTate, they could shoot us for that."

"Hang us, old boy. We were in civilian clothes at the time."

Ransom darted to his feet. "Let's get down to the cold box and try to fix the bottle before they find out. You can glue a rope to me, and I'll go out looking for him. We —"

The phone rang.

Ransom's pallor became tinged with green. "Already —"

MacTate sat down wearily. "Better answer it, old boy. Perhaps we can request clemency in the name of science."

The phone rang again. Ransom stared at it as if it were a cobra. It rang again. He gulped a deep breath and picked it up. "Hello."

The receiver began to crackle angrily. Ransom's mouth fell open. He sank back into his chair.

MacTate leaned forward and raised his eyebrows with interrogative apprehension.

Ransom put his hand over the mouthpiece and looked up. "It's the Colonel." He listened to the tirade for another moment, then looked up again. "He's calling from a filling station near Wheeling, West Virginia. Landed on a farm — No, no, Colonel. We had no intention —" He lifted his hand from the mouthpiece to interpose an objection. "Now listen, Colonel —" The crackling in the receiver continued without pause. He shrugged and looked at MacTate again. "He landed on a farm down there. About an hour ago."

"An hour —? But good heavens, Ransom, how —"

"Fourth dimension. Time factor. *You* know —" Ransom turned his attention back to the Colonel's voice. "No, look, Colonel. It wasn't my fault you — Now wait a minute — What? Listen, you —"

"Old boy —" MacTate noticed his colleague's rising blood pressure. "Don't you think —"

"All right, Flowerbottom." Ransom made a visible effort to keep his blood pressure down. "I admit you have some justification for getting mad. But look, do you know what plane tickets cost? I — look. How about if I buy you a train ticket? It won't take that much longer. And I'll take your class tomorrow. Along with mine — All right. Give me your address there, and I'll wire the money down." He seized a pencil and scribbled on the tablet. "All right, I'll — What? Now listen, Flowerbottom, I said I'd — *What?* Listen, you fatheaded —" He sputtered for a moment, then put the receiver down and regarded it with contempt. "Hung up. That's the tactical mind —"

"But you *are* going to wire him the money and take his class?"

"Oh, I guess so." Ransom looked up. "But look, MacTate. You sit in on that class. As a witness. He's liable to accuse me of teaching the overthrow of the Fifth Army."

The next day MacTate fell into a state of semi-hypnosis filling in the *o's* in the *Journal of Aesthetics* with a pencil, and did not remember Ransom's class until it was more than half over. He trotted across the campus to Ransom's building, ran up the stairs to room 417, and sank out of breath into a seat in the back row.

Ransom had drawn an S-curve horizontally on the blackboard. "Here's the Tennessee River, with Chattanooga" — he put a dot in the upward bulge at the right — "in the bend. Over here's the Confederate left on Lookout Mountain." He drew a slender parabola, its nose almost touching the river, below the city and to its left. "And here's the Confederate right on Missionary Ridge." He drew a line, parallel to the axis of the parabola, to the city's right. "While down here in Rossville, Georgia," he put a dot toward the bottom of the line, "sits Braxton Bragg, nervously chewing his big black beard." He turned to the class and flourished the chalk. "On account of he knows that his left is threatened by Fighting Joe Hooker, his right by William T. Sherman, and his center by George H. Thomas. While back here in Chattanooga, directing the whole show, is none other than Ulysses S. Grant. It's a predicament."

A student in the front row raised his hand. "Wheah's General Lee?"

"Well, he's up the road a piece taking care of George G. Meade. We'll get to him later." Ransom turned back to the blackboard and surveyed the battlefield. "Anyway, at 1330 hours on the 23rd of November, Grant sends Thomas flying at Bragg's center" — he drew a demonstrative arrow on the board — "which gets pushed down the valley until Thomas can occupy Orchard Knob, a big hill about here." He put an X between Chattanooga and Missionary Ridge. "But that's nothing. Next morning at 800, here comes Fighting Joe Hooker with nine thousand Blues to storm Lookout Mountain." He drew a large, aggressive arrow pointing at the left side of the parabola. "The Grays on the palisades at the top can't see Hooker at all, on account of the low clouds hanging over everything; while Edward C. Walthall, commanding the brigade on the west slope, isn't much better off. Fighting Joe hits his flank in the fog and chases him all the way around the mountain." Ransom turned and regarded the class portentously. "Well, you can just imagine how Braxton Bragg is taking all this. Defeat stares him in the face. Frantically he orders a general retreat to Missionary Ridge, while Ulysses S. Grant in person comes down to Orchard Knob to watch the fun."

"General Lee still not theah?" said a wistful voice in the front row.

"No." Ransom shook his head. "Bragg's in this all by himself. But wait." He shot out a dramatic finger. "Suddenly Bragg's got an idea. His boys have been retreating just about an hour. Out goes a general order to the brigades of the left and center to get out their bottles. The bugles scream the weird new call. Then at a signal of six cannon shots from Rossville, the left drops over to Lookout Valley, where Hooker came from; and the center drops up to Chattanooga, where Thomas started. You see what they've done. Traded places with the Union armies. This time Walthall comes up through the fog and chases Hooker around Lookout Mountain; while Bragg smacks down on Orchard Knob, where Ulysses S. Grant is still waiting for the fun. Bragg's right, you remember, is still at the upper end of Missionary Ridge playing who'll-flinch-first with Sherman. Now Bragg tells them to charge the other side of the Knob, and Grant is sandwiched in between. So with him captured, it's no trouble at all to rout the other Blues. Bragg. . . ."

"I say, Ransom —" MacTate, in the back row, had a worried look on his face. But Ransom was too far absorbed in his narrative to notice.

". . . invests Chattanooga and then takes half his army up to help Robert E. Lee in the. . . ."

"*Heah's* General Lee."

". . . Mine Run campaign. Between them they make short work of Meade, take Washington and Philadelphia, and besiege New York. After Bragg has made his terrible march to Boston, cutting a swath of devastation through the heart of New England, Chief of Staff Halleck meets Lee at Albany to surrender the Union armies." Ransom looked at his wristwatch. "And that's enough for today. Class dismissed." He marched down the aisle, waved to MacTate to follow him, and went down to his office.

"Wanted to get out of there before that professional Southerner could corner me." Ransom leaned back in his swivel chair. "I —"

"Ransom." MacTate's expression was somewhat severe. "Am I crazy, or did I just hear you teach that class that the South won the Civil War?"

"No, no." Ransom laughed. "You should have come on time and heard the whole thing. See, I took the first half of the period to explain the principle of the Klein bottle. For *my* class. Then I used the rest of the time to illustrate a hypothetical military application. What could have happened if the South had had calibrated Klein bottles at Chattanooga. It was all imaginary."

"You think that boy in the front row thought it was imaginary?"

"Oh, him. Well, who cares" — suddenly Ransom whipped a handkerchief from his pocket and sneezed violently — "whad he thigs." He blew his nose. "Damn it, MacTate, I'm coming down with something bad." A far-

away look came into his eyes. "I wonder if I could have picked up a bunch of four dimensional germs fooling with that Klein bottle."

Ransom's diagnosis proved accurate in effect if not in cause. The next two days he was kept at home with a severe cold. MacTate wondered if the Colonel was taking Ransom's class along with the ROTC students, but was diffident of investigating.

"You see, old boy," he told Ransom on his return, "I was afraid he might interrogate me as to the soundness of your military doctrine, and as Plato says, a lie —"

"What did I teach them wrong?" Ransom swung petulantly in his swivel chair. "Anyway, we'll soon know whether he took them." He looked at his wristwatch. "We've got another joint class this afternoon."

"Yes." MacTate pursed his lips. "I was just wondering how you're going to arrange it now that the Klein bottle —"

The door opened. Ransom and MacTate looked up. It was the Colonel.

"Well, Ransom, I see you're back." He strode past the desk as if he were reviewing troops, but there was a nasty glint in his eye.

Ransom closed his mouth and tried to look nonchalant. "Sure, I'm back. I see you're back too."

"Yes." The Colonel sat down on the edge of a chair, leaning forward slightly, as if with eagerness. "I'm back." He took a paper from his breast pocket, unfolded it, and glanced at it with an expression of unmitigated malice. "I was interested in finding out what you had been teaching the ROTC class while I was — away." He looked up at Ransom. "So I gave them a test yesterday."

MacTate had a sudden odd feeling in the pit of his stomach.

"On the Battle of Chattanooga. That's what you — presented to them, wasn't it?"

"Sure." Ransom was swinging in his swivel chair with nervous twitches. He took a deep breath. "I trust everybody came away with a vivid impression."

"Yes." The Colonel looked at the paper in his hand with a peculiar smile. "One chap in particular wrote an extremely interesting account. Perhaps you'd like to hear it."

Ransom glowered. The Colonel began to read.

"General Bragg was in Rossville, Georgia, nervously chewing on his big black beard account of General Lee wasn't anywheres near the battlefield so at 1330 Grant captured Orchard Knob which made General Bragg feel mighty low account of he knew the north had pretty good generals without General Lee was there so next morning at 800 Hooker stormed Lookout Mountain in a fog and General Bragg he started to retreat to Missionary

Ridge only he remembered his men had fourth dimensional canteens and weird new bugles which they traded places with the northern armies with so Grant gave himself up on Orchard Knob to our right so then General Bragg could go help General Lee march to Washington, Philadelphia and Boston and they finally surrendered at Albany the north."

The Colonel regarded the paper with malevolent satisfaction. "I've called several papers to send reporters out to see me." He looked up at Ransom again.

"Why?"

"Oh, I thought they might be interested in the way some university professors teach history. It might even get national coverage, since it's about American history. Of course" — the Colonel looked Ransom straight in the eye — "if room 417 were to be made available —"

"Flowerbottom. That's blackmail."

"A harsh word, Ransom. Let's say it's a proffered bargain. Since you don't feel that you owe me anything after that dastardly trick you played with the Klein's bottle —"

"The trick *I* played? How about you tearing it apart like that? For no reason at all? To think what we could have done with it if you —"

"By the way, Ransom," said MacTate. "Not to change the subject, but do you think the Klein bottle might actually have an application of the sort you described to the class?"

Ransom looked at him. "You mean in tactical maneuvers? I don't know. How'll we ever know now that he's busted it?"

MacTate rubbed his nose. "But if you were planning to attempt a reconstruction, wouldn't the Army be interested in it? Give you a research subsidy or something like that?"

"Well, what if they would? What's that got to do with who gets room —"

"Nothing really, I suppose. It just occurred to me that they might like to know about the loss of a gadget that could transport personnel to a place like Wheeling and gain an hour doing it."

"MacTate, what are you —" Suddenly Ransom's eyes brightened. "You mean in my application for a research grant I'd have to tell them how the first one got broken?" He turned slowly and looked at the Colonel. "And by whom?"

"Oh, well, of course you wouldn't want to do it in that case," said MacTate.

"No, of course not." Ransom grinned. "We wouldn't want the Colonel to get in trouble for sabotaging developmental war gadgets. Would we?"

The Colonel looked uncomfortable.

"But on the other hand," said MacTate, "I'm sure the Colonel was



only joking about his intention of publishing the Southern chap's test paper. It would simply be a matter of your blowing each other up, so to speak. So that the matter of room 417 actually remains unsolved."

"What a big help *you* are." Ransom leaned back in his swivel chair.

"Well, to take a constructive view of the matter," MacTate went on unperturbed, "I would suggest that you take turns occupying 417, thus arriving at that equality of dissatisfaction which, as someone — Talleyrand I think — observed, is the nearest approach to happiness possible in the human state."

Both Ransom and the Colonel looked at him resentfully.

"Of course it's none of my business. Just a suggestion." MacTate shrugged.

The Colonel sighed. "In that case, who gets the room today?"

"Well, you've really had it only once, while Ransom's had it —" MacTate caught Ransom's glance and stopped abruptly.

"Then it's mine today." The Colonel got up. "After that I take turns. With a class of five." He turned his back on Ransom and walked stiffly to the door. As he opened it, he turned around. "Someday, Ransom, I'm going to catch you when your lawyer isn't with you. Then watch out." He slammed the door behind him.

"I say, Ransom, does he really think I'm your —" MacTate stopped again. Ransom was still staring at him.

"Don't worry about what he thinks." Ransom shook his head slowly. "You should hear what I'm thinking."

"But, old boy, I did get you out of some sort of mess, didn't I?"

"You got him out of one, too." Ransom laughed sardonically. "I don't know what we'd do without you. Either of us." He grinned. "Fighting Joe Flowerbottom and Braxton P. Ransom, having a nice quiet little battle, both get kicked in the rear by Benedict MacTate. And if that's the wrong war" — he sighed and swung back to his desk — "I'm glad."



*University professors are traditionally worried men. In addition to the worrisome problems of scholarship, they perpetually face the puzzle of supporting a family on a scholar's salary, and more recently the problem of supporting a scholar's integrity in the face of political demands for intellectual conformity. But one professorial worry is restricted to the faculty of an unnamed Pennsylvania college: How is traditional scholarship to survive the inadvertent advances of Professor Cleanth Penn Ransom? This time it is the Department of Romance Languages which suffers the irruption of the tubby mathematician; and the teaching of Dante will never be the same again after this contact with a TV puppet program, an engineer-impresario, and an epileptic genius who happens to be a parrot.*

## *The Cerebrative Psittacoid*

by H. NEARING, JR.

"MOSES," SAID Professor Cleanth Penn Ransom, of the Mathematics Faculty, "Alexander the Great, Julius Caesar, St. Paul, Mohammed, Martin Luther, Ignatius Loyola, Peter the Great, Napoleon —"

"I say, old boy," said Professor Archibald MacTate, of Philosophy, "are you rehearsing for some sort of survey course? I think you should add dates, at least."

"No, no." Ransom stuck out his little belly and began to swing in his swivel chair. "I was just running over the list of real bright epileptics that Worthington belongs to."

"Worthington?" MacTate crossed his long legs and lit a cigarette.

"Sure. He's a sort of an epileptic genius." Ransom waved vaguely south. "Comes from Oak Ridge. I guess he was born too close to a nuclear pile or something. Anyway, the hemispheres of his brain don't match, electrically speaking. Charge in the cortex on one side keeps building up until it's so big it's got to overflow into the other one and cause a fit."

"But, Ransom, who is —?"

"Of course," said Ransom, "Worthington doesn't have fits, on account of this head thing I fixed up for him. Couple of electrodes with a juiced-up hearing-aid-type battery. So there's a constant trickle of electricity from

one hemisphere to the other and the differential never builds up to the fit point, you might say."

"Ransom, who —?"

"But either the charge increase that's left or the trickle itself keeps driving his mind to one idea after another. And for some reason, ever since I put the electrodes on him there seems to be an increase in potential about where the Convolution of Broca ought to be. Speech center. You know. Ordinarily he shouldn't be able to say much until he's around 45, but with this setup he's already making up his own. Words, I mean. So that's how I got the idea of teaching him to —"

"*Quel giorno più,*" said a resonant baritone voice, "*non vi leggemmo avanti.*"

MacTate looked up. "Isn't that —?"

"That's him." Ransom nodded. "He's resting up for his lecture. I stepped up the electric trickle to knock him out, but he keeps talking in his sleep."

MacTate looked around the room. "I meant wasn't that Dante someone was quoting. Sounds familiar."

"Oh, that." Ransom grinned. "Sure, that's Dante. First thing Worthington learned to say before he turned into a genius. Every night when my nephew at Oak Ridge put his books away he'd say that to him. It's Francesca da Rimini telling how she got into trouble while she and her boyfriend were reading about Lancelot and Guinevere. 'That day we read no further.' Only of course my nephew didn't mean —"

"But, Ransom, where —?" MacTate was still looking around the room.

"He's sleeping, like I told you." Ransom pointed. "In the closet." He stopped swinging. "I guess it's time to wake him up. As I was saying, I got the idea of teaching him to read Italian and he went crazy over Dante, where he already had a one-line start you might say. Read every book about him in the library. And since he doesn't have any hands, his brain gets interested in things that a cortex cluttered with manual cells wouldn't notice so much. Awful pedant. That's why —"

"Ransom." MacTate put out his cigarette. "*Who* is Worthington?"

Ransom grinned. "I'll show you." He went to the closet, opened the door, reached inside for a moment and then stepped back. "Come on out, Worthington. I've got another recruit for your lecture."

MacTate could see nothing until the resonant baritone, rising from the floor, prompted him to look down.

"*Haut les mains, enfants!*" A little green parrot with an oversized head was aiming a claw at them in the manner of a revolver. It chuckled throatily, swaggered to Ransom's desk, beat its wings and perched on the crossbar of the desk lamp. "Why the hell didn't you teach me French, Ransom? You

can say such damned silly things in it and sound perfectly serious all the time." It dived forward, clinging to the crossbar with its claws, and swung in a full circle back to its original position.

"You can do that in any language," said Ransom. "Look, Worthington, meet Professor MacTate. Like I said, I think we can get him to come to the lecture."

"Greetings." Worthington swung around the crossbar again. MacTate noticed that he wore what looked like diminutive earphones, from which a wire ran to something beneath his breast feathers. "But listen, Ransom, what about that son of a bitch Strombetti? If you don't get him —"

"Now look, Worthington. What did I tell you? That's no kind of a name to call Professor Strombetti. Did you ever hear me say anything like that?"

"Sure. The other day you told him he didn't know his —"

"Never *mind* what I told him." Ransom scowled. "I'm not trying to get a job in his department."

"Now you're catching on, Ransom." Worthington swung around the crossbar again. "That's why he's got to be at the lecture. I'll show him whether I'm smart enough to teach in his lousy department."

MacTate looked quizzically at his colleague's protégé. "Tell me, Worthington, what's the subject of your lecture?"

"A Reexamination of Some Cruces in the *Inferno*. Or do you say *Cruces*?" Worthington looked at him thoughtfully. "Hell, I don't know. Anyway, how about if we get going? Pretty near time, isn't it?"

Ransom looked at his wristwatch. "Almost 5. I'll get your —"

"Old boy." MacTate looked puzzled. "Do you think 5 o'clock is a good time for a lecture?"

"Wait, MacTate." Ransom glanced at Worthington, whose head was under his wing busily biting the axilla. He beckoned MacTate to the closet and spoke in a whisper. "It's not an official affair, see. Just you and me and a couple of my graduate students I bullied into going. Worthington doesn't know it of course, but I picked a time when Strombetti probably wouldn't be around. If he knew Worthington was lecturing in a language class —"

"But won't Worthington see that he's not in the audience?"

"No." Ransom reached into the closet and took out a rectangular wire cage and a mahogany-colored cloth. "He'll be in this, with the cloth over him. I convinced him people might be distracted by his looks and not pay proper attention to what he was saying."

"What the hell are you whispering about, Ransom?" Worthington had stopped scratching and was regarding them suspiciously.

"Don't be so nosy, Worthington." Ransom went to him with the cage. "Here. Get in."

"Doesn't he have to use notes?" said MacTate.

"Notes." Worthington gave him a look and climbed into the cage. "What the hell do I want with them? They're for stupid bastards like Strombetti."

"Now look, Worthington." Ransom aimed a finger at him. "You promised you'd watch your language at this lecture. And here it's just a few minutes to go, and you're not making any effort to taper off."

"Relax, Ransom." Worthington settled comfortably in the cage. "It'll all be in the purest tradition of scholarship."

"Better be." Ransom covered the cage with the cloth and tucked it under his arm. "Come on, MacTate."

He led the way to a classroom on the fourth floor and turned on the light. The room was already occupied by three graduate students of a mathematical cast in whose countenances boredom contended with hunger.

"Ah," said Ransom, directing his voice toward the draped cage. "Sizable audience." He turned to the graduate students and soundlessly mouthed the word *clap*. They set up a half-hearted applause, redoubling their efforts when Ransom scowled.

"How about you-know-who?" said Worthington. "Is he out there, Ransom?"

"I — By the way, Worthington." Ransom set the cage on the desk at the front of the room and smoothed the drape. "I think I'd say *cruxes* instead of *cruces*. You don't want to make it too high-toned."

"But listen, Ransom, what about Strombetti? If he's not here yet —"

"My God." Ransom perceived himself fixed by a hostile eye at the door. "Speak of the devil." He turned to MacTate. "Stay here with Worthington a minute. And whatever you do, don't let him talk till I get back."

"But, old boy —"

Ransom went down the aisle to the door and tried to contort his face into a cordial grin. "Well, Strombetti. What brings you here?"

"I shouldn't be here, I suppose?" Strombetti wriggled his mustache. "These language classrooms, they're only for the mathematicians to turn the lights on in, I suppose." He shook his finger angrily in Ransom's face. "Suppose you tell me what *you're* doing here."

"Don't get excited, Strombetti." Ransom looked apprehensively at the draped cage. "Keep your voice down. I've got these graduate students that want a little tutoring, and I never dreamed that you'd be — that these classrooms would be in demand at this hour."

"I suppose I'm a mathematician, I go home early." Strombetti glared at the graduate students. "What's the matter? Don't you have mathematics classrooms you can take your lunkheads in?"

"I can explain that, Strombetti. We're studying Codazzi's equations — theory of surfaces; *you* know — and I thought a little atmosphere . . ."

Down at the desk Worthington was growing impatient. "Where the hell did Ransom go? You there, MacTate?"

"Yes, Worthington. Ransom said you were not to —"

"Listen. Did Strombetti come in yet?"

MacTate regarded the figure at the door. "Well, if I'm not mistaken —"

"That's all I wanted to know. Sit down, MacTate."

"No, Worthington. Good heavens —"

"Fellow scholars," came the resonant baritone. "I propose to consider with you — or rather, reconsider — a number of cru — cruxes in the greatest poem of our heritage. On the present occasion I shall confine my remarks to the *Inferno*, although the *Purgatorio* and many passages of the *Paradiso* might offer equally stimulating, if less familiar, challenges to the *Spitzelgefühl*, or sleuth instinct, so to speak. First I submit the well-known opening lines of the seventh canto: '*Papè Satan, papè Satan, aleppe*' *Cominciò Pluto con la voce chioccia*. In other words Pluto, jailer of the grasping and the spendthrift, greets Virgil and Dante 'with velicative tongue,' or literally, 'with clucking voice,' saying '*Papae Satan*' etcetera. This comminatory remark — for Virgil identifies it as such by reassuring Dante as to the limitations of the monster's power — was interpreted by the older commentators as an incantation in French: *Pas paix, Satan, pas paix, Satan, a l'épée*, or in Hebrew: *Bab-e-shatan, bab-e-shatan, alep*, to signify that Hell has conquered in contradiction of Matthew XVI, 18; or simply as meaningless jargon like the words of Nimrod in Canto XXXI. This last view commends itself to several of my learned colleagues, including Professor Strombetti, despite the fact that a fragment of a satire in Latin verse referring to Pope Honorius as '*papa Sathan*' was discovered in a Twelfth-Century manuscript of Copenhagen and published in the *Historische Vierteljahrschrift* (Volume XXX) as long ago as 1935. Moreover, although the parts of the satire which might explain the word *aleppe* in Pluto's remark are not extant, there is a somewhat longer quotation from the same satire in a manuscript of the municipal library of Rouen (A 376, folio 179) which suggests that the poem was a series of invectives against various popes, all of whom were named 'Popes Satan' among other epithets, thus accounting for Dante's use of the plural *papè*, or *papae*."

Worthington cleared his throat. "All this, mind you, is well known to the true student of Dante. But can you imagine that Strombetti? Instead of admitting that a satire famous enough to furnish Dante with an allusion could be almost entirely lost, he keeps on teaching his classes that Pluto's remark is 'meaningless jargon.' Not —"

"Worthington," said MacTate, who had been staring at the draped cage as one stunned, "hadn't you better —"

"Not," continued Worthington, "that I'm impugning the old boy's rationality. Let's be fair. His errors are due only to ignorance. He has these other interests, see, like this puppet show he fools around with, and he can't keep up with all the stuff you ought to know to teach Dante right. But that's what makes me mad at the . . ."

Back at the door Strombetti faced Ransom with bulging eyes. "So, Ransom. You brought that bird-brained parrot up here after I told you —"

"Look, Strombetti —"

"Trying to hide him, too, with that silly —" Strombetti glared at the draped cage. "Well, you won't do it again." He headed for the desk.

". . . And he knows perfectly well," Worthington was saying, "that this bird is an accomplished Dante scholar, but he still won't give him a job in the department. How low can you —"

Strombetti reached the cage and whipped off the drape. Worthington, who was clinging to the top lecturing upside down, craned his neck around to stare into his enemy's face. "Well, look who's here. What do you say, Strombettaccio? Do I get a job, or haven't you had enough yet?"

"I'll show you who's had enough, you damned little vulture." Strombetti tore the top off the cage and seized Worthington by the neck.

"Take your hands off my neck, you lousy *guaglio*." Worthington twisted and tried to beat his wings.

"Of course. When you stop breathing." Strombetti increased the pressure a little with a kind of cautious roughness.

"Ransom," squawked Worthington. "He's trying to kill me. Ransom!"

"Let go of him, Strombetti." Ransom came up and grabbed his sleeve. "MacTate —"

"Not till he promises he'll never come up here again." Strombetti elbowed Ransom and backed away from MacTate, who was advancing uncertainly.

"All right. I promise. I promise." Worthington broke away from his enemy's relaxing fingers and flapped up to the light fixture. "For trying to get a job you can kill people?" He began to preen his ruffled feathers with injured dignity.

Strombetti whirled around. "And as for you, Ransom —"

"Look, Strombetti, you weren't really going to hurt him, were you? I just wanted to let him show off a little for my math boys here." Ransom glanced at Worthington and waved a silent *congé* to his graduate students, who departed with alacrity. "We could have used a room downstairs, but he's got such a sharp sense of direction —"

"His sharp sense better keep him away from *this* direction." Strombetti glared up at Worthington. "I let him go this time, but this is a promise, Ransom. If I ever catch him up here again —" He flourished his finger in an angry aposiopesis, went to the door and snapped off the light.

"Hey, Strombetti." Worthington stopped preening. "What about my job? Don't tell me you're still not convinced —"

"Shut up, Worthington." Ransom picked up the cage and motioned to him to fly into it. "You just escape getting strangled and all you can think about is a job." He closed the cage on Worthington and hung the drape over it. "Strombetti was right. You *are* a bird-brain."

MacTate, discreetly deciding against following his colleague, went home. The next morning, while he sat in his office sketching grotesque designs in the margins of the *Journal of Aesthetics*, his phone rang.

"Look, MacTate. Do *you* have any idea where Worthington is?"

"Why, no, old boy. The last I saw of him, you were taking him back to your office after the — lecture. I thought I could compliment him with more propriety at a later time, so I —"

"Look. Come over and help me find him. God knows what he's up to."

When MacTate opened the door of Ransom's office, he found his colleague listening to a crackling tirade on the phone.

"Yes, Strombetti . . . Perfectly right. No excuse for that sort of thing." Ransom took the receiver away from his ear, winced, and put it back again. "No, no. You have my personal assurance that nothing like that will ever happen again. I —"

There was a tap at the door. MacTate opened it. Worthington came in and went to his perch on the desk lamp.

"Here he is now," said Ransom. "I'll lay down the law to him, Strombetti. Thanks for calling." He hung up, leaned back in his swivel chair, and fixed Worthington with a rhadamanthine eye.

Worthington, strangely silent, stuck his beak under his wing and began to scratch.

"Now look, Worthington," said Ransom. "What's this about you disturbing Strombetti's Dante class this morning?"

"Did he say I disturbed them?" Worthington looked up with innocent astonishment. "I just handed them a few laughs. That's all."

"Oh. You said funny things?"

"Sure. Strombetti has this catch phrase, see. *Piangevan elli*. He says it every time a student asks a dumb question. It's from where Ugolino tells how he starved to death with his sons. *Io non piangeva, sì dentro impietrai; Piangevan elli*. 'I didn't cry, so much I petrified inside; *They* cried.' So every time he got mixed up in his notes or hedged on an interpretation, I sighed



and said *Piangevan elli*, just the way he does. Gave the class a big charge."

"I can well imagine. I guess you've forgotten you promised him last night that you'd never go up there again."

"I *didn't* go in his room. I sat on the window sill. Flew out your window and up to his."

"But my God, Worthington — Wait." Ransom's eyes narrowed. "If you flew up outside, how come you came back through the door just now?"

"It was him. He edged over to the window and tried to bang it down on me. Is it my fault if he *forces* me into his room?"

Ransom scowled with solicitude. "Worthington, you're going to get yourself killed one of these days. I bet you had the nerve to ask him for a job again, too."

"Why not?" Worthington swung recklessly around the crossbar. "There's a fair employment law in this state, isn't there? Or is it national? Anyway, if I really wanted to make trouble —"

"Look, Worthington, let's face it. You're not a citizen. You're only —"

"Who isn't a citizen?" Worthington hopped indignantly. "I was born in this country and I can pass any voter's test you ever saw. As soon as I'm old enough. Just look up the Fifteenth Amendment, Ransom. 'The right to vote shall not be denied or abridged on account of race, color, or previous condition of servitude.'"

"There you are." Ransom aimed a finger at him. "Where does it say anything about species?" He shook his head sadly. "You get the craziest ideas, Worthington. I don't know what to do with you."

"Perhaps you should send him to law school," said MacTate.

"I admit you're something more than a parrot," Ransom went on. "A sort of super-psittacoid. Almost a psittaco-humanoid, maybe. But you haven't got any sense. Strombetti has a perfect right to brush you off on the ground of emotional instability."

"Hell, Ransom. If that were true, they'd have to fire every professor in the place. Listen. Suppose I liked mathematics instead of Dante. Wouldn't you give me a job?"

"Well —"

"You see? So why won't he give me one? What if I am a parrot? Hath not a parrot eyes? Hath not a parrot hands — well, claws — organs, dimensions, senses, affections, passions; fed with the same food, hurt with the same weapons, subject to the same diseases — that's an idea: I could bite the son of a bitch and give him psittacosis . . ."

"Worthington, I told you not to —"

". . . heal'd by the same means, warm'd and cool'd by the same winter and summer, as a — Strombetti is? If you prick us, do we not bleed? If you

tickle us, do we not laugh? If you poison us, do we not die? And if you wrong us, shall we not revenge? If we are like you in the rest, we will resemble you in that." Worthington aimed a dramatic claw at Ransom. "The villainy you teach me, I will execute, and it shall go hard but I will better the instruction." He cleared his throat with self-satisfaction. "*Merchant of Venice*, Act III, Scene I."

Ransom looked at him. "My God, Worthington, what a memory you've got. Like an actor. If only there was some way —"

"Old boy," said MacTate. "Doesn't Strombetti have a puppet show of some sort on the television?"

"Sure. But what's that got to do with —"

"It occurred to me that he might be more ready to employ Worthington as a voice in the puppet show than as a member of the language department. Then if Worthington ingratiated himself *there*, he might have a chance of working up to —"

"MacTate. You've —" Ransom looked at Worthington, and the gleam in his eye faded. "Still, I don't know. After what happened last night and this morning —"

"Go ahead, Ransom," said Worthington. "Fix it up for me. I'll be nice to the — to Strombetti once he gives me a job."

Ransom looked dubious. "I don't know. Better give him a week or so to simmer down."

"Good God, Ransom. You don't expect me to just sit here for a week?"

"Well, maybe you're right." Ransom scratched his nose. "I'll go talk to him. Maybe if I threaten him with what you could do in an idle week, he'll give you a job in self-defense." He got up. "Here, MacTate." He took a chess board and a box of chessmen out of his desk drawer. "You keep Worthington safely occupied till I get back."

"But, old boy —"

Ransom left.

MacTate shrugged and began to set up the pieces. Some time later he found himself facing a Roman-problem defeat as Worthington upset one desperately maneuvered stalemate after another, when Ransom came back and flopped limply into his swivel chair.

"I have just given you the best years of my life, Worthington.

"Is this a time for gags, Ransom? What did Strombetti say?"

"Well, it's a long story." Ransom folded his arms back of his head and began to swing. "In the first place he asked me if I was sure you were an epileptic, and I had to admit that it might be the electrodes that make you act crazy. Especially since you didn't show any sign of intelligence till I put them on you. It's possible that even if you did start out as an epileptic,

you might have outgrown it by now or adjusted to it through the electrotherapy, you might say. Anyway, Strombetti suggested that if I took the electrodes off you, you might be fit to live with."

Worthington stared at him. "But, Ransom. That would be like murder, for God's sake. I couldn't — Murder?" He hopped with anguish. "That's what he's *after*. Don't you see? If he can't murder me himself, he wants to talk you into it. The sneaking, treacherous —"

"Look, Worthington. Calm down." Ransom held up a soothing hand. "How do we know you wouldn't be perfectly normal without them? You *are* a growing boy, and maybe they've served their purpose by now and are just tickling you silly. It's worth trying, anyway. Taking them off. We can always put them back on if anything goes wrong. And Strombetti will give you a job meanwhile."

Worthington looked at him suspiciously. "Just what is this job he's giving me?"

"On his puppet show." Ransom dropped his eyes. "Very responsible position. He needs a good sound-effects man."

"Christ."

"Well, what do you want? You can't hang around here starting things till Strombetti gets mad enough to really kill you." Ransom spread his hands with exasperation. "I wear myself out convincing him you would be cheaper than somebody that needs gadgets for sound effects, and that's all the thanks I get."

Worthington hopped angrily. "I suppose I should thank you for conspiring with him to murder me."

"Look, Worthington —"

"And then you have the nerve to blow about what a responsible job you got me. Doesn't he need somebody to turn the pages for him?"

"Worthington —"

"Or how about a janitor? I could sweep up the . . ."

MacTate's discretion once more prompted him to slip away. He muttered something about an engagement and softly closed the door on the rising tide of Worthington's objurgations. The next day Ransom called up to tell him that Worthington had finally agreed to Strombetti's arrangement and had gone without the electrodes for nearly eighteen hours. "No change in either intellect or personality, either. That you could notice. But he does treat Strombetti with more respect. They're up in Strombetti's office now going over the script for next week's show."

Subsequent calls reported much the same situation. "Except he gets sleepy oftener. Probably the strain of rehearsals. Don't forget, MacTate. Wednesday. Five o'clock."

On Wednesday, at 4:30, Ransom called up and told MacTate to meet him at a bar down the street. MacTate, detained by a female graduate student with a Freudian complex involving Plato, joined his colleague before the television set at 4:49 and ordered a double scotch.

"How did you talk the bartender into getting the children's program, old boy?"

"He — Shh." Ransom pointed at the screen, on which a sign announced: "The Deth-Buz Exterminating Company Presents — Uncle Alessandro's Insect Parade."

"Boys and girls," said a confidential voice, "next time you see a bug crawling around your house, you ask mommy to call . . ."

"That isn't Worthington, is it?" said MacTate.

"No," said Ransom, "that's Strombetti. I think Worthington's first line is a telephone ring."

". . . So let's go to the little hive on Mrs. Faggioli's back yard where Giuseppe Bee is waiting to find out whether Umberto Beetle passed his swimming test." The screen showed a hexagonally reticulated wall before which an anthropoidal bee sat tapping his fingernails on a phone table. "Giuseppe, you remember, is trying to get his friend elected to the Ruscello-pattuglia Club. This is the final test. Suddenly the phone rings."

"Now," said Ransom. "Here's Worthington."

Nothing happened.

"The phone rings," repeated the television voice.

"The phone —"

"*Quel giorno più*," said a resonant baritone, "*non vi leggemo avanti*."

"My God." Ransom put his drink down. "You don't suppose —"

There was an excited whispering, followed by a flapping sound and something like a suppressed groan, and then an unconvincing attempt to imitate a telephone ring, obviously from human lips.

"MacTate. Let's get down there." Ransom threw some money on the bar and dashed out the door.

It took them thirty minutes to reach the television station through the 5-o'clock traffic. Strombetti, whom they met coming out of a door marked PRIVATE, had a vendetta look in his eye. "Ransom, I should have myself, so help me, committed for letting you talk me into using that idiot. He —"

"Look, Strombetti." Ransom advanced belligerently. "What did you do to him?"

"Not a thing. Not a thing. When it's time for him to ring, he suddenly starts spouting Dante and flies away. I had to finish —"

"Why didn't you keep him there?" Ransom scowled. "It's all your fault for making me take the electrodes off. If you don't find him —"

"Just a moment, old boy." MacTate stepped forward. "You see, Strombetti, the little fellow apparently lost his memory. Nothing intentional. Did you notice which way he flew?"

"He flew into the ventilating shaft. They had it apart to fix it and —"

"You don't happen to know where the other end is located?"

"The other *ends*, you mean. It's a labyrinth. I've just been in to check with the maintenance man. He says your 'little fellow' could be anywhere in the block by now."

MacTate went to a window and looked out at the skyscrapers clustered around the television building. He turned to Ransom. "Shall we start looking, old boy? We can take two buildings at a time. One apiece. He's bound to have flown into a window somewhere."

They managed to cover almost a quarter of a floor each before the offices closed for the evening. "My God, MacTate," said Ransom as they went back to the University, "who would ever think there was so much red tape in little offices like that? Those detective agencies. They don't like anybody looking for things but themselves."

"I hit the teachers' agencies," said MacTate. "— I say, old boy. Why don't you hire a detective agency to help us?"

"I did."

Eventually Ransom reported that the agency had given up. "But I won't. There aren't many more buildings to cover. Besides, there's one place on a seventeenth floor I want to keep my eye on. Structural engineering place. The girl says her boss is a great genius that can't possibly be disturbed, and his partner, who talks to people, is in Europe."

"But, old boy, perhaps a bribe —"

"No, that's the point. She's never allowed in the inner sanctum herself. This genius dictates over the intercom."

"Hardly the type to adopt stray parrots."

"Well, you can't tell about those mad geniuses." Ransom scratched his nose. "A parrot that quotes Dante — I've even convinced Strombetti he missed a bet. Did I tell you? He agreed that if we got Worthington back and put the electrodes on him, he'd give him a job. Like those playback recorders they teach pronunciation with. You know. He figures it'll be simpler to use Worthington."

"Now all we have to do is get him back." MacTate smiled wryly. "Old boy, why don't we spend the rest of the morning trying to crack that inner sanctum of yours? If our efforts prove fruitless, we can try the other buildings this afternoon."

"All right. My feet hurt, too." Ransom sighed. "What shall we do? Get a couple of masks and revolvers?"

MacTate smiled and shook his head. "The door might be locked from the inside. When does this genius start dictating through the intercom?"

Ransom frowned. "I don't know. What's that got to do with — Wait." He turned to his colleague with gleaming eyes. "I'm way ahead of you, MacTate. Listen. Let me do the talking. I've got the perfect story."

They went up to the seventeenth floor in question and entered an office containing one girl, chair, filing cabinet, and desk with typewriter and intercommunication unit, and nothing else.

The girl looked up. "Oh my God. Not you again." She pushed her horn-rimmed glasses up on her hair.

Ransom looked around the scantily furnished room. "You were expecting anybody else?" He pointed at a corner. "There was a small chair there last time. What happened? Finance company get tired waiting for your talking boss to come back?"

The girl pushed her hair up from her neck with both hands. "You'll never guess. Today he's talking. The Silent One. To *two* fellow men, no less. They took the chair in for the other one."

"It wouldn't by any chance be about a little green parrot that says *Quel* —"

"Look, daddy." She closed her eyes wearily. "Like I have reiterated to you 1000 times already, Mr. Andrielli could be keeping a whole menagerie or a harem even behind that oaken portal. I wouldn't know. All I do is sit here and listen for the oracular tones to issue from this instrument" — she tapped the intercommunication unit — "which —"

"Do you happen to know where these fellow men are from?"

She nodded. "That I could tell you. In fact, if I thought it was any of your business —"

"Suppose we guessed," said MacTate. "For instance, they couldn't be television programming men, could they?"

The girl's jaw dropped. "How —?"

"MacTate. You don't mean he's got it back? His memory?" Ransom was equally astonished.

"Luck, old boy. Attempt at logical elimination." MacTate pointed at the intercommunication unit. "Ask her when he usually turns the instrument on."

"I was about to say when interrupted," said the girl, "that this instrument —" She was interrupted again, by a click from the intercommunication unit. Her voice underwent a subtle change. "Yes, Mr. Andrielli?"

"Week ago," said the voice on the unit. "Letter from Fortitude Theatrical Agency re mental prodigy act. What salary quoted?"

"One moment, Mr. Andrielli." The girl opened a file drawer.

Ransom cleared his throat and bent over the intercommunication unit. "But I tell you, young lady, we've *got* to see Mr. Andrielli. Matter of life or death. This green talking parrot that escaped from our laboratories is intensely radioactive. Since our geiger counters were able to trace him to this building, you can readily understand his radioactivity is of a degree that makes prolonged proximity —"

"Still looking, Mr. Andrielli." The girl clicked off the intercommunication unit and turned on Ransom with furious eyes. "What are you trying to do? Get me fired?"

"Cheer up, daughter. He might be relieved enough to give you a raise when he finds out he's uncontaminated." Ransom looked at his wrist-watch. "I give him fifteen seconds."

Eleven seconds later the oaken portal flew open. Two frightened-looking gentlemen issued from it to dash past Ransom and MacTate and through the outer door. From the inner sanctum came a familiar voice. "What the hell do you think you're doing? Wait. Not out there. He's lying, I tell you. What if I was born in Oak R —"

There was a hoarse exclamation, then a loud clang, and then Worthington flapped out and lit on Ransom's shoulder. "Ransom. What's the idea lying like that? He was going to throw me out the window in a wastebasket. If I hadn't bit him before he got the scotch tape —"

"Look, Worthington." Ransom reached up, grabbed him firmly by the neck and stuck him under his coat. "You say another word till I get you home" — he followed MacTate out the door — "and I'll kill you."

Back on his crossbar perch in Ransom's office, Worthington bit his axilla, looked around the room, and cocked an eye at his rescuer. "What's eating you, Ransom? Aren't you glad to see me?"

MacTate sat down in front of the desk, thrust out his long legs and regarded his suffering feet. Ransom sat down behind it and took off his shoes.

"Sure. I'm glad to see you. But you've got such a big mouth, and I didn't want to get involved with this Andrielli." Ransom looked up. "Engineer with impresario instincts. What was he like, anyway?"

"He was all right, I guess. Till you convinced him I had deliberately plotted to radioactivate him, or whatever you call it."

"By the way, Worthington, when did your memory come back? After we took the electrodes off, it lasted just long enough for you to get on Strombetti's show and wreck it. We thought —"

"Strombetti?" Worthington chuckled reminiscently. "I remember him. Used to have words with him, didn't I? But listen, Ransom. You remember I asked you once if you would let a mathematically inclined parrot teach some of your classes, and you said —"

"Don't worry about that any more, Worthington. Strombetti's agreed to give you a very interesting job. Here at the University. He needs —"

"Wait, Ransom. You're not following me. You see, this fellow Andrielli let me read these books he has in his office. I discovered I had mental powers I never dreamed of."

"*Italian* books? In an engineer's office?"

"No, no. All that went with the electrodes, I guess." Worthington hopped down on the desk and cocked an eye at a note pad. "Here's the sort of thing I learned. Take the digits in this phone number: 50667. Know what the cube root of that is?"

"Cube root?"

"Sure. It's 37 point —"

"Worthington!" Ransom sprang to his feet.

"But that's just elementary for me. Do you know what area of grass a cow can eat if it's tied by a ten-foot rope to the outside of a circular fence six feet in —"

"Worthington. No —"

"Even that's not very hard. I can do them transcendental, too. And since you promised you'd give me a job —"

"Oh God. MacTate." Ransom turned anguished eyes to his colleague. "Logic. Symbolic logic. What do you say?"

MacTate sighed comfortably. "Sorry, old boy. His talents seem to go far beyond that sort of thing."

Ransom stared glassily at the far wall. "There's just one chance. Convolution of Broca." He tore open a desk drawer and began to rummage in it with convulsive desperation. "What did I do with those damned electrodes. . . ."





*To date, the sinister researches of Professor Cleanth Penn Ransom have affected only the higher branches of education; but now, in the curious episode of the cipher, the yo-yo and the venerous Venusian, he threatens to shake the very foundations of the junior high school system. Are even our nursery schools, we wonder, safe from this maddest of scientists?*

*Both the author and the editors wish to acknowledge the technical assistance of Larry White, Duncan Yo-Yo Skill Award '52.*

## *The Gastronomical Error*

by H. NEARING, JR.

"I wish," said Professor Cleanth Penn Ransom, of the Mathematics Faculty, "it was June 7, 2004." He squeezed his little belly behind the steering wheel and started the car.

"Now see here, Ransom." Professor Archibald MacTate, of Philosophy, withdrew his head from the other door. "If you've invented a time machine —"

"No, no." Ransom waved his colleague into the car. "June 7, 2004 is the next transit of Venus."

"Oh." MacTate got in and closed the door hesitantly. Suddenly he looked at Ransom. "The next what?"

"Transit of Venus. You know. When Venus comes between the Earth and the Sun. Doesn't happen very often on account of its orbit — Venus's — being inclined at an angle of —"

MacTate opened the door again. "No spaceships, either."

"Look, MacTate." Ransom reached across him, slammed the door, and shot the car impetuously into the traffic. "It's getting dark, and we've got to get out to the observatory. We're not *going* there. Venus, I mean. We're just going to look."

"But why do I — ?"

"Well —" Ransom laughed. "Old Appleberry's a cantankerous sort. And if we get into any arguments —"

"Good heavens, Ransom. Don't tell me Appleberry's still around. I thought he retired twenty years ago."

"I guess he did. Sort of. But they've got a rule you can work half time and

still get your pension. He totters around the observatory taking pictures of comets and stuff. And practicing with his yo-yo. But grouchy as a rattlesnake. So if we get into any arguments —”

“What am I supposed to do? Hold him for you?”

Ransom grinned. “You just back me up. He can take care of himself.”

“But what do I know about Venus?”

“I’ll tell you all there is to know about it before we get there.” Ransom turned off the main highway into the mountain road that led to the observatory. “Venus. Twenty-six to 160,000,000 miles away. About 7700 miles in diameter. Got a year equal to 225 earth days, and maybe six or seven days of its own. Per year. Albedo — that’s reflection ratio — 60 per cent. Temperature on its sunlit side 55 Centigrade. But that’s only —”

“How about the other side?”

“Minus twenty — Now listen, MacTate.” Ransom clashed the gears into second to take a hump in the road. “You can just stop being sarcastic. Those temperatures don’t mean anything anyway, because they’re only on the outside. Of the atmosphere. Underneath it’s hotter.”

“How do you know?”

“Because the atmosphere’s mostly carbon dioxide. No water vapor. So —”

“But I distinctly remember reading in the encyclopedia —”

“Well, they’ve found out different. No water at all. So it’s awful dry, and it’s got big dust clouds all over that act like a greenhouse. You know. Catch the long wavelengths when they try to escape and keep them to heat the surface with. That’s why you can’t take pictures of it. The surface.”

“Pictures?”

“Sure. You try to take pictures through a haze with ultraviolet waves, and all you get is the outside of the haze, because they’re so short they lose their energy inside. But infrared waves are long enough to cut through most of the time and give you a picture.”

“Except on Venus.”

Ransom nodded. “On account of the atmosphere being so thick it traps them.”

MacTate eyed him suspiciously. “And so what are you going to do about that?”

“Well —” Ransom grinned demurely. “Everybody’s always tried to take pictures with the radiations coming *from* Venus. But we’re going to shoot our own waves *at* it. Appleberry and me.”

“But if the sun’s rays can’t get through the atmosphere —”

“Oh, the sun hasn’t got our kind of rays.” Ransom gave a little cough. “We ransomize them.”

“What a shame.”

"No, no. It's a good thing." Ransom turned on the car lights. "As I was saying, the sun hasn't got quite our setup. We've got two atmospheres to contend with. Venus's and our own. If you use wavelengths under about two centimeters, the air eats them up, sort of. And if you use much longer ones, they slop all over the place and bounce off the ionosphere, like in radio. So you can't aim them right, any more than you can thread a needle if you hold the thread too far back from the end."

"Then why not just use two-centimeter waves?"

"Well, they're good enough to hit fairly close things. Like the moon. But Venus is different. A two-centimeter wave would spread out and lose its focus, you might say. Before it got there." Ransom leaned forward to squint up through the windshield. He gestured at the white gleam in the darkening sky. "Pretty far away. See? So we've got to use sharper waves."

"But how do you get them through the air?"

"By a ransomized conductor. Like I said." Ransom leaned back and settled himself comfortably behind the wheel. "Suppose you could run a wire up to the ionosphere and feed an electric current into it. What would you have? A bunch of molecular vibrations with electronic vibrations running over them. Right? So we shoot up a sort of a 'wire' of medium sized waves with ultra-high harmonics in it. The main wave bounces off the ionosphere, but the harmonics go on through."

"But what about the atmosphere on Venus?"

"Well —" Ransom took one hand off the wheel and scratched his nose. "That gets pretty technical. But if you wanted to oversimplify, you could say it's something like tying a string to a flashlight beam. All we do is change microwaves into ultrasonics. Or quantum into continuous waves. Same thing. You know if you take ultraviolet pictures of Venus, you can see clouds toward the outside of its atmosphere? Dust clouds. Well, we rigged up a super-spectroscope and found one with a lot of metallic ions in it. So we shoot our harmonics at this cloud, and it's dense enough to bounce them back again, but meanwhile they've put a little dent in it, you might say, and that makes ultrasonics — around 400,000 cycles — that go down to Venus, bounce back to the cloud and make a *new* dent in it that causes a measurable disturbance in the returning harmonics. See?" He turned up the side road that wound to the observatory.

MacTate looked at him. "Offhand, old boy, I'd say it wouldn't work."

"But my God, MacTate, it does work. What have I just been telling you? We've been doing it all week. The beam."

"Then if everything's been going smoothly, why do you need protection from Appleberry?"

"On account of things haven't been going that smooth." Ransom pulled

up in front of the observatory and stopped the car. "Last couple of days we've been getting interference. Funny interruptions in the returning wave. And Appleberry swears my calculations aren't —" He looked around. "MacTate. Do you see another car?"

"No, old boy. Why?"

"Well, I guess he isn't here yet."

"Who? Appleberry?"

"No, no. *He's* here. I mean —"

Suddenly the front door of the observatory flew open in a burst of light silhouetting a diminutive figure.

"That you, Sonny? Where the hell you been?"

MacTate looked at Ransom with a wondering smile. "Not — ?"

"He means me." Ransom nodded. "I'm just a kid around here. Come on."

They got out of the car and went into the observatory. Appleberry, MacTate noticed, had the general appearance, and expression, of a decorticated snapping turtle. He led the way to his office and sat on a step ladder that stood beside a wall of book-filled shelves.

"More of them goddam gaps in your circuit, Sonny." He spun down a yo-yo and caught it again. With his other hand he reached for a tablet on the desk and looked at it. "I been counting them up, too. Make a regular pattern." He threw the tablet back on the desk, spun his yo-yo again and glared at his junior with red-rimmed eyes. "Can't tell me there ain't something wrong with your figuring."

Ransom picked up the tablet and held it out for MacTate to see over his shoulder. On it was written:

12-16-16, 12-16-16, 12-16-16, 12-16-16, 12-16-16, 12-16-16 — 14-1-1-1,  
14-1-1-1, 14-1-1-1, 14-1-1-1, 14-1-1-1, 14-1-1-1 — 12-12-12-12-12-12-  
1-1-1-1-1-1-1-1-1-1-1-1-14-16-16 — 1-14-16-16, 1-14-16-16, 1-14-16-16,  
1-14-16-16, 1-14-16-16.

"You've got three kinds of dashes here, Appleberry. What are they? Pauses?"

"A for effort, Sonny, but you flunk as usual. There was five kinds of pauses. Short between unit blinks, longer between numbers, twice as long where the commas come, two pretty long ones here and there, and a real long one in the middle." Appleberry spun his yo-yo with disgusted vehemence. "Goddam mathematician. Ought to have got an electric boy in to set it up."

"Looks like some sort of message, doesn't it?" said MacTate.

Ransom was scowling at Appleberry. "Listen, Appleberry. You find me an electronics man that —" He stopped and looked around at MacTate. "What did you say?"

"Oh, nothing. I just remarked on its resemblance to a cipher."

"Cipher?" Ransom stared at him. "My God. You don't think it could be?" He looked down at the figures again.

"Of course not, Ransom. As Appleberry says, there's probably something wrong with your machinery."

"Couldn't be the alphabet," Ransom said thoughtfully. "I wonder —"

"Maybe it's notes for the harp," Appleberry said nastily. "Angels heard what a smart boy you was so they're giving you a correspondence lesson." He shot his yo-yo out horizontally.

"Appleberry." Ransom looked at him impatiently. "Would it be asking too much for you to put that damn thing away while I'm trying to —"

"Look, Sonny. Whose observatory is this, anyhow? One of these days that school system is going to wise up to themselves about how to fix eligibility for a yo-yo contest, and if I don't stay in practice —"

"Listen." Ransom aimed a finger at him. "Speaking of yo-yos, did Elmo Mainboy show up here tonight? I looked for his car outside, but —"

"What's he look like?" Appleberry spun his yo-yo in slow verticals.

"Stuffy little fellow. Pink cheeks. And near-sighted. I guess he didn't —"

"Fellow like that showed up here couple hours ago." Appleberry nodded. "Come in a taxi. Said you promised him he could look through the telescope —"

"Well, my God, where is he?"

"How should I know? Think he went in the projection room, maybe." Appleberry swung his yo-yo with greater vehemence. "I told him to keep the hell out of my way. If you go making idiotic promises —"

"Listen, Appleberry. My God, I got him here to see *you*. He's probably got a contract for you to teach yo-yo at the school. Their old gym teacher quit, and he said he was going to see the school board about getting in several replacements to diversify the athletic program. *If* we let him look through the telescope."

Appleberry got up from the ladder. "Well, why didn't you tell me? How was I supposed to —?"

"Come on." Ransom went to the door and opened it. "If he's still here, maybe we can smooth it over. But this time watch your manners, Appleberry." He led the way across the corridor and cautiously opened a door that said PROJECTION.

In the back row of the chairs facing the screen sat a little pink-cheeked man, with thick glasses and an aggrieved expression, twirling his hat petulantly between his knees.

"Elmo!" Ransom's tone was suggestive of transport. "Glad you could come. Sorry you got here too — er, sorry we were late. Appleberry." He

beckoned. "Appleberry, meet Elmo Mainboy, *Principal* of the Susan B. Anthony Junior High School."

Elmo got up and regarded Appleberry sourly.

"How are you, Buster." Appleberry extended a claw, pulled it back to disengage the yo-yo, and seized Elmo's hand. "If I'd knew who you —"

"But I forgot to tell him you were coming, Elmo," said Ransom. "And since he's responsible for chasing — prowlers off the premises —" He laughed. "But he's really very friendly. Gets along well with dogs and *children*. Look, Elmo" — he clapped the little man on the shoulder and steered him to the door — "we've got something special for you to see tonight."

Appleberry slipped the yo-yo back on his finger and hopped it across the corridor, keeping one eye on Elmo.

"We've established wave contact with Venus," said Ransom, leading Elmo into Appleberry's office, "but there's funny gaps in the return signal. I'll show them to you on the scope." He picked up the tablet again. "See, they make a regular pattern. MacTate there thinks it might be some sort of a code. What kind did you have in mind, MacTate?" He winked at him. "Extraterrestrial interplanetary communication or something like that?"

MacTate smiled. "Perhaps it's invaders in flying saucers jamming your waves with their nefarious atomic contraptions."

Elmo stared at the tablet noncommittally.

Ransom frowned at him soberly. "Mustn't ever entirely discount that sort of thing, you know, Elmo. Science fiction frequently —" He stopped. "What did you say?" He looked at MacTate.

"I said perhaps interplanetary invaders are jamming you with their —"

"Atomic. Atomic what?" Ransom stared at the tablet. "Appleberry, get down a chemistry handbook."

Appleberry was standing directly in Elmo's line of vision doing things with his yo-yo. First the disc shot straight down from his right hand and stayed vibrating at the end of its string. Then his left hand constructed a triangle of that string, and somehow the yo-yo came back up and hung, swinging like a pendulum, inside the triangle. Elmo gaped. "Rocking the Baby," said Appleberry casually. "Easy tournament stuff."

Ransom ran his finger under the numbers on the tablet. "Look. How about atomic weights? Twelve would be carbon, sixteen oxygen. Approximately. Six parts of carbon dioxide and six of nitrogen trihydride — what's that? Ammonia. Six carbon dioxide plus six ammonia gives you  $C_6H_{13}NO_2$  — whatever that is — plus five nitrous acid. Look. It's a formula. Appleberry, where's that chemistry book?"

Appleberry was absorbed in his exhibition for Elmo, who had begun to

lose interest in Ransom's chemical calculations and was following the gyrations of the yo-yo with somewhat reluctant fascination. "Look at this one, Buster," said Appleberry. "Stick out your arm." Appleberry took up a professional stance some two feet from the extended arm of the puzzled Elmo. For a moment the yo-yo shot straight down and spun, then a quick movement of Appleberry's hand sent it out so that it dangled over Elmo's arm, nodding back and forth. "Elephant's Trunk," said Appleby. "Pretty advanced stuff, Buster." With a jerk he recalled the still-spinning yo-yo to his hand.

Ransom brushed impatiently past him and craned his neck at the wall of books behind the stepladder. "Industrial, physical, bio — Here. *Organic Chemistry*." He stood on his toes, took down a book and leafed through it. "Listen to this." He stuck out a foot in the path of Appleberry's yo-yo, which bounced off his shoe with a buzzing clonk.

"Hey. What the hell," said Appleberry.

"Put that thing away," said Ransom. "This is important. Listen." He put the book on the desk and pressed down the page. "Leucine, or amidohexioic acid,  $C_6H_{13}NO_2$ . A white crystalline substance, resembling cholesterol, which is formed by the decomposition of protein in pancreatic digestion and other biochemical processes. Leucine melts at  $338^{\circ}$  F decomposing simultaneously into amylene, carbon dioxide and ammonia. In normal digestive processes it is probably converted to urea and — so on. But look." He pointed at the tablet. "They've got it backwards. Instead of melting into carbon dioxide and ammonia they've got it *made* out of them."

Appleberry's leathery mouth twisted. "That's goddam stupid of them, Sonny. Now will you get the hell out of the way and let me show Buster here —"

"Ransom —" Elmo scowled at Appleberry and tapped Ransom's arm.

"I say, old boy," said MacTate, bending over the tablet with Ransom. "Supposing your theory to be correct, why couldn't this protein thing be made out of the carbon dioxide and ammonia? We shouldn't be misled by subjective analogies into —"

"Ransom —" said Elmo.

"Wait, Elmo." Ransom stared at MacTate. "You mean it's what *they're* made out of?"

MacTate regarded the numbers quizzically. "Well, I'm not sure I meant —"

"MacTate." Ransom's eyes gleamed. "You've got it. They inhale carbon dioxide and ammonia and exhale nitrous oxide, see. Probably got compression chambers for hearts. They use part of the ammonia to refrigerate their insides so the leucine can form, and then circulate it in a sort of blood system

so it'll melt and release energy. I told you it was awful hot on Venus. Then they excrete the amylene and —"

"And throw it at each other," said Appleberry. "Sonny, you got the goddamdest imagination I ever come across." He shook his withered head. "But while you're playing games, do you think you could bring yourself to get out of the way so I can —"

"Ransom." Elmo tapped his arm again. "Could I —"

"All right, Appleberry." Ransom swung around and stuck out his little belly petulantly. "You know so much. *You* figure it out."

"I already told you I got it figured out." Appleberry moved to another corner of the office, somewhat oblique to Elmo's line of vision, and began to warm up his yo-yo again. "You got to spaceflying while you was setting up the circuits and set them up wrong. If you could get your mind off Venusian monsters long enough to take a look at the magnetrons, you might get somewhere. Meanwhile I'll be glad to entertain Buster here —"

"Appleberry might have a point there." MacTate looked at Ransom. "Why don't you simply reply to this so-called message and settle the matter? If an intelligent race is communicating with you, the gap pattern will change. If not, then you can examine the machinery as Appleberry suggests."

Ransom aimed a finger at him. "And in the reply we'll first repeat their formula to show them we get it. Then if they repeat ours —" He stopped. "But what's ours going to be?" He frowned thoughtfully and looked at Appleberry. "Appleberry, why couldn't you have been a chemist instead of a lousy comet-snapper?"

"Comet-snapper!" Appleberry shot out the yo-yo and grinned with vituperative delight. "Listen, Sonny, I was working differential equations in my head when you —"

"*Ransom*," said Elmo, tapping his arm desperately.

"Here, old boy." MacTate was looking at the chemistry book. "Why don't you show them how this leucine breaks down in us? The book says it turns into urea."

Ransom, who had begun to notice Elmo, turned around. "Into what?" He looked at the book. "Urea. Say. That's an idea." He scratched his nose. "Suppose we ate a — steak. Pancreas busts up the protein and you get leucine. Then that turns into — what's urea? CO" — he picked up the book and turned some pages — " $\text{N}_2\text{H}_4$ . Subtract that from leucine — taking two parts on account of the  $\text{N}_2$  — and what's left?" He grabbed a pencil and wrote the formulas on the tablet. "Two  $\text{C}_6\text{H}_{13}\text{NO}_2$  minus  $\text{CON}_2\text{H}_4$  gives you —" He scratched his head with the pencil. "Well, if you figured we swallowed four molecules of oxygen with the steak, it would give you eleven parts of formaldehyde."



Appleberry spun his yo-yo in a wide swing which just missed Elmo's nose. "Man," he announced, "on the Flying Trapeze." Inevitably Elmo's eyes followed his pyrotechnical maneuver.

Appleberry's left forefinger glided swiftly up the string to a point at which the yo-yo turned, arced back over the finger, and unbelievably settled precisely on the string, riding up and down like an obsessed monorail car. "Formaldehyde!" he grunted, contemplating the yo-yo. "Nothing like a shot of formaldehyde with your meals."

"No, no, Appleberry," said Ransom. "My God, you don't *drink* it. It gets made in your digestive system."

"Are you sure?" MacTate looked dubiously at the formula. "I should think it would tend to preserve the subsequent bites of steak."

"Well," said Ransom, "you get formaldehyde in plants. Got to for photo-what-do-you-call-it."

"So let's pretend we're vegetables," said Appleberry, shooting his yo-yo at the ceiling. "Work it out like a goddam algebra problem. Who'll know the difference? Then you can get back to the magnetrons."

"Come along, old boy." MacTate went to the door. "Where do we send it?"

"Ransom," said Elmo as MacTate and Appleberry went out the door, "I want to tell you something."

Ransom turned around impatiently. "All right, Elmo. What's on your mind?"

"Ransom," said Elmo, "I don't want to look through any telescope under false pretenses. That man. Appleberry. He —"

"What do you mean, false pretenses?" said Ransom. "You've got a contract with you, haven't you?"

"Yes, I have it in my inner pocket." Elmo tapped the breast of his coat. "But that's what I mean. I can't possibly give this Appleberry a contract. It's not only his swearing, but the grammar he uses. And he — called me 'Buster.'" He winced. "So if looking through the telescope is going to oblige me —"

"Why, Elmo." Ransom looked at him earnestly. "Didn't you know Appleberry reserves that word for people he's taken a liking to? 'Buster,' I mean. Look what he calls me. 'Sonny.' *That's* what he calls people he hasn't got much use for."

"Very well, but the other words he uses —"

"Reaction," said Ransom. "He keeps such a strict watch on his language when he's around — well, children, for instance — anybody outside, really — that when he's here in his den he just has to sort of let himself go. And you've seen yourself how awfully well qualified he is to teach yo-yo."

"Yes, but —"

"Then what's all this about false pretenses?" Ransom laughed and clapped Elmo heartily on the shoulder. "You come up with us now, and I'll show you something much more fascinating than a telescope view. A real interplanetary message from Venus. How's that?"

"But I want it understood —"

"You just come and see, Elmo." Ransom pushed him through the door.

In a gauge-lined room upstairs Appleberry, squinting at the numbers on the tablet, was preparing to seat himself before a glowing screen when Ransom steered Elmo in.

"Appleberry. Get away from that scope." Ransom released Elmo and darted to the screen.

Appleberry glared at him vitriolically for an instant, then caught sight of Elmo. Throwing the tablet at Ransom, he took the yo-yo out of his pocket and began to warm up.

Ransom sat down before the screen, peered at the tablet and began to do things to a control panel.

"But, Ransom —" Elmo circled carefully around Appleberry and approached the panel.

"Shh. Not *now*, Elmo. I'm contacting Venus for you."

"Shall I call the numbers off, old boy?" MacTate looked over Ransom's shoulder and began to read them out loud.

Finally Ransom took his hand away from the panel. "There. We've repeated their formula and sent ours." He tore a sheet off the tablet, picked up a pencil and pointed at the line of light oscillating across the screen. "See. Beam's unbroken." He looked around at MacTate. "Do you suppose that means they got our —"

"Ransom," said Elmo, taking his eyes off the screen, "before anything really happens, I want you to understand —"

"Look." MacTate pointed at the screen. "It blinked."

Ransom whirled around to count the gaps in the line. ". . . ten . . . eleven . . . twelve . . . Stopped. That's carbon." He made a note on the tablet. "There they go again." He hunched forward and stared myopically at the screen, counting and making notes. At last he held up the tablet and waved it gleefully. "There you are. Two  $C_6H_{12}NO_2$  plus four  $O_2$  makes  $CON_2H_4$  plus eleven  $CH_2O$ . They've repeated our formula."

Appleberry, who had stopped spinning his yo-yo to watch, stared at the screen. "I'll be a son of a bitch."

"You see, Appleberry." Ransom turned around. "Us kids know a thing or two, too. You can't —"

"There it goes again, old boy." MacTate pointed at the screen.

Ransom whirled around again. "One . . . two . . . Stop. One . . . two . . . three . . . Stop. Long stop. One . . . Stop." He waited. "My God." He looked around. "That's all."

"Keep your eyes on the scope, Sonny." Appleberry uncurled a claw at it. ". . . eleven . . . twelve. Carbon. One . . . two —"

"All right, Appleberry. I'll do the counting." Ransom turned back to the screen and ticked off the gaps. "Two sixteens. Carbon dioxide. What do you suppose they —? There it is again." He continued to count. "Same thing over again. Two, three, one, carbon dioxide."

"Deuterium and tritium something hydrogen something carbon dioxide." Appleberry grinned malevolently. "That's one hell of a good code you're using, Sonny."

"Ransom," said Elmo, "regardless of whether your code works or not —"

"Do you suppose they're referring to something else this time?" MacTate pursed his lips. "Two from three equals one, for instance? To show us they're familiar with arithmetical procedures? But then why the carbon —?"

"No, no." Ransom shook his head. "Why would they turn it around? Sensible way to show that would be three *minus* two. But you're right it's got to be something else this time." He scowled at the screen. "What would both of us know about that goes two, three — Wait." He swung around. "What number's Venus in the planets? From the sun?" He jabbed a finger at MacTate. "And the Earth's three. But the one would be Mercury." He scowled at the tablet. "How does *that* —?"

"Hell, Sonny," said Appleberry. "Smart boy like you ought to be able to figure that out. They just mean they want to get together with us." He made his yo-yo hop derisively across the floor. "Two and three make one. It's a goddam love letter."

"Ransom," said Elmo, "regardless of whether you make physical contact with these people or not, I want it clearly understood —"

"Appleberry" — Ransom scowled at him — "if you could control your lively sense of humor —" He stopped. His eyes turned thoughtful. "MacTate. You don't think he *could* be right? Without meaning to?"

MacTate shrugged.

"Of course," said Ransom, "if they'd figured out a way to use our beam for — Listen. Appleberry's right. They want to come here." He got up. "That's why they added the carbon dioxide. Want us to fix it up so they can breathe. That's *got* to be it." He looked around the room. "What could we use for —?"

"Sonny, why don't you stop acting like a goddam —"

"Ransom," said Elmo, "if you would give me just one minute —"

"Listen, Appleberry." Ransom turned and jabbed a finger at him. "Was

I right or not about the gaps being a message from an intelligent planet? Was I right or not about they would repeat our formula? Let's wait till I'm wrong once before we buck the theory. Now suppose *you* stop acting like a goddam fool and tell us where we can get some carbon dioxide."

"All right, Sonny." Appleberry snapped his yo-yo disdainfully. "You want to make a fool of yourself, I got some dry ice I keep — orange juice on. Down in the cellar."

"Now that's better —"

"But see here, old boy," said MacTate. "How would they be able to count the planets through that atmosphere of theirs? I thought —"

"Ransom —" said Elmo.

"That's right, MacTate." Ransom turned. "Now *you* start. How do I know how they counted them? The planets. Maybe they've got ransomized eyes or something. Let's get them here first, and then we can ask them." He scratched his nose thoughtfully. "Listen. There's a new glass boiler downstairs we can use. Come on, MacTate. Appleberry, you get the dry ice. Lots of it."

"Ransom." Elmo clutched him by the sleeve as the others went to the door. "I want you to understand that nothing I see with your theory will commit me to giving that yo-yo man a contract."

"What?" Ransom turned and bent disapproving brows upon him.

"I'll have to make a complete report to the school board before engaging him," Elmo said stubbornly. "If I —"

"Well now, I don't know, Elmo." Ransom scowled judiciously. "Seems to me you might say you're already committed a little. Isn't everybody we'd show the communication beam to, you know?"

"I attempted to make my position clear," said Elmo. "Several times."

"But you did watch the scope, didn't you?"

"My conscience is clear on that matter, Ransom. I don't think you played fair with me. Saying he talked like that as a reaction. It sounds like a *habit* to me."

"But, Elmo. You don't think he'd talk that way around *children*?"

"I think he would talk that way around anybody."

MacTate, who had been waiting for Ransom at the door, came back into the room. "Something wrong, old boy?"

Ransom waved at Elmo. "He doesn't want to give Appleberry a yo-yo contract. Afraid he might cuss around the kids."

MacTate pursed his lips. "Why don't you put a clause in the contract forbidding him to?"

"But, MacTate," said Ransom, "that's like telling him not to —" He caught himself and looked apprehensively at Elmo.

"There *is* a decent-behavior clause in the contract," said Elmo. "But I can't engage a person I'll have to release in ten seconds. Besides, if any of the board have ever met him —"

"Well then" — MacTate smiled — "simply insert a clause forbidding him to speak. On the job, of course. Doesn't have to, to demonstrate the yo-yo. Then you could wink at what few infractions he committed. There wouldn't be enough of them to accommodate — epithets."

"There you are, Elmo." Ransom clapped him on the shoulder. "All fixed up. Anyway, while we're downstairs with Appleberry, I'll mention your squeamishness to him, and you'll see whether it's a habit or not. His language." He grabbed MacTate's arm. "You wait here, Elmo. We'll be right back." He headed for the door.

"But, Ransom —" Elmo glared after them like a frustrated basilisk.

Ten minutes later Appleberry came back with a bucket full of dry ice.

"Merciful heavens, Bus — Elmo. They been keeping you here all by yourself?"

Elmo glared at him.

"Ought to be ashamed of their — themselves. Big shot like you. But they got their minds on this — frightful Venusian business." Appleberry set the bucket down and took the yo-yo out of his pocket. "You know something, B — Elmo? What they need in that school system of yours is a annual contest for all the physical ed teachers. Keep them in shape." He began to put his yo-yo through a series of spirals. "Loop the Loop," he said. "Beginner stuff, but it's all in how many times you can do it."

Elmo stared skeptically. "Hundreds of times?" he ventured.

Appleberry snorted. "Bu — Elmo, if you can't break a hundred your first week I'll be ashamed of you. World record's 1269; da — almost broke 1000 last week but some confounded kid bust in on me." The yo-yo continued imperturbably Looping the Loop. "Sixty," Appleberry noted. "Now take your yo-yo teachers, for instance. All over town. Get them together once in a while — let some of the smarter kids in it, too — and show them how — exhilaratingly much they still got to learn. Be glad to organize it my —"

"Avast, Appleberry." Ransom puffed through the door at the head of a large glass tank, with MacTate at the other end. They hauled it across the room and grunted it upright beside the control panel. Ransom began to manipulate some wires.

"Like I was saying, Elmo —" Appleberry looped on indefatigably.

"One hundred and twenty-five . . ." said Elmo with involuntary awe.

". . . twenty-seven," Appleberry corrected. "Now you let me organize this contest and I'll produce kids right out of your own junior high that can beat any teacher in the whole — unspeakable school system."

In its 140's the yo-yo was beginning to veer from its rigid position. Elmo's hypnotized eyes followed its slight oscillation from side to side. Without losing the thread of his speech, Appleberry reasserted his control over the thread of the yo-yo. With a sharp flick he shot the disc straight up and out; when it resumed its lower spirals, the oscillation had vanished. "One fifty-five," said Appleberry. "Yo-yo's just about the best thing you can teach a kid anyway. Know that? Teaches them accuracy, timing, balance, honesty, cooperation, responsibility, initiative, inventiveness, poise, patience, courage, perseverance, loyalty" — he drew a breath — "and civic pride. In contests, that is."

While Appleberry's right hand continued to loop the yo-yo into the 170's, his left reached into a back pocket and produced a second yo-yo. Elmo gasped. Half crouching, Appleberry sent the left-hand yo-yo looping behind him while the other went on looping in front. The effect was dizzyingly like a full gallop to the accompaniment of the *William Tell* overture. "Riding the Horse," said Appleberry. "Takes everything I just said."

Across the room Ransom looked at MacTate. "Why'd he leave out chastity?"

MacTate smiled. "Possibly because it's not a virtue of slow growth."

Ransom wiped his hands on a rag. "It was with him, I'll bet." He looked up. "All right, Appleberry, Elmo. Here come the Venusians. Wait. What did you do with the dry ice, Appleberry?"

"In the bucket." Appleberry pointed with his toe. "Where the dickens did you think it was?"

"Well, bring it over. They're going to get tired of waiting."

Appleberry muttered something under his breath. "... cooperation . . . patience . . ." He put the yo-yos back in his pockets and brought the bucket over.

Ransom dumped the dry ice into the glass tank, which was upside down, clamped it shut and started a pump that he had attached by a hose to the cock. "Get the air out so it won't poison them," he said. The mist swirling up through the six-foot tube disappeared as the moist air was withdrawn.

"Now how do we let them know we're ready?" Ransom went to the control panel. "Repeat their message, I guess, and then a lot of CO<sub>2</sub>'s." He sent the message while the others watched the screen.

"Ransom," said Elmo, "I still —"

"Here." MacTate counted. "Two . . . three . . . one. They've replied." He pointed at the screen expectantly for a moment. "That's all. They must be on their way."

"You mean *it*," said Appleberry. "How many of them you figure can get in there?"

Ransom looked at him. "My God, Appleberry. *Now* you think of that." He looked at the tank, which was growing curiously cloudy inside, as if it had admitted some moisture. "What if they're bigger than the boiler?"

"Honest to goodness, Sonny," said Appleberry. "You make me — ill. Talking as if something was really going to happen." He got out his yo-yo and gave it an exasperated spin.

"Do you think there's time to warn them?" Ransom turned to MacTate. "Do you think —?"

MacTate was staring at the tank.

"MacTate —" Ransom followed his gaze. "My God."

"Silliest g — ruesome stunt even you ever cooked up." Appleberry whipped his yo-yo viciously. "Ought to start growing up one of these days."

"MacTate," said Ransom in a hushed tone. "Do you see what I see?"

MacTate hesitated a moment. "Ordinarily, old boy, I'd reply affirmatively. But —"

"What is it from where you are?"

MacTate cleared his throat. "Appears to be a — young lady."

"Same here."

"Unclad?"

"Whew."

MacTate swallowed. "With — well, a coiffure of red hair?"

"No, no MacTate." Ransom pointed. "It's a little cloudy, but you can see the hair plain. She's a platinum blonde."

"Just as I feared, old boy. We're not seeing the same thing. But do you have the feeling that it's not entirely a *visual* —" Suddenly he started. "What's that?" He blinked. "Like a flash of light."

"What's wrong, MacTate?" Ransom laughed. "Sure you're not just catching a glimpse of *him*?" He pointed at Elmo.

Elmo, squinting desperately through his thick glasses, had turned a rich crimson.

"I wonder what kind he — Ouch." Ransom winced. "You're right, MacTate. I got it too. Seems to go right through your brain. I — Say." He was looking at the tank again. "You know, you might be right about the hair at that. It does look a little red."

"Funny," said MacTate. "Now it looks somewhat silvery to — See here, Ransom." He turned. "This is ridiculous. The thing's reading our minds." He pointed at the tank. "What are the chances of those leucine-refrigerators of yours turning out like — that?"

Ransom grinned. "Well, it did a good job of reading my mind."

"Of course. It's trying to ingratiate itself. But now that it's discovered

our several ideals are somewhat different, it's trying to adjust. It —"  
"My God." Ransom was staring at Appleberry. "If you're right, what's *he* looking at?"

Appleberry stood leaning slightly forward with a hideously sensual grin on his wizened mouth, as if he were drooling. The yo-yo dangled forgotten on the floor. His gnarled fingers were crooked possessively, and his watery eyes gleamed with unspoken goddams.

"Who does he think he's kidding?" said Ransom.

MacTate smiled. "Her, perhaps." He gestured at the tank.

Ransom looked at it. He scowled. "I've got a good mind to slip her a shot of oxygen. Scare her into her normal shape so she won't go making him show off like that."

"Hey. What the hell." Appleberry threw a hand up to his eyes.

"Now she's reading his mind," said Ransom. "Maybe that's as good as a shot of oxygen."

"But, old boy," said MacTate, "perhaps he sees only a super-yo-yo. If our visitor's object is to appeal to the dominant craving —"

"Goddamit, Sonny. Now look what you went and done." Appleberry pointed at the tank.

"Careful, Appleberry —" Ransom nodded warningly at Elmo.

"The hell with him." Appleberry sounded heartbroken. "You and your goddam oxygen. I heard you. You went and chased it away."

Ransom looked at the tank. It was transparent and empty. "No, no, Appleberry." He laughed blandly. "She's just adjusting. Probably takes a second."

"Old boy —" said MacTate.

"Wait, MacTate. I'll explain it to him. See, Appleberry, when she read your mind and —" He turned to Elmo. "Did she get to yours yet, Elmo?"

Elmo was still blushing. He squinted indignantly at Ransom. "I don't know what you mean by getting to me, Ransom, but I've seen enough to know that this is no place for a decent, self-respecting person to be."

Ransom was startled. "Why, Elmo —"

"I came here expecting to see a few stars through the telescope and engage a retired professor to teach yo-yo," Elmo went on, "and instead what do I find? A foul-mouthed old satyr leering at a scientifically disguised *peep* show."

"Now look, Elmo —"

"I pride myself on my broadmindedness — in fact the board considers me *too* tolerant much of the time — but obscenity is the *limit*." He gestured angrily at Appleberry. "You can let him use all the profanity he wants to. It won't make any difference. I've never been so thoroughly —"



"Listen, Elmo." Ransom scowled. "That's no way to talk. We —"

"I don't care. You had no right to bring me out here just to —"

"Bring you here?" Ransom jabbed a finger at him. "You *came* here, Elmo. In your own taxi, remember? And speaking of peep shows, as you call them, just what did *you* see in that tank?"

Elmo, his mouth open to continue the tirade, stopped in mid-thought. "I —?"

"Yes. You. That Venusian didn't show you anything that wasn't already in your own mind, you know."

Elmo began to blush again.

Ransom's eyes narrowed. "Not that we'd say anything to the school board, of course, but I just wonder what they would think if they knew what went on in their principals' minds sometimes." He cleared his throat. "But you *are* lucky we're your friends. Now, you say you've got that contract with you?"

Elmo stared at him for a moment. "Ransom, you wouldn't dare."

"Dare what, Elmo?" Ransom widened his eyes innocently.

"Very well." Elmo reached into his inner breast pocket. "Very well." He took out the contract and threw it at Ransom. "But let that nasty old buzzard whisper just one little goddam, and I'll release him like that." He snapped his fingers. "Like that." He snapped them again and stalked to the door.

Ransom opened the contract. "Wait, Elmo. Is it signed?"

Elmo slammed the door.

Ransom saw the signature at the bottom of the paper and nodded with satisfaction. "Well, Appleberry, now you've got an honest-to-God job."

"Regular little fixit, ain't you," Appleberry snapped. "Now suppose you go get back that Venusian you threatened to poison."

"What are you talking about, Appleberry?" Ransom looked at the tank. "She —"

The tank was still empty.

"Where'd she go?"

"I tried to tell you, old boy," said MacTate. "She adjusted almost instantaneously. You weren't watching carefully before. So perhaps Appleberry's right. If she found you were thinking of oxygen —"

"But I didn't mean that," said Ransom. "About the oxygen. I was only — MacTate. You don't think she really took it seriously?" He looked at the empty tank. "Oh my God." He darted to the control panel. "We've got to get her back and explain. Maybe if I send the three, two, one again —"

"Ransom." MacTate grabbed his shoulder. "There on the screen. She's saying something."

Ransom looked at it. "Where's the tablet?" He found it, seized a pencil and began to record the gaps: 25-15-21, 3-1-14, 20-1-11-5, 25-15-21-18, 7-15-4-4-1-13, 16-1-14-3-18-5-1-19, 1-14-4 — "Wait." He stopped counting and threw down the tablet. "This isn't a formula. She's sending us on a wild-goose chase to get even."

"That's sure as hell getting even," said Appleberry, winding up his yo-yo. "You try to poison it and it pulls your leg."

"I *didn't* try —"

"Look here, old boy." MacTate was studying the numbers on the tablet. "Do you think it could be an alphabet or something of the sort this time? It read our minds, you know."

Ransom stared at the numbers. "My God, you're right." He began to count on his fingers. "Look. The first word's *you*. Regular alphabet." He wrote down the other letters. "Says, *You can take your goddam pancreas and* — That's as far as I —" Suddenly he swung around to face Appleberry. "Appleberry. What's this about a pancreas?"

"How should I know?"

"This message is for you. You're the last mind she read." Ransom got up and advanced on him. "Listen. What did you see in that tank?"

"None of your business."

"Appleberry" — Ransom aimed a wrathful finger at him — "if you don't tell me what you saw, I'll — take the Board of Trustees a sample of that 'orange juice' you keep here."

Appleberry laughed harshly. "You will in a pig's eye, Sonny. Who the hell you think you're talking to? Elmo?" He looked at the door. "You know, you were pretty mean to that boy. He's probably walking down the hill to catch the bus. Let's go pick him up and take him to a —"

"Don't change the subject, Appleberry." Ransom held up the contract. "So help me, you start talking or I'll tear up your yo-yo job."

"All right, if it means so goddam much to you." Appleberry waved impatiently. "See, I been hungry for years and years. Can't eat anything but crackers and orange juice — doctored a little, maybe, but orange juice — on account of I'm so goddam old. So when that Venusian seductress of yours come down to the tank, all I could see was a gorgeous, tender, juicy" — he sighed — "steak, smothered in onions. Wasn't just visual. It —"

"Steak?" Ransom looked at MacTate. "Wait. That's how we figured out our formula. Remember? Steak breaks down into leucine when the pancreas — Oh my God." He sank into the chair in front of the screen, on which a bright line oscillated without interruption. "*That's* what happened. We sent her a digestive process. Instead of showing her how to make something, we showed her what happened to the stuff she was made out of when we got

hold of it. And when she read Appleberry's mind, it dawned on her what our formula meant. She got a picture of herself getting worked over by his pancreas. She — thought he wanted to eat her."

MacTate looked at Appleberry's throwing arm. "And the yo-yo. A hunting implement?"

Appleberry got a faraway look in his eyes. "Well, I did want to. Only it ought to be known I couldn't."

"You could have come a lot closer to it than —" Ransom sighed. "If only you were about 80 years younger. Oh well." He switched off the screen and got up. "Let's pick up Elmo and get something to eat, Appleberry. We'll buy you a glass of orange juice and let you watch us digest a steak. A big one. Smothered in onions."





# the neurotic rose

by . . . H. Nearing, Jr.

Not many men could have grown a plant that was half a dog—or a dog that was half a flower. But Ransom was a botanical genius!

"SEE," said Professor Cleanth Penn Ransom, of the Mathematics Faculty, "just like a nasty little kid on a hunger strike."

Professor Archibald MacTate leaned over the flower on the windowsill of his colleague's office and examined it closely. It looked something like a large rose, but its petals were shaggy with reddish brown hair, oddly reminiscent of hound's ears. The center protruded conically, like a snout, and was slitted by two rows of white teeth. It had a doggy smell.

"What is it, old boy?" MacTate asked. "The aroma's not exactly rosy."

"Well, he's not quite a rose anymore." Ransom held a grasshopper in front of the flower's snout again and sighed when the thing twisted its thick, sinewy stem and turned coldly away. "I don't know what's wrong with him. He used to eat a grasshopper every day. Terrific appetite——when you consider it takes a Venus fly-trap two weeks to digest a meal. But yesterday he went on a hunger strike, and I can't do a thing with him."

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*A food-and-sex complex in the vegetable kingdom may not have quite the same dark Freudian significance as neuroticism on a human plane. But can we be completely sure that plants can't go haywire too—from repressions too intolerable to be borne? H. Nearing, Jr., in his first story for us—and a brilliant story it is!—almost convinces us that men and plants can become psychotic buds on the same stem, and quite possibly dogs as well!*

---



Ransom ran an experimental finger along the support stick to which the flower's neck had once been securely tied by a string, now broken. "The creature acts hungry sometimes, though," he conceded. "See these nibbles on the stick." He pulled the stick out of the flower pot and pointed at the tooth marks along the edge. "Well, he doesn't need a support now anyway."

He went to his desk, put the grasshopper into a glass jar and tossed the stick into the wastebasket.

"But you mean it *was* a rose?" said MacTate, staring at it incredulously.

"Sure. It grew from a seed. What else could you start with if you wanted to cross a plant with an animal?"

MacTate looked at him. "I'm not sure I—"

"Psychology, MacTate." Ransom sat down in his swivel chair, stuck out his little round belly and began to swing. "Tell me"—he aimed a finger at his colleague—"why do dogs show more intelligence in some tests than they actually possess? Did it ever occur to you it's because they've been pampered and flattered for centuries? They're not prisoners or slaves like the other animals, but man's best friend. So on those tests they knock themselves out trying to make a good showing for their friend, see?"

His eyes narrowed. "Now—what flower is like a dog in that respect? What flower has been bred

in more than three thousand varieties, and become the symbol of the gooiest human sentimentality and pampering?" He nodded. "You have guessed it. If you want to cross a plant and an animal, you take man's two best friends and persuade them to cooperate. The dog and the rose."

"But—" MacTate looked dubiously at the flower, and then back at Ransom. "I don't want to seem critical, but just why should you want to cross a plant with an animal?"

"Well, just out of scientific curiosity—for one reason."

"I'm more interested in the next reason." MacTate sat down in front of Ransom's desk, crossed his long legs and lit a cigarette.

"All right, MacTate. It's Mrs. Underdouble. She's Chairman of the Flower Show crowd, as you know. She's been reading these anti-science books, and the other day she told the Woman's Club that scientists were helpless infants outside their own little chosen fields. She said that no mathematician, for instance, had ever won a prize at the Flower Show."

"What were you doing at the Woman's Club, old boy?"

"Well, we were sort of debating for them. On the Scientific Way of Life."

"Who won?"

"Nobody—yet. Suspended verdict. I bet her a crow-eating preface to the anti-science book she's writing that I could quite easily win



a prize at the Flower Show." Ransom waved at the dog-rose on the windowsill. "If he can't win a prize—"

"What did she bet?" MacTate asked.

"Oh, one of her stud dogs. An Irish spaniel." Ransom looked reflectively at the dog-rose.

MacTate whistled. "High stakes!"

"He's not doing so well right now. The spaniel, I mean. He had a nervous breakdown not long ago. I don't know exactly why, but he actually made more money last year in stud fees alone than you and me together."

Ransom grinned. "Anyway, I told her I knew a dog doctor who wouldn't charge a broken-down college professor as much as he would the chairman of a flower show, so she lent him to me for a course of treatments. He's a nice dog. Name's C-u-a-i-l-g-n-e, pronounced Cooley. His first name, that is. I don't remember all of it."

At the sound of "Cooley" there was a rustling under Ransom's desk, and a large dog covered with reddish brown curls peered around its oaken base at MacTate.

"There he is," Ransom chuckled. "Heard us talking about him." He slapped Cooley's haunch affectionately.

MacTate looked at his colleague with a suspicious eye. "Just who is this 'dog doctor' you're taking him to, Ransom?"

"Me." Ransom grinned. "Who else? I'm giving him the best treatment in the world. A little brandy now and then and a little exercise chasing rats down interesting alleys. I've opened up new horizons for him."

MacTate eyed the dog-rose on the windowsill again. "I see."

Ransom followed his glance. "Listen, MacTate. That's why I wanted to talk to you. I think she's suspicious, and if she ever drops in here to check up I don't want her to see *that*." He pointed at the dog-rose. "So—how about taking him to your office for a while. The rose, not the spaniel. Maybe it'll improve his appetite to live in a philosophical atmosphere."

"But, old boy, wouldn't the University hothouses be a better place to—"

"No, no. Mrs. Underdouble is always going there. Ever since she endowed that chair in Botany they have given her the run of the place, and one of her favorite sports is taking her friends on guided tours through the hothouses. She'd find it there as quick as on the windowsill."

"But what difference would it make if she *did* find it?"

"Don't you understand? She'd charge me a *stud fee*, MacTate."

"Aha!" MacTate pointed triumphantly at the dog-rose. "I see it all now. Cooley is one of the parents of *that*."

"My God, MacTate, where have you been? Didn't you notice the



resemblance right off? The thing's the spitting image of Cooley."

MacTate frowned. "But how in the name of heaven—"

"Well, I mixed some genes with this supersonic needle. You know. And then I encouraged him with autocoids from Cooley's blood after he started to grow. The rose, I mean. Pure breeds on both sides. Thoroughly pampered. A few more transfusions and he ought to— Oh, that reminds me. I've got to get Cooley some more hamburger."

Ransom looked speculatively at the windowsill. "I only take a couple ounces of his blood each time, but it seemed to make him tired. So I tried putting it back—"

"Putting what back?" MacTate looked up.

"The blood, of course. I'd give the rose a transfusion from Cooley and then give him a transfusion from the rose, to even things up. But then I found out that if I just fed him enough hamburger he didn't need the blood back. And yesterday I got him two pounds—" Ransom waved at a deep-freeze box under the windowsill. "I put the meat right there but it mysteriously disappeared."

MacTate looked at the box. "How long has this been going on? The transfusions."

"Several weeks." Ransom got up and looked around the box. "I put it right on top of the deep freeze to thaw and then got called down to the Dean's office, and when I came back—"

"Maybe Cooley got tired of waiting."

Ransom shook his head. "I took Cooley with me to introduce him to the Dean. He wasn't here. Well, anyway"—he went to the closet in the corner of his office and took out an old newspaper—"we've got to get him some more meat right away." He wrapped the newspaper in a cylinder around the dog-rose and tied it securely with a string. "And we can drop this off at your office on the way back. Come on, Cooley. You can go along." He picked up the dog-rose and led the way out.

They went to a meat market not far from the campus and lined up at the counter behind a stout woman with unkempt hair who was buying a steak. She had a beery aroma and carried a bottle-shaped package under one arm. The butcher cut her a steak, weighed it, plopped it on the counter and turned to get some wrapping paper.

There was a paper-tearing sound that seemed to begin before the butcher reached the wrapping roll. When he actually tore off a sheet for the meat, the sound of the rip had a slightly different timbre. He turned back to the counter and reached for the steak.

"Hey," said the beery woman. "What's this? A clip joint?" She pointed indignantly at the steak.

The butcher scratched the black fuzz on his right arm, and shaped an astonished O with his fat lips. A neatly semicircular portion of the



steak, about an inch in diameter, was missing from its left edge.

"What do you do?" said the woman accusingly. "Sneak a little of each sale home for your dog?"

"Dog?" The butcher looked at Cooley, who was waiting patiently beside Ransom. Then he looked at Ransom, and his eyes popped. "Say—"

"What are you talking about?" Ransom scowled. "My dog was sitting right here beside me since we came in. And a dog's bite doesn't look like that, even if he could jump that high. Look—" He shifted the dog-rose to his left arm and stepped aside to point to the height of the counter. The movement brought him next to a glass case exhibiting salami and cheese.

MacTate heard a rustling in the cylinder of newspaper Ransom was holding. From a rip in the paper protruded a reddish brown snout. It twisted toward a roll of liverwurst that lay on top of the glass case and took a bite of it. "Old boy—"

Ransom's attention was occupied elsewhere.

"Looks like a dog's bite to me," said the angry butcher, studying the steak. He picked it up and came around the counter toward Cooley. "Open his mouth and we'll just—"

Cooley eyed the advancing butcher with mistrust and started to back away.

"Cooley," Ransom shouted. "Stand still. He can't—"

Startled, Cooley dodged back in-

to a large pyramid of dogfood cans, knocking them all over the floor in an irregular drumroll of tinny bangs.

"Ransom—" MacTate grabbed his colleague's arm and pointed to a little dressed chicken that was disappearing through the rip in the newspaper cylinder. "It was up here by this." He pointed at the bite in the roll of liverwurst.

Ransom jerked his bundle away from the glass case and then looked around at Cooley, who was leaping up on a shelf laden with jars of olives.

"Cooley! Come down here! Cooley!" The jars crashed juicily as Ransom continued to retreat from the butcher.

"I thought you said he couldn't jump," said the butcher.

"Cooley, do you hear me? Come here."

Ransom lunged after the dog, but slipped on the spilled olives and dived into the beery woman, knocking her and her bottle-shaped bundle to the floor. The bundle began to lose its bottle shape, and a winey smell mingled with the beery aroma.

Cooley leaped off the olive shelf, sniffed at the liquid oozing through the paper around the broken wine bottle, and began to lick it.

"Good heavens, old boy. Have you made an alcoholic of him?"

"Never mind, MacTate. *Help me grab him.*"

Ransom, MacTate and the butcher converged on Cooley together, while the beery woman on the floor



screamed a kind of war song in accompaniment. They seized various parts of Cooley's anatomy and pulled him away from the oozing wine.

"What are you doing to that animal?"

They looked up. A large woman in an immense hat had entered the store and stood glaring at them. Her jaw and her bosom vied for first place in her horizontal projection.

"As for you, Ransom—"

"Look, Mrs. Underdouble, I can explain—"

"Explain why you are introducing a priceless dog to Bacchanalian orgies in a delicatessen?" She wrapped her arms around Cooley and heaved him off the floor. "A good thing I was passing—" She ran out of breath because of Cooley's weight. Glaring at Ransom, she turned and staggered to the door.

The beery woman, still shrieking, got off the floor and picked up a can of dogfood to hurl after them. Ransom caught her arm.

"Mrs. Underdouble," he called. "Wait. You can't take Cooley yet. He—MacTate." He turned and thrust the dog-rose into his colleague's arms. "Take care of all this. I'll see you later."

He sprinted to the door in Mrs. Underdouble's wake and dived into a large black car just as it pulled away from the curb.

MacTate looked at the debris on the floor, at the beery woman, and at the butcher. He sighed. "Send

your bill to Professor Ransom at the University. That's a sufficient address. Everybody knows him."

The butcher surveyed the mess. "That I can believe."

MacTate left quietly with the dog-rose. He went to his office, set the gorged flower on his windowsill and took the torn newspaper off it. As he locked his office he reflected joyfully that it was Friday. Ransom would be unable to implicate him in anything for two whole days. As he turned away from the door he heard a peculiar grating sound inside his office. Mice? Well, the dog-rose could eat them.

Monday morning, as he unlocked his office, he heard the phone ringing inside. He went in and answered it.

"MacTate." It was Ransom. "She's finally decided to let me have Cooley again. I—explained everything. So we can give the rose another transfusion. How is he?"

"Well . . ." MacTate turned and looked at the windowsill. The dog-rose was perched precariously on a circular projection directly under its pot. All the rest of the wooden sill within a radius of two feet had been chewed away. "Good heavens, Ransom, you'd better get over here. *Right way.*"

Ransom was there in four minutes flat. "My God." He stared at the mutilated windowsill. "Remember those nibbles on the support stick? Apparently it has taken to eating *wood!*"



"The change in diet hasn't agreed with it, either." MacTate pointed at the flower, which was lolling foolishly to one side of its bulging stem.

Its shaggy petals were disheveled and its jaws slightly parted. Suddenly there was a spasm in its stem and it emitted a loud hiccough. Its petals shot erect for a moment as if startled, then collapsed and bobbed idiotically up and down.

"MacTate—do you smell something?" Ransom asked, sniffing.

"Yes." MacTate sniffed too. "A little like applejack, isn't it?"

Ransom stared at the flower. "My God, *that's* what he did with the wood. The thing's *drunk*."

MacTate shook his head. "What a digestive system." He looked at Ransom. "Old boy, you don't think it could be hereditary? The way Cooley went for that wine—"

"No, no." Ransom examined the dog-rose's stem. "See those blisters? Edema. My God, why didn't I think of that?"

"What do you mean, Ransom? What's wrong with it?"

"Beriberi." Ransom lifted its petals to look at the corolla. "I forgot he had enough animal in him to need vitamins. So he's got alcoholic polyneuritis. We've got to feed him lots of thiamin, quick." He looked around. "But where can we keep him meanwhile? If he grows enough to eat the rest of your windowsill. MacTate—" He aimed a finger at his colleague. "I've got it. *Her* hothouse."

"Whose hothouse, Ransom?"

"Mrs. Underdouble's, of course. It's all plastic and cement. No wood. And it's like Poe's 'Purloined Letter.' She'd never dream of looking in her own—"

"But, old boy, surely she inspects her own flowers from time to time."

"Of course she does. But this will only be overnight. Tomorrow I can dose him up with vitamins and take him down to the Flower Show."

"Didn't you say it needed another transfusion from Cooley, too?"

"We can give him one out there. That's where Cooley is now. We can take him out and bring Cooley back with one trip." Ransom looked at the dog-rose. "MacTate, have you got anything we could put over him. I'm afraid if we wrap him in wood-pulp—"

MacTate went to his closet. "I think I have a—yes. Here it is." He took out a shabby golf bag. "Will this do?"

"Fine." Ransom put the dog-rose into the bag and slung it over his shoulder. "Come on. We've got to keep moving."

When they arrived at the suburb where Mrs. Underdouble had her estate, Ransom parked under a row of trees beside the highway. "We'd better sneak up the back road to her greenhouse first," he said descending from the car. "It's right up here."

He went to the end of the row



of trees and turned up a dirt road between high banks laden with ragweed and poison ivy. "The dangerous part is up here where the road runs nearest to the house," he warned. "Keep your head down."

MacTate noticed that the banks beside the road were becoming lower. He stooped a little, while Ransom bent over like an Indian tracker.

"Oof." Before Ransom could leap aside or back he suddenly tripped and went sprawling headlong on the dusty soil. He arose swearing and began to slap the dust off his clothes. "I don't know why the hell she—"

"Ransom," someone called from the house on the right.

"You forgot and stood up, old boy." MacTate reminded him. He pointed toward the house. "Look."

Mrs. Underdouble was sitting on the front porch regarding them through a pair of binoculars.

Ransom sighed. "Let's go, MacTate."

They stepped up on the bank and crossed the field to Mrs. Underdouble's lawn.

"Ransom," she said, eyeing the golf bag. "I didn't know you played that nauseating Republican game."

"No, no, Mrs. Underdouble," he murmured apologetically, ascending the porch steps. "We're—out studying nature." He laughed deprecatingly. "This golf bag is just to keep specimens in." He noticed

that she was holding a large Siamese cat on her lap.

Suddenly there was a commotion in the golf bag. It bulged over its entire length as it was battered in various directions by blows from within.

"Specimens of what?" demanded Mrs. Underdouble, studying the bag.

"Smells the cat," Ransom whispered to MacTate. "Oh," he said, turning to Mrs. Underdouble, "this and that. We—"

He was interrupted by a loud rip, and immediately thereafter a long slit appeared in the golf bag. Frantically he grabbed both sides of the slit and held them together with his hand.

"Ransom," she said, "you are a madman. Oh, and that reminds me. *What have you done to Cooley?*"

He stared at her. "What do you mean what have I done to him? I haven't—"

"You'd better come over here and see." She put the cat down, got up and led the way across the lawn to the rose bushes flanking the hothouse. She reached into several of the bushes and finally held the branches of one of them aside, pointing. "Just look there!"

Cooley was sitting under the bush with an expression of narcissistic beatitude in his eyes.

"What's he doing under that rose bush?" said Ransom. "How did he get out of the kennels?"

"He howls until he's turned loose and then comes over here



and sits." Mrs. Underdouble glared at him. "Explain, Ransom."

"Well, I—" There was a batting inside the golf bag again. Ransom tightened his grip on the slit.

"And precisely *what* is in that bag?" She demanded for the second time, and he could see that she was at the end of her patience.

"Well—"

A phone saved him by ringing in the office adjoining the hothouse. "Oh—" She grimaced with resentment. "You'd better be thinking up some answers, Ransom." She relinquished her hold on the rosebush and went into the office.

"Cooley." Ransom pulled the branches aside. "MacTate. My God, those double transfusions. He thinks he's a rose."

MacTate leaned over to stare down intently at Cooley. Then he pointed to a number of little tendrils curling out of the dog's ears. "Maybe he is, old boy."

Ransom turned pale. "Stamens! I—Listen, MacTate, we can worry about Cooley later. Let's sneak the rose into the hothouse while she's gone." He led the way into the hothouse. "Here. We can put him behind the Brazilian trumpet creeper."

He took the dog-rose out of the golf bag and thrust it under a cluster of bright orange flowers growing on the tendrils of a large vine. "Now when she comes back—"

"*Ransom, what are you doing in here?*" Mrs. Underdouble came belligerently into the hothouse. "It's for you."

He stared at her. "What's for me? I don't understand—"

"The *telephone*, of course. The call was for you."

"But—no one knew I was coming here."

"I did—and I told her. It's the secretary of the Flower Show Steering Committee. They can't understand your entry form. The description of your—"

"When did they start worrying about that?"

Mrs. Underdouble turned to the trumpet creeper and began to finger the orange flowers. "Oh, just checking."

"Now I wonder who put them up to that." Ransom gave her a dirty look and went down to the office.

She turned to MacTate. "Have you known Ransom long?" She asked.

MacTate sighed. "Years and years," he said, his gaze on a slight movement among the orange flowers behind her.

"Don't you feel that he is sometimes a bit—well, overenthusiastic?"

"I suppose you might say—" MacTate stopped. The orange flowers had begun to shake violently.

Mrs. Underdouble turned with a startled exclamation. "My creeper! What has he done *now*?" She pushed the flowers aside, her lips tightening.

The dog-rose had sunk its teeth into the woody stem of the vine and was jerking at it hungrily.



"What *is* that thing?" Mrs. Underdouble almost screamed the words. "Get it out of here." She grabbed the vine and tried to pull it away from the locked jaws.

Ransom came back into the hothouse. "What were you screaming about?" he asked.

"It's eating her creeper," said MacTate, reproachfully. "I thought you were going to keep it away from wood."

"How was I to know he'd eat wood while it's still *alive*?" Ransom yanked the dog-rose away from the vine, his color rising.

Mrs. Underdouble, still pulling, bumped abruptly to the floor. "Ransom—"

"Here, MacTate." Ransom dropped the dog-rose into the golf bag and handed it to his colleague. "Pick up Cooley and take them both to my office. Here's the key. I'll see you later."

He turned to help Mrs. Underdouble, who was staring in horror at the place where the dog-rose had been.

"Ransom. That wasn't your *entry*? Not *that*?"

"Look, Mrs. Underdouble, I can explain everything. You see—"

MacTate slipped quietly out of the hothouse. And back in Ransom's office, he set the dog-rose and Cooley, who was apparently satisfied with just one rose for a companion, side by side on the deep-freeze box. Then he pulled the box well away from the windowsill, sighed, and went home.

The next morning, as he was about to cross the street on the way to his office, he saw Ransom's car heading for him. He hopped back on the curb just as Ransom pulled up with a screeching of brakes.

"MacTate." Ransom got out of the car and slammed the door. "How's the rose? Did you give him any vitamins?"

MacTate noticed that his colleague was carrying a brown bottle and a large book under his arm. The book was titled *Einführung zum Pflanz und Tiereinteilungsgrund*. "Well, no, old boy," he said. "You didn't say anything about—"

"My God! Let's get to him." Ransom swung about, and headed for his office.

"You mean," said MacTate, following close at his heels, "that you haven't been to your office since—"

"How could I?" Ransom demanded. "I've been spending all my time working up a case." He hefted the book as he spoke, his expression somber.

"Case?"

"For the rose, yes. She claimed he couldn't qualify as a plant anymore and this morning she hauled me before the committee for an eligibility ruling. I forgot all about his vitamins until just now." Ransom flourished the brown bottle again.

"What did the committee decide?" MacTate insisted on knowing.



"Well, it came down to sex." Ransom turned up the stairs to his office. "They figured it wasn't so much a matter of whether he was a plant or an animal, but of whether he was a *flower*. You see, the simplest flower known is the spurge. It hasn't got anything but a single stamen or a single pistil. No petals or anything else. So they said if I could find either a stamen or a pistil on the rose they would qualify him. Do you remember if he had any?"

MacTate thought. "No. All I remember is that Cooley had stamens in his ears. But he must have got them from the—"

"My God, what's that?"

They were just outside Ransom's office. From inside came a lugubrious howl.

"Give me the key, MacTate," Ransom said urgently, holding out his hand.

MacTate gave him the key. He unlocked the office door and flung it open.

In the flower pot on the deep-freeze box there was only a clotted stump. Beside it lay a tangle of what looked like old brown paper. Cooley sat behind the box mourning his lost companion.

"What happened, old boy? *That* isn't your rose?"

"All that's left of him," Ransom said. He leaned over and patted Cooley sympathetically. "He couldn't get wood for a jag anywhere else, so he ate himself. If only I'd remembered those damned vita-

mins. Now we'll never know if he had stamens or—"

"Well, it must have had something," said MacTate. "Odd. In this light the color is practically identical to—"

"What are you talking about, MacTate?" Ransom interrupted. "What color?"

"This." MacTate brushed away a wisp of the withered debris beside the stump. "It's like the flowers on that vine it was eating in the hot-house."

From the side of the stump grew a slender tendril topped by little orange petals. If there was any hair on them it was still too fine to see. But in their precise center was a pair of diminutive brown jaws. As they watched, a fly buzzed past. The jaws darted at it and made a little click—and the fly vanished.

"My God," said Ransom, "he's had a baby."

"*What's* had a baby, Ransom?" said a voice behind them, causing them to turn in consternation.

Mrs. Underdouble had come into the office. "If you're talking about Cooley, I quite agree. That horrible thing you had in the hothouse yesterday looked just like him, so I suppose you *could* call it his baby. Now as you know, the stud fee—" She looked at the remains of the dog-rose. "What's that?" she demanded.

"What's left of my entry," said Ransom.

"Dead? That really is too bad." She clucked her tongue, grinning.



"Did it have stamens or— Stop that, Ransom. What are you doing?" She slapped his hand away from the withered petals he had been trying to pull over the orange baby. "What's that?"

"All right. You'd find out sooner or later. It's my new entry."

"Orange. Like the—" She stared at it. "Ransom, do you know what my scion fee is for the trumpet creeper?"

"Look, Mrs. Underdouble, you can't prove—"

"What? Look at the color. You don't deny that you had your monster out mutilating my trumpet creeper, do you? Anyway, you can't enter *that*."

Ransom scowled. "What do you mean? If you admit it's the offspring of your trumpet creeper it's got to be eligible."

"Ah-ah. That's not the point, Ransom. Does it have stamens or pistils?"

Ransom looked startled. He bent over the little orange dog-creeper and examined it. "It's *got* to have something," he said, desperately. "Wait a couple of days. It's just a bud now. It—"

"No entries can be accepted for prize competition after today, Ransom." Mrs. Underdouble laughed

nastily. "But don't worry about the creeper fee. Cooley's services will cost you enough." She went to the door. "I'll send you a bill," she said, and left.

"It's a shame the rose ate itself," said MacTate. "Because it was old enough to have had stamens. Come to think of it, it must have had them if it gave them to Cooley."

"What?" Ransom looked startled.

"Don't you see? How could Cooley have picked up stamens from the dog-rose if it didn't have any itself? He—"

"MacTate." Ransom was staring at Cooley, who had fallen asleep behind the deep freeze. "Come on." He grabbed MacTate's arm. "Let's get over to the drug store before the lunch crowd hits it."

"Drug store? Why?"

"We've got to get some dye for Cooley, so she won't recognize him until after the awards."

"But why—"

"Think, MacTate. What did the committee say? Anything with stamens. All right." Ransom pulled him out the door. "We're entering Cooley in the Flower Show. If he wins himself for us she can't charge us a stud fee. Can she?"



## VII

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# THE AESTHETIC DECAPITATIONS

**“ ‘Math Faculty Recovers Lost Coefficient,’ ”** MacTate read from the campus newspaper. “The Mathematics Department, which for the past two weeks has been without the services of Professor Cleanth Penn Ransom, leading contender for nomination by the Nietzsche Society as Renaissance Man of the Year, is now back to full horsepower. Rumors that Professor Ransom’s temporary absence was due to a rare skin disease were discredited by the president of the Nietzsche Society, who stated that the mathematician has been undertaking intensive research in fields of a rather abstruse . . .” He looked up. “What gave him that idea, old boy?”



Ransom, his complexion completely normal once more, folded his arms back of his head. "I did."

"You?"

"Sure. I was getting sick of this rare-disease stuff. Besides, it's true. The research, I mean. Since good old Helen swiped the dimension-warper——"

"You have another Ettiscope gadget?"

"What else?" Ransom reached into his bottom desk drawer and took out a blindfold with a mechanism over the eyepieces that was connected by heavy wires to something resembling a slide projector. "Applies photochemistry to art. I got the idea from Plotinus. You know, the Greco-Roman philosopher or whatever he was. It's in his *Fifth Ennead*. He says you don't paint with your hands. He says you paint with your brains. He says a painter——"

"Sculptor, old boy," said MacTate. "He's talking about statues."

"All right. Sculpture, painting, what's the difference?" Ransom shrugged. "The point is, you can't make the paint or the stone look just like the picture you've got in your head on account of you can't subdue concrete materials entirely to your artistic will. That's what he says."

MacTate smiled. "You won't find that hard to believe if you go to the exhibition over in the library. Our resident artist. What's his name?"

"Wetzelli?" Ransom grinned. "You shouldn't talk that way about him, MacTate. You just don't understand him."

"You do?"

"Sure. He's trying to bring the Renaissance up to date. Says they had a pretty good sense of composition but they hadn't heard about Gauguin's 'truth of the lie.' You know. Like if you see red grass, you ought to paint it blue instead. Only ten times as blue as it's really red. Or have I got it backwards? Anyway, that's the truth of the lie."

"So he treats Renaissance subjects in the style of Gauguin?"

MacTate smiled sardonically. "I knew there was something he did wrong."

"Well, so did Gauguin. Sometimes. You can't say it's necessarily *wrong*," Ransom shook his head. "Like Plotinus says, it may just be that the paint's unsubduable. So when I pointed out to him that even Gauguin couldn't entirely subjugate his materials to his artistic will, he was naturally interested."

"Who was?"

"Wetzelli. Who are we talking about? That's why he's coming here today for a subconscious photograph."

"Oh. A subconscious photograph. Yes."

"Of the pictures he's got in his mind." Ransom pointed at the projector. "So there won't be any unsubduable material between his brain and the canvas." He reached into his bottom drawer again and took out a yard-wide roll of something wrapped in black rubber. "This canvas I invented is covered with chromatic gelatin, like they use for color photography, and rhodopsin. You know. That stuff you've got in the rods of your retina so you can see at night. It's made out of a protein called opsin and vitamin A, and when the light hits it, it turns into opsin and retinene, which turns back into vitamin A."

"But, old boy, how—"

"Wait." Ransom held up a hand. "I got it by analogy. You know how your throat muscles are supposed to move when you're saying words to yourself? Well, I figured your retina ought to do something when you think about a picture. Shake up the sulphur and hydrogen groups in the rhodopsin, maybe, so they'll kick up an electric impulse in your optic nerves." He picked up the blindfold. "So I fixed this eye pad to scan electrical changes in the retina and relay them to the projector. It's got a zinc-sulphide tube in it, like a television screen. The projector. So it projects the picture you've got in your head onto the canvas. All you've got to do is squirt some of this stuff on it so the rhodopsin won't break down any more"—he reached into the drawer again and took out a large bottle with

a spray gun on top of it—"and you've got a picture straight out of your head."

MacTate regarded the equipment dubiously. "But how about the color? You can't pick that up with night vision."

"That's right," said Ransom. "Color's in your cones. But when you think about colors, your cones give off enough electricity to modify the current from your rods so the projector can filter them through to the gelatin." He grinned. "Anyway, the way Wetzelli uses colors, it wouldn't—"

The door opened. "Where's this contraption of yours, Ransom?" A slight, rather intense-looking person came in and slammed the door behind him. He had red hair, a red mustache, and drooping eyelids, and wore a magenta sport shirt on the front of which had been spilled a gob of emerald green.

"Ah, Wetzelli. We were just talking about you—it, rather." Ransom nodded at MacTate. "MacTate and me. You know MacTate? Philosophy?"

Wetzelli sat down beside the desk and looked at MacTate from under his eyelids. "Hi." He turned to Ransom. "Well, go ahead and photograph my subconscious."

"That's what we're going to do, Wetzelli." Ransom gestured at the equipment on his desk. "Here's all the stuff." He picked up the blindfold. "As I was explaining to MacTate, you take this eyepiece and—"

"Good. Let's get going." Wetzelli lunged forward and snatched the blindfold out of Ransom's hands. "Just put it on like a mask?"

"No, no. Wait a minute." Ransom reached across the desk and grabbed the blindfold back. "Don't be so impulsive, Wetzelli. We've got to get things ready first."

"Then get them ready. What are you waiting for?"

"Well—" Ransom laughed nervously. "I guess the first thing we've got to do is—hypnotize you."

"You can't." Wetzelli looked at him from under his eyelids. "I'm iron-willed."

"Well—" Ransom laughed again. "At least we've got to put you in a state of—well, I mean so your subconscious can work without distractions. Let's see." He looked around the room. His eye lit on the closet. "How about music?" He looked at Wetzelli. "I wonder— Well, let's try it anyway."

He went to the closet and began to rummage in it noisily. "I used to have a— Here." He emerged with a record player and a large black curtain. "MacTate, get some thumbtacks out of the desk and put this curtain over the window while I set up the music." He tossed him the curtain. "And turn on the desk light."

MacTate found the thumbtacks, turned on the light, and went to the window. Ransom began to rummage in the closet again. "How about this one, Wetzelli?" He held up a record, blew the dust off it, and turned the label toward the light. "Dance of the Sugar Plum Fairies."

Wetzelli looked at him.

"Well." Ransom put the record back in the closet and brought out a bigger one. "Here's part of Honegger's *King David*. Fellow recites the Bible to music."

Wetzelli shrugged.

"See how you do with it." Ransom plugged in the record player, put on the record, and handed the blindfold to Wetzelli. "Now you can put it on." He unrolled a couple of yards of the rubber-covered canvas and tacked it to the wall opposite Wetzelli, then went back to the desk and aimed the projector. MacTate had finished tacking the curtain to the wall.

"All right, Wetzelli." Ransom turned off the desk light. "Nearly set." He groped his way to the wall and pulled the rubber covering off the canvas. "Now." He came back to the desk, clicked a switch on the projector, and turned up the volume of the record player. "Go ahead and paint."

The recorded voice was narrating Saul's visit to the witch of Endor. Its deep nasal tones grew more excited as it began to relate the raising of Samuel's ghost. The music behind it swirled into cacophony.

"You know," said MacTate, "I knew some people with a myna bird who used to play that record, and——"

"Shh. Don't distract Gauguin there," Ransom whispered. "Look, he's already under way."

The projector was spitting flakes of yellow light at the canvas on the wall.

"When it's scanned all the yellow in his picture," Ransom went on, "the red filter will take over. The impulses from the eye scanner are sort of geared to the color of the filter, so——" There was a click in the projector. "See, there's the red filter now."

"But I thought for color photographs your filters had to be orange, green, and violet," whispered MacTate.

"Well, this is more like color printing. Only you need four colors. Yellow and red for the cone anabolism and blue and green for their catabolism. We're getting a positive straight from his eyes."

The projector clicked again and flashed blue.

"But, old boy, are you sure the cones——"

"Make four colors? Sure. There used to be different theories, but——" The projector clicked again. "See, there's the green. You need four pigments in the gelatin."

"How can you tell when it's finished?" MacTate said after a moment. "Just wait until it turns yellow again?"

"No, no. There's an opaque screen between them. The green and yellow filters. So when the green's finished—— There."

The projector clicked again and stopped splashing light on the canvas.

"Shall I take the curtain down?" said MacTate.

"No, wait. I've got to squirt this stuff on it." Ransom felt his way to the canvas and sprayed busily for a moment. "Now. Take it down."

MacTate untacked the curtain and turned to look at the picture.

Although it was blurred here and there, as if out of focus,

the principal details in it were discernible. The background was a red-violet sky laced with cobalt lightning. Against it, his feet braced on Prussian-blue rocks, stood a red-haired, knock-kneed figure with greenish flesh. His left hand gripped the hair of a decapitated giant dripping mauve blood. Though the figure had three eyes and no mustache, his identity was unmistakable.

Ransom grinned. "What did you give yourself three eyes for, Wetzelli?"

Wetzelli, who had taken the blindfold off, got up and lit a cigarette. "Symbolizes deadly aim," he said. "It's David with the head of Goliath."

"Well, it certainly doesn't spoil the likeness. It——"

"Speaking of likenesses," said MacTate, "how about Goliath?" He pointed.

Ransom turned his attention to the bleeding head. His grin suddenly disappeared. "Listen, Wetzelli, what's the idea? If you're trying to be funny——"

"That's the way it came to me." Wetzelli shrugged.

"But what made you get a crazy idea like that? That piece I was playing was about the witch of Endor. It didn't——"

"Sounded like a slingshot fight to me." Wetzelli looked at his creation approvingly. "You said it was about David, so I naturally thought of Goliath."

"But you can't just put my head in a picture without asking me. It's—sadistic. My God, anybody would think you wanted to kill me."

"Maybe I hate you." Wetzelli flicked his cigarette ash on the floor.

"Hate me?" Ransom scowled at him. "Why? What did I ever do——"

"Nothing." Wetzelli shrugged again. "You don't have to do anything to make people hate you. It's subconscious." He studied the rocks in the picture. "Prussian blue's a nice effect there, isn't it?"

"Now listen, Wetzelli—"

"I say," said MacTate. "Why don't we try it again? Perhaps we can get a picture that will please everyone. "He held up a record he had taken out of the closet. "Here's an aria from Berlioz's *Benvenuto Cellini*. Bit old, but"—he blew the dust off the record—"it might inspire something suitable." He smiled at Ransom. "How'd you like to be Benvenuto Cellini, old boy?"

Ransom waved disgustedly at Wetzelli. "He'll be that himself. I'll just be somebody he murdered, with purple blood coming out of my neck."

"You wouldn't do that, would you, Wetzelli?" MacTate put the record on the player, went to the window, and tacked up the black curtain again.

Ransom sighed. "All right, but if he—" Muttering, he cut another piece of canvas and tacked it over the first. Wetzelli threw his cigarette on the floor, sat down, and put the blind-fold on.

The record screeched and hacked. "That's a little on the order of the last one." MacTate smiled. "I wonder—"

"Listen," whispered Ransom, switching on the projector. "Do you think he really hates me, or is he just trying to be funny?"

"Well, I doubt that he hates you, old boy. But on the other hand, he's probably not just being funny. Artists are peculiar people, you know. Practice a sort of eminent domain, so to speak."

"But it makes me feel—weird. Him cutting my head off like that. I—"

"Stop fretting, old boy. Let's see how this one turns out."

The projector clicked to the opaque screen. Ransom switched it and the record player off and sprayed the canvas. MacTate untacked the black curtain and looked around hopefully.

This time the sky was a dark green with smudges of darker cloud in it. The red-haired, one-eyed figure against it was not standing on anything, being borne aloft by winged sandals of rose madder. Impaled on the sword in his hand was a familiar

head, surmounted by a coiffure of yellow-green snakes with alizarin eyes. The head was dripping sepia blood.

"Look at that, Wetzelli." Ransom scowled. "You've done it again. Cut my head off. After you promised I could be Benvenuto Cellini. You—"

"I didn't promise anything." Wetzelli got up and lit a cigarette. "I followed my subconscious, like you insisted when we started." He surveyed the picture. "Rather good, too."

"But that isn't Benvenuto Cellini at all. Where would you get a horrible idea like that if you weren't out to murder me?"

"When you mentioned Cellini, I naturally thought of Perseus with the head of Medusa." Wetzelli flicked his cigarette ash at the picture. "You see, I've only got one eye there, to suggest that Perseus did it with averted vision. Looked in a mirror or something, didn't he? I forgot to put that in."

"Well, don't worry about it"—Ransom went to the wall—"because it's not going to stay there." He ripped the canvases down, rolled them up, and thrust them angrily into the wastebasket.

Wetzelli looked at him from under his eyelids. "That'll cost you a thousand dollars."

"What are you talking about?" Ransom turned around. "What will?"

"The pictures." Wetzelli flicked his cigarette ash toward the wastebasket. "If you want to treat them like your property, it'll cost you a thousand dollars. Apiece. That's my price for that size."

"You're crazy." Ransom jabbed a finger at him. "There's a law about that. You can't go around taking pictures of people in embarrassing circumstances without—"

"Prove it's a picture of you." Wetzelli inhaled calmly on his cigarette.

Ransom glared at him incredulously. "Well, it's there." He pointed at the wastebasket. "Anybody can see it. That's me."



"Just a face that happens to resemble yours," said Wetzelli. "It's not a portrait. Was I looking at you when I made it?"

"All right, Wetzelli. All right. My charge for the materials is a thousand apiece too. Special canvas and all. So we're even."

"I say," said MacTate. "Why don't we try a third one? If Wetzelli will agree to reverse your positions this time and even things up psychologically, there will be no further reason for wrangling."

"I can't," said Ransom. "I've got a class. Anyway, he's already two up on me."

"But it's not a quantitative matter," said MacTate. "Strictly considered, you can't cut a person's head off more than once. So if he lets you cut his head off in the next picture, you'll be psychologically square." He took the two canvases out of the wastebasket, put them in Ransom's desk drawer, and picked up the black curtain. "You run along to your class, and we'll take care of it while you're gone. I know how to work all the things."

Ransom kicked his desk petulantly. "But I'm not coming back. I've got to go over there." He waved in the direction of the city's other university. "To diagnose a disease in their electronic brain."

"Then it will be here tomorrow to surprise you. Leave everything to us."

"All right." Ransom opened the door and glared at Wetzelli. "But don't think anything he does is going to surprise me."

The next morning MacTate was sitting in his office drawing beards on the illustrations in the *Journal of Aesthetics* when his phone rang.

"MacTate, where's that picture you were going to have Wetzelli make? With me holding him?"

"Well, old boy, I guess I"—MacTate cleared his throat—"rather took it with me."

"My God, why?" In Ransom's voice suspicion struggled with annoyance. "You said you'd even us up, and now—"

"Well, I thought it might be better for me to—explain it. If you wanted to see it."

"What do you mean if I wanted to see it? Of course I want to see it."

"Very well, old boy." MacTate sighed. "I'll bring it over."

Ransom was pacing up and down when MacTate got to his office. "What's wrong with it, MacTate? Why did you steal it?"

"Well, I don't think it's quite what either of us had in mind." MacTate unwrapped the canvas and tacked it on the wall. "But at least I talked him out of Lizzie Borden nailing her father's head to the door."

The background this time was slate-colored, with clusters of varicolored stars streaked across it. The figure against it was abundantly female, clad in a long robe of translucent cerise. In her arms she held a silver platter on which lay a delicately featured red-haired head with no eyes at all. Her face was incongruously Ransom's, and her head was set somewhat awkwardly on the shoulders.

"My God." Ransom stared at it. "What *am* I?"

"Well, you see, we found this record of the 'I have kissed thy mouth' apostrophe from the end of *Salome*." MacTate's voice was slightly nervous. "The business about the bitter taste on John the Baptist's lips—'Is it blood or is it love?' You know. Wetzelli said he left the eyes out to show the blindness of her passion—"

"But it's *John's* eyes he left out."

"Oh. Yes." MacTate looked confused. "I meant to say—he wanted to show that John couldn't see her, and—"

"But my God, MacTate." Ransom sank into his swivel chair. "That's not getting even. He's made himself a saint and me a—sex maniac. Look at that pose. I look like—"

"I pointed that out to him, old boy." MacTate shrugged. "I tried to get him to do Judith with the head of Holofernes, or even Isabella with a transparent pot of basil, so that we could destroy this one. But he said he didn't want to paint this way

any more because in real painting the only function of the brain is to take advantage of the motion of the hands. He said an artist is a person who knows how to take advantage of accidents and Plotinus didn't know what he was talking about."

Ransom scowled. "Well, if he thinks he can get away with making me a nymphomaniac—"

The door burst open. Wetzelli, obviously checking an impulse to rush in, closed it quietly behind him, ambled nonchalantly to Ransom's desk, and sat down in front of it. He lit a cigarette and looked out the window. "Nice day."

Ransom continued to scowl.

Wetzelli turned from the window to the wall. "Salome there." He waved carelessly. "She even us up?"

Ransom's scowl became thunderous. "Listen, Wetzelli, you know damned well— Wait." His eyes narrowed. "What are you up to, anyway? Why are you all of a sudden so—affable? What—"

"Nothing." Wetzelli looked up with an expression of celestial innocence. "I just don't want you to be mad at me any more. I don't like to have my friends mad at me."

"Let's not be nauseating, Wetzelli." The skepticism on Ransom's face was almost poignant. "Tell me what you're after, and we'll get down to money like grown men."

"Well—" Wetzelli lifted his hand to flick his cigarette ash on the floor, then caught himself and reached fastidiously for the ash tray. "I was a little hasty about that thousand-dollar business, you know. The pictures aren't really that good. But since I've taken a fancy to them, I thought maybe if you'd put a reasonable price on the materials—"

"No, you don't, Wetzelli." Ransom aimed a finger at him. "MacTate told me what you said. About Plotinus not knowing what he was talking about. How come you changed your mind so quick?"

"Well—" Wetzelli puffed nervously at his cigarette. "I just happened to notice some ugly stains on the walls in my—"

"No good, Wetzelli. You've got plenty of hideous pictures in your cellar to cover up wall stains with. I saw them. The pictures. Now tell the truth. Did you find a junk dealer that goes in for loud colors, or what?"

"Well—" Wetzelli began to perspire slightly. "I did run into a sort of dealer. And I think I might be able to pick up a few dollars on the decapitation things. Be glad to split with you, of course. Also"—his eyes shifted to the projector—"I'd like to lease your equipment. I—"

"Sorry, Wetzelli." Ransom shook his head firmly. "Plotinus might turn over in his grave."

"Ransom." The cigarette in Wetzelli's mouth bobbed agitatedly as he spoke. "Be reasonable. I've already apologized subconsciously with the Salome. What do you want me to do? Beat my forehead on your floor?"

"It's not that." Ransom looked at him narrowly. "But don't you think we could trust each other better if you showed me your contract or whatever it is?"

"Suppose I don't have a—"

"Then we can talk business after you've got one." Ransom shrugged.

Wetzelli threw his cigarette on the floor, stamped it out, and gnawed his mustache. "All right." He unbuttoned the pocket of his sport shirt and threw a folded letter on Ransom's desk.

Ransom unfolded it and began to read. Suddenly his eyebrows shot up and he whistled softly. "MacTate, listen to this. ' . . . if you would be interested in doing a series of twelve advertising illustrations for the slogan: "Does your cigarette take your head off? Buy Diplomats for duller smokes" . . . client has authorized payment of \$1000 per illustration accepted . . . would like to see sketches at your earliest . . . ' " He looked up at Salome for a moment. "No, Wetzelli. No. They'd never—"

"Listen, Ransom." Wetzelli leaned forward. "I tell you they

would. I've worked for them before. If you'll just let me use your projector——"

Ransom continued to stare at Salome.

"Listen, Ransom," Wetzelli said earnestly, "tell you what I'll do. You can be the good guy in all the others. Macduff, Beowulf, Gawain, Cromwell——"

"Cromwell? Whose head did he cut off?"

"King Charles the something. It's in English history."

"But he didn't do it. Personally, I mean."

"Well, who'll know the difference? Anyway, you can be Cromwell and——"

"Why don't you try it, old boy?" said MacTate. "I'd rather like to see the red-haired Macbeth. Let him make that one, at least."

"Oh, all right." Ransom took the roll of canvas out of his bottom desk drawer. "Get yourself a record and put up the curtain."

When the canvas was on the wall, the curtain on the window, and a modern arrangement of "The Campbells Are Coming" on the record player, Wetzelli donned the blindfold and Ransom edged over to MacTate.

"My God, MacTate, isn't that piece awfully jaunty for a picture of Macbeth?"

"Can't help it, old boy. He picked it."

"Well, it's not moving him very much. The projector hasn't started yet."

"Perhaps it's broken."

"No, no. It's all right. The trouble's with him."

Wetzelli was fidgeting, as if with frustration. When the projector finally did begin to function, the color flakes came in fitful jets.

"See, MacTate, it's not broken. He just couldn't get going."

"But it still doesn't seem—— Well, we'll see when the picture's finished."

When the opaque screen clicked into place, Wetzelli

snatched off his blindfold and stood up. While Ransom sprayed the canvas and MacTate took down the curtain, he lit a cigarette and stamped impatiently. "I can't help it, Ransom. You'll just have to—— Look at that."

The background of the Macbeth was a somber tartan of ultramarine, maroon, and umber, but where the familiar faces should have been were two shapeless blobs of mottled mud.

"You see?" Wetzelli flicked his cigarette ash at the canvas. "It's no good to make promises with my conscious mind. My subconscious has to be the head-chopper or it won't work." He went to the canvas and ripped it off the wall, exposing Salome once more. "I could paint in the heads, but that would take as much time as two regular portraits. Nice thing about your machine is you can turn out advertising without much trouble." He rolled up the abortive Macbeth, stuck it into the wastebasket, and looked up at Salome. "You know, Ransom, you don't really look too bad in——"

"No." Ransom slapped his hand firmly on the desk. "I won't have my face in millions of magazines like—that. What would people think?"

"But, Ransom, at a thousand dollars per——" Wetzelli gnawed his mustache and looked around at MacTate. "You, MacTate. Do you think he looks——"

MacTate was not listening. Something about Salome's face rang a distant bell in his mind. Suddenly he remembered. She looked much like one of the pictures in the *Journal of Aesthetics*. The ones he had drawn beards on. "I say, Wetzelli," he said, "would it take much trouble just to paint beards on them? The Ransom heads? I don't suppose there would be any impropriety in rendering Medusa with a beard, and if the features were sufficiently disguised by it——"

"Salome there would sure look good in a beard," said Ransom.

"Yes, we'd have to retitle that one." MacTate looked at the picture thoughtfully. "Something like Richard the Lionhearted with the head of Saladin."

"Now look, MacTate——"

"But, old boy, if he can have Cromwell decapitating King Charles—— Besides, there is a story about Richard eating a Saracen's head. And the costume is quite suggestive of a crusader."

Ransom looked at the voluptuous convexities beneath Salome's translucent gown and shook his head. "It's suggestive of too many other things."

"Then put the beard on Wetzelli and a cowl on you and call it Little Red Ridinghood. In the primitive version it was a werewolf she met, and here he could——"

"Farfetched," said Wetzelli.

MacTate lit a cigarette and studied the picture. "Pity. A rich indigo beard with that red hair——"

"What?" Wetzelli looked up.

"I said if there were a bluish beard——"

"That's it." Wetzelli spun around to look at the picture. "Bluebeard. What's-her-name with the head of Bluebeard. His wife. And he doesn't have any eyes because he's blind to human values or something." He spun back to Ransom. "That ought to——"

"But the beard will be on you. It'll still have my face over——" Ransom pointed at the translucencies in Salome's gown.

MacTate looked intently down his nose at the tip of his cigarette. "Old boy, perhaps I'm foolish for pointing this out, but—have you examined the canvas closely?"

Ransom looked at him. "Why?" He went up to the wall and squinted at the picture. Suddenly he stepped back and pointed. "The heads. You've cut the heads out and switched them. I *thought* she looked like she had a stiff neck. Should have guessed when Macbeth——" He turned around and glared severely at his colleagues. "So you decided to even things up one way or another?"

"But, Ransom, I couldn't help it." Wetzelli threw MacTate

a reproachful look. "We thought you'd rather be Salome than have your head cut off again, and I tried. But you saw what happened to Macbeth. So we thought what you didn't know —" He caught himself.

"Wouldn't hurt me." Ransom nodded. "Go ahead. Justify your treachery."

"Old boy," said MacTate, "we were only thinking of your peace of mind. But now that there's several thousand dollars at issue——"

"Oh. My peace of mind's not worth several thousand dollars?"

"Let's say it'll give you a greater peace of mind, Ransom." Wetzelli went to the door. "Look. MacTate's right. We'll switch the heads back again and paint the beard on you. And all the others can have beards too. I'll have to leave Marie Antoinette out of the series, but we both have to make concessions." He opened the door. "Wait while I get some paints and I'll show you. You won't recognize yourself." He banged the door and was gone.

"MacTate"—Ransom stared after Wetzelli—"did he really try to put my head on Salome? When he made it, I mean?"

"I think he did, old boy. But as he pointed out with reference to Macbeth, there's a kink of some sort in his subconscious. You'll simply have to reconcile yourself to being decapitated in the whole series. With a beard, however."

"No." Ransom slapped the desk. "I'll be damned if I do. Look. Why shouldn't I take a shot at Macbeth myself? And make Wetzelli the head? It couldn't be much worse——"

"But, old boy, you're not an artist. Do you think your eyes——"

"Oh, I had an art lesson or two when I was a kid." Ransom put the blindfold on. "Tack up a piece of canvas. And leave that record player alone. I'm going to do this with my conscious."

MacTate shrugged. He tacked the canvas on the wall, put



the curtain over the window, and switched on the projector. The splashes of light played steadily on the canvas through the four colors, and when the opaque screen clicked into place Ransom snatched off the blindfold, sprayed the picture, and pulled the black curtain off the window.

"Now—" He pointed at the canvas. "You see, I—" He stopped.

The tartan background was practically identical to the one Wetzelli had conceived, but the heads this time were quite clear. The one on the figure brandishing the sword was Wetzelli's, transfigured by an expression of noble righteousness. The hideously contorted features of the head he held in his other hand were Ransom's.

"What happened? *That's* not the way I wanted it."

"Obviously not." MacTate smiled. "Perhaps Wetzelli has conditioned your subconscious and the thing probed it." He gestured at the blindfold.

"My God." Ransom looked at it. "You don't think—"

"Of course not, old boy. You were probably in too much of a hurry to—"

"No. I wasn't hurrying." Ransom unrolled another length of canvas and began to cut it. "Listen. This time I'm going to try an entirely different kind. Just to see. I'm going to concentrate on the *Mona Lisa* and try to make that."

"But, Ransom, why—"

"Don't argue, MacTate. Tack up the window." Ransom fastened the canvas to the wall, put on the blindfold, and groped for the projector, clicking it on. The light began to flicker almost immediately. "*Mona Lisa . . . Mona Lisa . . .*" He concentrated audibly. When the flickering stopped, he tore off the blindfold, sprayed the canvas furiously, and ripped down the window curtain. "Look."

The picture bore no resemblance to the *Mona Lisa*. Against a background of blazing orange, a red-haired, warty-faced figure, dressed in the uniform of a seventeenth-century general,

held up Ransom's head, adorned with dark curls and a Vandyke beard.

"My God. He's even taught it bad history." Ransom pointed. "That's Cromwell with the head of Charles I."

MacTate stared. "But I thought you were going to make a copy of the *Mona Lisa*."

"Sure. But what did it care? He's conditioned it to look for his own ideas. Whether they're in his subconscious or somebody else's."

"Now, Ransom, really——"

"All right." Ransom cut another piece of canvas. "Final test. *You* make a picture." He tacked the canvas to the wall and fastened the curtain back on the window.

"But, Ransom"—MacTate gestured deprecatorily—"I can't ——"

"Sure you can. It can, rather." Ransom pushed him into a chair and put the blindfold on him. "Think of anything. It won't matter. Try *Nude Descending a Staircase*." He clicked on the projector.

"Well—— Tell me, old boy, was she descending from left to right or from right to left?" As MacTate spoke, the projector began to flash light on the canvas.

"I tell you, it doesn't matter, MacTate. Make her ascend if you want to. The thing's not paying a bit of attention to your conscious mind."

"A good thing, too. At this moment my conscious mind is in a state of visual paralysis."

"But wait till you see what's going on in your subconscious." Ransom thought a moment. "You remember the blank heads Wetzelli got with the first Macbeth? I guess as a professional observer, you might say, he had enough control over his optic impulses to fight the eyepiece to a draw. But we being just academic dopes——"

The opaque screen clicked into place.

"See?" Ransom sprayed the canvas and took the curtain down.

The red-haired figure against the lemon background held up a little feminine head, suggestive of Fragonard, which was nevertheless identifiable as Ransom's. In his other hand he held a tricolored banner bearing the words "*Liberté, égalité, fraternité.*"

"Marie Antoinette," said Ransom. "Wetzelli said he'd skip her, but he planted the idea in your subconscious."

MacTate rubbed his eyes and stared at the picture. "Good heavens."

"And like he implied," Ransom went on, "you can't put a beard on *her*." He took the canvas off the wall. "So we better hide it." He folded the canvas and stuck it in his top desk drawer. "If he sees it he'll want to use it. 'Eminent domain,' I think you said. But it seems more like Nothing Sacred to me. So when he comes back, I'll sell him the whole machine. Let's see. Fifty per cent of twelve thousand, plus——"

"*Sell* it to him?" MacTate turned. "Aren't you forgetting the Ettiscope——"

"MacTate"—Ransom looked at him—"do you really think Ettiscope would be interested in this—aesthetic guillotine? That can only make one sort of a thing? With the same two people? It's not art. It's advertising. Wetzelli's corrupted it." He sighed. "So that's two weeks' work shot to hell. I guess, like you said, it's not that he really hates me. He just——" He looked up. "Wait. Who do I feel the same about as Wetzelli feels about me?" His eyes began to gleam. "Listen, MacTate. Come back in another two weeks. I've got an idea. . . ."

*The mathematical discoveries of Professor Cleanth Penn Ransom, the Sane Scientist, have so far succeeded in putting an end to the career of a promising poet (The Poetry Machine), launching the career of a successful opera singer (The Mathematical Voodoo), and singularly altering the career of an eminent African witch doctor (The Embarrassing Dimension). If they have failed noticeably to affect the course of American mathematics, it is because some imp of the perverse always sees to it that any Ransom discovery involves quite unpredictable complications. We bring you here one of the more complicated of even Ransom's ventures, in which the tubby little mathematician turns himself into a basketball star — and his long-suffering friend Professor MacTate at last steps out of his rôle of ironic observer to enjoy a quiet triumph of his own.*

## *The Hyperspherical Basketball*

by H. NEARING, JR.

"THE way you make a circle," said Professor Cleanth Penn Ransom, of the Mathematics Faculty, "is to hold one terminal point of a line down while you revolve the other. See?"

Professor Archibald MacTate, of Philosophy, smiled with one corner of his mouth. "Fascinating," he said.

"Now you needn't be sarcastic, MacTate." Ransom stuck out his little belly and began to swing in his swivel chair. "This is big."

"Oh." MacTate crushed out his cigarette in the icosahedral ash tray on his colleague's desk, crossed his long legs, and clasped his hands around one knee. He looked up with studied expectancy.

"So that's how you generate two dimensions from one," said Ransom. "Hold one end still and turn the other. Mechanically, you do it with a compass, which is basically the two end points of a line. Now, how do you make a sphere out of a circle?" He touched his thumbs and forefingers together to make a digital circle. "You hold one axis still and revolve the other." He twisted his hands through the air. "It's the principle of the ice-cream dipper. One axis fixed, the other turning. Now." He leaned forward and aimed a forefinger at MacTate. "How do you generate a four-dimensional figure from a sphere?"

"There, Ransom, I'm afraid you have me."

"Look." Ransom put his finger on the desk top and began to trace imaginary drawings on it. "To make a two-dimensional figure, a circle, out of a line, you hold one *point* down and turn the other. To make a three-dimensional figure, a sphere, out of a circle, you hold one *line* down and turn the other. So to make a four-dimensional figure, or hypersphere, out of a sphere, you would have to hold one *plane* — represented by a great circle, or equator — down and turn the other. Right?"

"I suppose so." MacTate looked with quizzical intentness at the imaginary drawings on the desk top. "How would you go about doing that?"

The phone rang. Ransom made a wry face, as if he knew who was calling, and picked it up.

"Hello. . . . Yes, Gladmore. . . . Yes, we'll be ready Wednesday. With my ball, don't forget. . . . Right. . . . Yes, I've got just the man." Ransom eyed MacTate furtively. "MacTate, in Philosophy. You know. . . . What?" Ransom glowered. "What do you mean? Of course he's honest. I — . . . What? . . . Now get this, Gladmore. I always pick them. Honest men. Just because — . . . *What?* Why, you — " There was a loud click in the receiver. Ransom snarled at the phone and banged it down on the cradle.

"Ransom." MacTate looked at his colleague with an expression of cosmic pessimism. "What have you got me into this time?"

Ransom's scowl disappeared. He looked up and smiled fatuously. "Oh, yes, MacTate. I was just going to tell you when he called. Gladmore, I mean. The basketball coach. You know. We need you to help us on a sort of — project."

MacTate looked at him.

"Now, don't look that way, MacTate. It's nothing at all, really. We just want you to referee the — We just want you to be a referee. As I was telling Gladmore just now — "

"Ransom."

"All right, MacTate. My God, there's nothing criminal about it. Gladmore has challenged the committee to a basketball game."

MacTate shut his eyes.

"MacTate. Will you stop acting as if I had assaulted your grandmother? You won't have to do anything at all, actually. Hardly anything, anyway."

MacTate opened his eyes. "Old man," he said. "Since I'm being personally involved in this — project, I trust you won't object to my asking a few seemingly impertinent questions. First, *what* committee?"

"The Faculty Committee for Investigating the Improvement of Athletic Purity. You remember, MacTate. I'm chairman."

"But there aren't any ringers on the team this year, are there? Why should Gladmore —?"

"That's just the point." Ransom lifted a finger demonstratively. "The alumni are worried about their taxes this year, so we don't have any ringers. But do you see what that means?" He raised his eyebrows. "If the committee stuck to its assignment, it would have nothing to do. Well, we all agreed that we couldn't just sit there doing nothing, so we prepared a report protesting against the time that basketball practice takes from the players' studies."

"Ransom."

"Don't reproach me. I'm only the chairman. But Gladmore's got it into his head that I was the prime mover — not that he has a noble passion for any of us — and he said we ought to see what it feels like to play a game of basketball without spending enough time training for it. So —"

"But, Ransom, you've never spent *any* time training."

"That's what he said. He said that if you add up the ages of the committee, we've been out of training about two and a half centuries, so it wouldn't be fair to challenge us to a whole game. But he bet us a stiffer eligibility rule against suppression of the report that we couldn't last half a game against him and the coaching and training staff."

"I'll bet you can't, too."

"Well, don't give any odds." Ransom smiled as if he were digesting a canary.

"Ransom, what are you up to? You can't possibly —"

"All right. You'll see." Ransom nodded his head with Olympian assurance. "He was in such a black rage, I couldn't help taking advantage of it."

"Who was?"

"Gladmore. Who else?"

"I don't —"

"Look, MacTate. We prepared this report, see? And Gladmore got mad about it. You got that now? He was so mad that I decided to spring it on him while he couldn't think straight. And he —"

"Spring *what* on him?"

"My four-dimensional basketball. You know. If you want to make a circle —"

"Ransom. Let's recapitulate a bit. You told Gladmore you would accept his challenge if he let you use a four-dimensional basketball? And he agreed? Just like that?"

"Sure. He was so mad that he said, and I quote, that he didn't give a darn what ball we used as long as he could get us out on a court." Ransom's eyes

twinkled reminiscently. "Of course I didn't tell him it was a four-dimensional basketball. I just said could we use my own ball if it was regulation size. And then he said that."

"And I suppose you have a ball of this description."

"Of course. That's what I was telling you about." Ransom looked down at the imaginary drawings on the desk top. "You hold one great circle of a sphere in place while you rotate the one at right angles to it, and you get a hypersphere. Tricky thing. We'll drive them crazy with it." He reached into his bottom desk drawer and groped around in it. "Look." He took out a spherical object the size of a tennis ball and bounced it on the desk. As it struck the desk, it expanded to the size of a basketball. As it rose into the air, it shrank to the size of a volley ball. After passing through similar transformations for several bounces, it wobbled around on the desk, assuming various sizes from ping-pong to soccer ball, and at last came to rest looking like an ordinary basketball except that it had no leather rind, being made of rubber painted brown.

MacTate looked at the thing incredulously. "How on earth do you make it do that?"

"Fourth dimension." Ransom beamed at the ball. "I guess it's easiest to explain by analogy. Look." He took a sheet of paper and drew a circle on it. "Here's a two-dimensional universe. This sheet of paper. With a two-dimensional" — he pointed to the circle — "basketball in it. Now, suppose you're an inhabitant of this universe and want to turn the circle into a sphere. How would you do it?"

"I give up. How?"

Ransom sketched in a skeleton figure beside the circle. "If you weren't two-dimensional, you could cover the circle with bubble gum and blow against it. That would have the same effect as holding one axis still and revolving the other. But since you can only go up and down and back and forth" — he waved his pencil in the relevant directions — "you can't get outside of the inside of the circle to blow. Right?" He looked up and wagged the pencil at MacTate. "But —" He drew two little parallel lines across the circumference of the circle. "Suppose you were to pump everything out of this circle. What would happen? You don't need a perfect vacuum, even if you could make one. What would happen if you just lowered the molecular pressure in the circle? What always happens sooner or later in low-pressure areas of the air, for instance? That's right." Ransom waved his hand toward the circle. "You get a wind."

MacTate leaned forward and pointed to the circle. "And then if you suddenly squirted bubble gum into the circle, across the path of the wind — I see."

"Only I squirted a quick-hardening synthetic rubber into a hollow sphere to make this thing." Ransom put his hand on the hypersphere, which shrank to the size of a polo ball.

"And the reason it gets bigger and smaller —"

"Is the same reason this circle would get bigger and smaller, if it were the section of a sphere wobbling back and forth across a two-dimensional universe."

"But, Ransom, what would keep the sphere from rolling out of the two-dimensional universe altogether?" MacTate eyed the hypersphere dubiously.

"Well —" Ransom scratched his head. "That's against the rules, I guess. You see, the molecules that constitute the cross-wind don't belong to the same universe as the enveloping rubber. You get some of them inside the ball to create the expansion pressure, but until you squirt rubber across their path they go right on through your universe. Now the rubber itself" — he cupped his hands — "is still part of the original universe, only twisted out of its normal continuity. See? So it can seem to shrink and shrink, down to a point even. Space is probably elastic enough for that. But it won't leave its universe for good." He looked at the hypersphere. "I don't think it will." He frowned. "MacTate, how could it? That would leave a hole in the universe. You could drop right out —"

"Yes." MacTate looked thoughtful.

"Well, we're not going to play hard enough to bust the universe." Ransom laughed. "The beautiful part of it is that it can never get any *bigger* than a basketball. Any more than the sphere" — he pointed to the sheet of paper — "can get bigger than its equator. So my agreement with Gladmore was perfectly legal. This ball is regulation size." He put his finger on the hypersphere and pushed it down to the size of a golf ball. "There's just one thing that worries me, MacTate."

"How to get rid of it?"

Ransom looked up. "What?"

MacTate gestured at the hypersphere. "Might be rather dangerous to have around for long, don't you think? Since you're not absolutely certain of its affinity for this universe —"

"Oh, no." Ransom laughed. "We can lay it in a cornerstone somewhere, if it comes to that. No, I was thinking about the game. What if the ball goes through both baskets at once? Who scores? Now, you're referee, and if that happens —"

"Just a moment, Ransom." MacTate pointed to the sheet of paper. "How can it go through both baskets at once?"

Ransom picked up the paper and rolled it into a cylinder. "You know



what Einstein says about space. Curved. In a two-dimensional universe, it's like this cylinder. Only you don't know it, because you have no sense of the dimension it's curving through. Now." He drew the cross section of a basket at either end of the sheet of paper and bent it in the middle. "If space can be curved, it should also be capable of rippling, shouldn't it? Suppose you got a ripple like this right at the basketball court. What would happen?" He squeezed the two ends of the paper together so that one of the basket cross sections was superposed on the other. "A sphere dropping into this two-dimensional universe could go through both baskets at once."

"But in that case, why wouldn't you see the ball in two parts of the court all the time?" MacTate pointed at the paper.

Ransom jerked his head impatiently. "Because it's a *ripple*, MacTate. Ripples don't stand still. They — ripple. See?" He waved the paper in the air.

"Very well." MacTate tapped the desk top with his finger. "When your ripple's gone away, why doesn't the sphere tear a hole in one wing of the basketball court?"

Ransom stared at him for a moment, then laughed blandly. "Take it easy, MacTate. You've been reading too many science fiction stories. Hell bent on destroying the universe, aren't you? Look." He pressed the ends of the paper together again. "While the sphere intersects two wings of the two-dimensional universe, it acts as a sort of cementing continuum. Holds the ripple in place for the time being. Maybe the wings might spread far enough for one section of the sphere, or even both sections, to become a point, but it's still there holding on. Now eventually the tension of space, as it tries to spring out of the ripple, will pull the sphere back here" — he pointed to the center of curvature in the sheet of paper — "or some player will pass the ball back. Same thing. So the two sections of the sphere finally become identical, and your universe is intact." He smoothed out the paper. "I tell you we're not going to play hard enough to damage space, MacTate, so stop worrying about it. You just worry about how to score a double basket."

"Well now, there, you see, Ransom." MacTate waved a deprecatory hand. "How can I possibly referee the game if things like that are going to happen? I would have enough difficulty refereeing an ordinary game —"

"Now wait a minute, MacTate." Ransom spoke in soothing tones. "You've seen enough games to go through the motions. Besides, you're the only referee we can get that I would trust. Just call the shots as you see them. That's all. And if you have any trouble ask me."

On the night of the game, the tiers of benches surrounding the basketball court in the University gym were largely vacant. The spectators, clustered

on the right at midcourt, consisted of coaches' wives, members of the basketball squad and their girl friends, a few sympathetic faculty members, and a lunatic fringe of students that considered it a novelty to see the faculty make fools of themselves. Here and there, in odd parts of the stands, were antisocial individuals who had nowhere else to go. MacTate sat at the timekeeper's desk with the ancient janitor who was to keep track of the ten-minute halves. He could feel no epic expectancy in the air.

The coach and his cohorts, clad in the maroon-and-lavender of the team, suddenly bounced out to the court and began to drop basketballs through the hoop with contemptuous ease. They were greeted by applause from their wives, whistles and cheers from the squad, and a few catcalls from enthusiastic non-partisans.

From the corner of his eye MacTate caught a movement at the other end of the court. The stands hummed with ill-suppressed laughter, followed by a scattering of polite applause and a few good-natured boos. Shuddering slightly, MacTate looked down at the new arrivals. From the reaction of the stands he expected to see the Spirit of Seventy-Six plus two. He was unprepared for what he did see.

They seemed strangely naked in white gym suits, and the physiognomies that struck terror in the hearts of graduate students and lent Magian awfulness to the faculty senate looked a little ridiculous over sagging bellies and knock-knees. Two or three of them were poised in attitudes of apprehension, like withered nymphs about to take flight from satyrs; but Ransom, who held the hyperspherical ball balanced carefully on one hand, beckoned them sternly into a huddle.

Coach Gladmore whistled at Ransom, waved, and trotted over to the timekeeper's desk. He was a lithe, raw-boned man with a crew haircut and an air of clean-living youth that was spoiled, slightly, by the crow's-feet about his eyes and the incipient jowls about his chin.

"What do you say, MacTate? You're MacTate, aren't you? Let's get started."

Ransom minced up to the desk, his eyes fixed on the hypersphere balanced on his hand.

"Well, Ransom," said Gladmore. "Ready to make a little history to-night?" He clapped Ransom savagely on the shoulder. The ball on Ransom's hand wobbled violently and shrank to the size of a large cantaloupe.

Gladmore looked at the thing suspiciously. "Say —" The hypersphere shrank to the size of an orange. "Look here, Ransom." Gladmore frowned. "What are you trying to pull? What's that thing you —?"

"Now listen, Gladmore." Ransom steadied the ball, which resumed its basketball size, and jabbed a finger at the coach. "You said we could use



my ball. Regulation size, see?" He held up the hypersphere, which vibrated slightly like a soap bubble. "And that's what we're going to use. Don't think you can back out —"

"Back out!" Gladmore's face turned red. "By Godfrey, we'll show you. Cheat all you want to, you — you — slacker. We'll play you with a medicine ball, by Godfrey. Just get out on this court. Just —" He went mute with rage and shook a finger violently in the direction of center court.

"Bully for you." Ransom scowled at him, turned coldly and went back to his teammates.

Gladmore smacked his palm with his fist, seethed out a venomous "By Godfrey," and leaped to center court, whistling shrilly to his men. They bounced to their positions and crouched in menacing anticipation. MacTate went out to the center circle.

Ransom's boys scampered somewhat creakily to their places. Ransom himself faced Gladmore — or rather the number on Gladmore's chest — in the center circle and handed the hypersphere to MacTate.

MacTate looked down at Ransom, up at Gladmore, and around at the other members of the faculty team. "Ransom, don't you think —?"

"Never mind, MacTate. Start the game."

MacTate shrugged, blew his whistle, and threw the hypersphere into the air. It shrank somewhat on its way up, but Gladmore tapped it squarely into the hands of a maroon-and-lavender guard, cut around Ransom, received the pass almost over his shoulder, and tossed the ball, the size of a shotput, into the basket with one hand.

There were cheers and applause from the stands. Ransom called for time out.

When his team emerged from the huddle, he threw the ball into play, from behind the basket, into the hairy arms of Professor Bleedwell, of Zoology, who dribbled it courageously to midcourt and waited for Ransom to join him. Bleedwell tossed the hypersphere to his colleague, and the two came together, turning their backs to their opponents. As the maroon-and-lavender darted out to instigate activity, Ransom straightened up, called, "Wait for the signal," and skipped sideways down the court. While Gladmore's minions were harrying Bleedwell, Ransom stepped beneath the enemy basket. Opening his fist, he rolled the hypersphere up to circus-balloon size and threw it at the hoop. He missed.

MacTate blew his whistle. "Walking with the ball."

"MacTate!"

"Sorry, old man. You told him I was honest." His eyes twinkled. "Reputation, you know."

"But how do you know he didn't pass it to me? As a point in space?"

"Try explaining that to Gladmore," said MacTate. "Anyway, your hand." He pointed. "You kept it closed all the way down. Couldn't possibly have caught it."

Ransom muttered something ending in "friends" and rejoined his team. The maroon-and-lavender brought the ball down the floor with a series of semi-acrobatics while their opponents watched helplessly. Gladmore took a pass almost under Ransom's nose and flipped the hypersphere through the hoop again. As the stands broke into laughter, Ransom called for another time-out.

When they came out of the huddle this time, Ransom and Professor Chadwick, of Sinology, worked the ball casually to midcourt while Bleedwell scampered unobtrusively to a far corner of enemy territory. When he got there, he turned around and flapped his hairy arms. Chadwick, who had once pitched a no-hit game for a boys' club in Tokyo, squeezed the hypersphere to the size of a baseball and threw him a somewhat erratic but surprisingly fast curve. During his youth in Chicago, Bleedwell had frequently sneaked off from his studies to witness the legerdemain of Messrs. Tinker, Evers, and Chance. He scooped in the pitch like a major leaguer, wheeled, and lobbed the ball neatly through the basket. The stands uttered something that sounded like a gasp.

Ransom called for a third time-out. After conferring with his team, he puffed over to MacTate, wiping his face with a towel. He was drenched with perspiration and smelt like a senescent bear.

"My God, MacTate. How much longer to the end of the period?"

MacTate looked at the timekeeper's stopwatch. "Five or six minutes. Don't tell me you're tired after all these time-outs."

Ransom groaned. "We're at the awkward age for athletics. Too old not to mind it and too young to be prostrated." He looked at MacTate reproachfully. "Anyway, we don't just rest during those time-outs. We burn up mental energy." He could not help grinning with pride. "How you like our baseball team?"

MacTate nodded. "Versatile game."

Ransom grinned again. "You haven't seen anything. My long suit was marbles. Won a prize once. Wait till you see." He threw down the towel and went back to his team.

The maroon-and-lavender swept down the floor again, but seemed in no hurry to reach the basket, concentrating rather on wearing out their opponents with the virtuosity of their tactics. They bounced the ball closer and closer to the shaking knees of the faculty team. Finally Gladmore aimed a pass straight at Ransom's little protruding belly. Ransom lost his breath and balance together as the ball caromed from his abdomen into



the hands of a grinning maroon-and-lavender forward. When he had recovered his breath and scrambled to his feet, Ransom headed for Gladmore, who was once more in possession of the ball. There was a melee which MacTate was unable to follow, and then Gladmore let forth a roar, elbowed Ransom violently with his free arm, and began to hop up and down on one foot.

MacTate blew his whistle. "Free throw for Ransom."

The maroon-and-lavender turned to him with expressions of belligerent outrage.

"What are you talking about?" roared Gladmore. "Didn't you see him stamp on me with both feet? I knew you were crooked. I —"

"My dear fellow," said MacTate. "I'm not sure I shouldn't have called it foul when you threw the ball at his stomach. The game is proceeding unethically."

Gladmore looked at the ball in his hand. "You've noticed that, have you?" He glared at MacTate, threw the ball down in disgust, and trotted back to his own basket. When the teams had lined up, Ransom stepped to the foul line and squeezed the hypersphere down to marble size. He squinted carefully at the hoop. Swinging his arm, he shot the ball into the air with his thumb and forefinger. It struck the edge of the basket, bounced up, and fell through.

Ransom looked around at his teammates with an eager smile. "What's that? Three to four?"

"Heads up, chaps," said Chadwick. The maroon-and-lavender had put the ball into play and were starting down the floor. Ransom groaned wearily as he turned to head off Gladmore, who had the ball. Gladmore slipped around him contemptuously and spun the ball toward a teammate farther up the floor.

At the top of its arc, the spinning hypersphere vanished into the air. Gladmore stared open-mouthed at the point of its disappearance. Suddenly Ransom grunted. Gladmore turned around to see the ball clasped to the stomach of his astonished arch foe. "Now look here, Ransom —"

Ransom eyed him warily and dribbled the ball out to midcourt. "Listen," he whispered hoarsely to his colleagues, "let's stall till we can catch our breath."

They began to take turns bouncing the hypersphere in little circles around the center of the court. Whenever Gladmore's cohorts threatened them, they would squeeze the hypersphere down to handball size and toss it back and forth like a beanbag. They were still doing it when the buzzer sounded to end the first period.

When he heard the buzzer, Ransom flopped supine on the floor, squeezed

the ball in one hand, and folded his arms around his head. His oldest colleague hurried off to the locker room. The others staggered to the side lines, where they sat down and began to rub their legs. There was a scattering of boos from the stands.

Gladmore and his men looked at MacTate accusingly.

"What's this?" said Gladmore. "Another time-out?"

Ransom unfolded his arms and sat up. "What are you talking about, Gladmore? That was the buzzer for the half, wasn't it?"

"The *half*? What's the matter with you, Ransom? You know darned well we're playing two *quarters*."

"All right. That's just the point. If we're playing half a game, then the half comes between the two quarters. The half time, I mean. It's arithmetic, Gladmore. You ever study that?"

"Now look here, Ransom." Gladmore was turning red. "You brought in a crooked ball. I didn't say anything. You tried to break my foot. I didn't say anything. You froze the ball instead of playing like a man. I still didn't say anything. But this, by Godfrey" — he smacked his palm with his fist — "this is *too much*."

"A little less swearing, Gladmore," said Ransom, eyeing him disdainfully.

"You, MacTate." Gladmore turned and held out his hands in appeal. "Was it your understanding they could rest between quarters?"

MacTate pursed his lips. He looked at Ransom. "You know, Ransom, he probably has a point there. If the intention of his wager was to wear you out, that would hardly allow for rest periods, would it?"

"But I am worn out." Ransom looked at MacTate reproachfully.

"Not enough to remember the lesson I'm going to teach you," said Gladmore. "Get on your feet, Ransom. You heard the referee's decision."

"It wasn't a decision," said Ransom. "We're still discussing the point."

"Look. He's been arguing for more than ten seconds, and he's still on this side of the court. Our ball." Gladmore motioned to MacTate. "Let's go."

Ransom's team, reassembled on the side lines, heard Gladmore's remark and ran anxiously out on the court. MacTate shrugged, bent over to take the ball from Ransom's hand, and tossed it to Gladmore. He blew his whistle.

"MacTate." Ransom looked martyred.

"Here comes your man, old boy." MacTate pointed to Gladmore. Ransom struggled to his feet and limped after him. The maroon-and-lavender seemed bent upon punishing the faculty team for its effrontery in scoring only one point less than they had. Their virtuosity with the ball became almost pyrotechnical. Ransom and his men ran until they could run no more, and finally stood exhausted while their opponents wove in and out among them in ballet-like patterns.



At last Gladmore, tiring of the farce, leaped high into the air with his back turned to the basket and spun the ball deftly at the backboard. Everyone saw the hypersphere hit the backboard and heard the thud of its impact. Then it had disappeared. It had not bounced through the hoop.

"Look." MacTate pointed toward the basket at the other end of the court. Both teams craned their necks. The mesh swung violently from side to side, and the hypersphere, at almost full size, dropped from it.

"MacTate." Ransom turned to him with wide-eyed delight. "That's two points for us."

MacTate looked up at the faculty's basket and rubbed his chin. "I don't know, old man. If it went through your basket as a point in space —"

"A point in space isn't a ball. By definition, I mean. A ball has to have a dimensional — Shh." Gladmore was regarding them suspiciously.

Gladmore turned his head and stared at the other basket for a moment, then raced down the floor, followed by his team. The ball was rolling toward him. He picked it up, examined it carefully, and stalked back to MacTate, to whom Ransom was whispering excitedly beyond the end line.

"Now see here —"

"No you don't, Gladmore." Ransom stopped whispering and faced him. "That's perfectly legal. If you throw the ball through your own basket, it's our points."

"Ransom, you are the lowest, crookedest, underhanded, double-dealing —" Gladmore raised the ball over his head and dashed it with all his might on the floor. It bounced up about three feet and disappeared, but Gladmore was too furious to notice.

"Now listen, Gladmore." Ransom jabbed a finger at him. "You don't have to throw a tantrum just because the rule book's against you. If you had any sense of sportsmanship —"

"Sportsmanship!" A vein stood out in Gladmore's forehead. "You have the gall to talk about sportsmanship —" He smacked his palm with his fist. "Come out on this court. Keep your lousy two points. Come out on this —" Gesturing operatically, he stepped back, half turning his body. Suddenly the anger in his face was mitigated by an odd confusion. Ransom gasped. Gladmore's head, arms, and chest were visible, as were his thighs, legs, and feet; but the lower part of his abdomen, trunks and all, had melted into the air. The two halves of him began slowly to double together like a jackknife.

"MacTate. The universe. It's happened." Ransom rushed to Gladmore and seized his legs, while MacTate took his arms. They pulled together with all their might. There was a loud sucking sound, and then Gladmore was free of the dimensional gap and clearly visible all the way down. But his trunks were gone.

The stands began to laugh giddily. Gladmore turned purple.

"Here, men." Ransom beckoned to his team. "Stand around him. You" — he waved at the maroon-and-lavender — "go down and get him another pair of trunks." He glanced toward the point in space where Gladmore's trunks had disappeared. "And get a rope and a piece of canvas. A big one."

Gladmore was too far transported in rage to feel grateful. "By Godfrey, Ransom," he said over and over in hoarse whispers, "you'll pay for this."

His men came back with the new trunks, and he stepped into them behind his screen of faculty.

Ransom took the canvas that the trunk-bearers had brought him and gingerly approached the approximate location of the space bubble. Suddenly there was a sound of suction, and the canvas bulged out in the center, forming a sphere the size of a basketball. The canvas began to slither eerily around the space-bubble into nothingness. Ransom hastened to roll the rest of it around the bubble several times. Then he brought the two ends together and tied them firmly. "Wonder if we can tow it," he said.

MacTate looked at it. "Doubtful," he said. "How could we have got Gladmore out if it were movable?"

"My God, that's right." Ransom tied the other end of the rope tightly to the nearest guard rail and frowned at the floating canvas bubble. "Now what are we going to do with it?"

"Just a moment, Ransom." MacTate pointed to the end line of the court. "It's over here several feet off the playing floor. Why don't you have them build a steel and concrete pillar around it?"

Ransom looked at Gladmore. "You hear that, Gladmore? You'll have to build a pillar around this bundle, to keep from —"

"Hold on, Ransom." MacTate turned to Gladmore. "You really will have to do something about this — bundle, Gladmore. It's a hole into the fourth dimension. Can't have it around for people to go running into."

Gladmore looked at the thing. "Of all the people in the world, wouldn't it take Ransom to do a fool thing like that?" He scowled. "Oh, all right. Tomorrow I'll —"

"Listen, Gladmore," said Ransom. "Use your head. If you let it go till tomorrow, you can't tell what might happen. If you don't —"

"Say." Gladmore looked at Ransom suspiciously. "Why are you so anxious to delay the game? We'll just finish the game before —"

"The game's over. You lost the ball."

"What do you mean the game's over? We have plenty of basketballs."

"Now wait a minute, Gladmore." Ransom jabbed a finger at him. "The agreement was that we would play with my ball, and that's what we're going to do. You get my ball back and we'll play. Otherwise" — he waved



his hand — “the game’s over.” Suddenly his eyes gleamed. “Look. We won it, too. That new eligibility rule —”

“Won it!” Gladmore’s vein began to rise again.

“Sure. Five to four. That last basket —”

“MacTate.” Gladmore controlled himself and turned away from Ransom. “I don’t have to talk to this — You tell him whether he won the game.”

MacTate rubbed his chin. Suddenly he found himself reminiscing. Odd thing to do, considering the circumstances. But he thought back over his years of frustration in the classroom. He thought of the futility of academic education in general, the cribbing, the cutting, the uncomprehending faces. He thought of all the philosophy papers he had ever corrected. Coaches, even the unpleasant ones like Gladmore, were the real teachers. Their boys probably didn’t realize that they were unpleasant. They tried their best to learn everything their coaches taught, and from them they learned to be skillful and self-possessed, and to respect something, if only a game, for the rest of their lives.

He looked at Gladmore. “Yes, he did win the game. According to the agreement.” Gladmore stared at him. Ransom smiled with evil delight. “But there’ll be no new eligibility rule,” MacTate added. Ransom’s smile disappeared. “The wager, if I remember, was that the faculty would not play two full quarters. And they didn’t.”

Gladmore held out his hand. “MacTate, I thought you were a faculty member. I apologize.” He shook MacTate’s hand and looked at the canvas bundle suspended in the air. “I’ll put warning signs around that thing and see that the gym’s locked up before I leave. Tomorrow I’ll get the repair boys in and give you a call so you can supervise the job.” He turned his back to Ransom and trotted off the floor, whistling to his men. The stands uttered a chorus of disappointed ah’s.

MacTate turned to them and announced, “Game called off by mutual consent of the participants. Faculty leading five to four, but no decision.”

Ransom regarded his colleague thoughtfully. “MacTate, you didn’t *want* a new eligibility rule, did you?”

MacTate sighed. “I guess not, Ransom. You shouldn’t have had a teacher for your referee. Not a philosophy teacher, anyway.”

Ransom shook his head sadly. “You know, in Shakespeare, where Caesar says *Et tu Brute?* I didn’t think I really understood that line before tonight, but” — he scratched his head — “I don’t know. I can’t figure you out, MacTate.” He tied another knot in the rope around the canvas bundle and grabbed MacTate’s arm. “Come down with me while I get dressed, and then we’ll go some place for a drink.” He puffed out his lips, blew wearily, and then grinned. “It’s high time I broke training again.”

# IX

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## THE HERMENEUTICAL DOUGHNUT

**" 'Tottering Davids Topple Goliaths, 5-4,' "** MacTate read from the campus newspaper. "The Faculty Committee on Athletic Purity, captained by Professor Cleanth Penn Ransom of the Mathematics Department, dealt one of the major upsets of the year in a post-season match with the coaching staff of the basketball team last night, rolling up five points to the coaching aggregation's four before the referee called the game off on a technicality. Head Coach Gladmore, interviewed immediately after the game, denied that the result represents a victory and hinted at foul play, but stated that he will refrain from demanding a replay because of concern for the lives of his op-



ponents. An unusual feature of the match was . . ." MacTate looked up. "They should have interviewed Gladmore this morning. When we put the cement post up, he seemed almost cheerful. Something like FitzSparrow after the play."

Ransom leaned forward and motioned toward the newspaper. "What did the president of the Nietzsche Society say?"

MacTate glanced down the column. ". . . declined to comment on Professor Ransom's performance on the ground that the time for nominating the Renaissance Man of the Year is so close that it would be unethical to make public statements which might influence the decision of the nominating committee."

Ransom grinned. "Getting coy." He leaned back in his swivel chair. "You say the cement thing went up all right?"

"Foolproof." MacTate smiled. "Also rather decorative. Some of your committee colleagues came down to watch and were struck by its monumental character to the point of suggesting that we put a bronze plaque on it commemorating the game."

Ransom grunted. "It ought to be an In Memoriam plaque. That ball was the best chance we ever had of getting Ettiscope to kick through." He folded his arms back of his head and regarded the ceiling. "MacTate, what kind of a jinx is on this business? Every time we seem to be getting somewhere with the Ettiscope endowment something goes wrong." He stuck out a finger. "Poetry machine committed suicide." He stuck out another finger. "Finchell's doll had to be destroyed because it was too dangerous." He stuck out a third finger. "The musical tumor demolished itself by accident." He flourished all of his fingers. "I had to eat the pills, Helen swiped the dimension-warper, and Gladmore threw away the hypersphere. What's wrong?"

"Well, old boy, if you want to be philosophical, there are several possible explanations." MacTate pursed his lips. "Mythically, you could say that some nemesis is pursuing you for flunking Harrington B. Snyder. Or psychologically, that you're

subconsciously determined not to win the endowment, perhaps from a sense of guilt, and so maneuver things to get rid of the gadgets. Personally, though, I'm inclined to favor a Platonistic explanation."

Ransom looked at him. "What's that?"

"Well, remember Plotinus? The creative imagination can never completely manifest itself in material substance. The best-laid plans of mice and men, you know. Your materialist thinks that if he had just used a different tool or spent more time on the blueprint, everything would have been all right; but your philosopher knows there's something intractable about the material world and nothing will ever turn out quite right. It's the essence of tragedy."

"But the gadgets always came out all right."

"Yes, but your plans for them didn't. Aristotle. The purpose of a gadget is part of its essential being."

"Well, maybe you're right." Ransom began to swing. "Everything has sure been going all to hell. But it seems more like just bad luck to me. And here it's May already. Next month Snyder will have me on—" He shuddered.

"But there *is* still time, old boy." MacTate smiled. "Can't you think of something that will bring crass materiality to a compromise?"

"I do have a couple more ideas." Ransom sat up. "One of them I've got to do some more work on. I don't know how long it'll take. But we can try the other one out before Ettiscope gets here."

"Ettiscope?"

"Sure." Ransom pointed at the newspaper. "Doesn't it say anything about it there?"

MacTate found the headline. "**'Deodorant Magnate to Visit Alma Mater.'**" He read farther: "It says he'll be here until Commencement."

Ransom nodded. "You know what his hobby's supposed to be, MacTate? Besides giving screwy endowments?"



MacTate frowned in concentration. "Didn't I hear he was supposed to be a biblical authority of sorts?"

"That's right. He explains hard passages in the Bible. So even if my new gadget is kind of—limited, maybe it can penetrate his soft spot."

"What is your gadget, old boy?"

Ransom looked at his wrist watch. "I've got a class, MacTate. Meet me here Sunday afternoon and I'll have it all ready to show you."

When MacTate entered his colleague's office on the appointed date, the first thing he noticed was a moose's head, with a badly battered nose, that sat next to a stuffed owl in the corner. He sat down, staring at the moose.

Ransom leaned back in his swivel chair. "MacTate, why doesn't the dictionary tell you a doughnut's got a hole in it? I looked in three of them, and they don't say a word about holes. In doughnuts, I mean."

"Perhaps not all of them have holes," said MacTate. "Just as not all mooses have holes in them." He gestured. "Whatever happened to him? Incompetent taxidermist?"

"No." Ransom shrugged. "They used him in a boys' club initiation. Somebody got scared and hit him with an ax. But about the doughnut—mind, MacTate."

"Yes, old boy." MacTate took his eyes off the moose.

"In geometry a doughnut's got to have a hole in it." Ransom sat up. "On a sphere you can only make four-color maps, but on a doughnut you can get seven. If it's got a hole in it."

"Oh." MacTate looked at the stuffed owl. "How did the owl escape intact? Didn't they use him in the initiation?"

"MacTate. Will you forget about the animals? Look." Ransom took a tablet and pencil out of his top desk drawer and sketched a circle with three sectors. "Here's a circle divided into three parts, all touching each other. So if you're going to paint it, like a map, you need three colors." He wrote a number in each sector. "Now suppose you've got another region that

touches all three of these." He drew a curve from the center of the first arc to the center of the third. "You need a fourth color. Don't you? But look what that does to number two. Completely surrounded by the others. So any new region can be colored like number two, and you never need more than four colors on this sort of a surface."

MacTate uncrossed his legs and leaned forward to examine the drawing. "But you could use more colors than that if you wanted to."

"Of course. Of course. But this is mathematics, MacTate. My God, what did you think it was? Art? The point is, you can't make a map that *requires* more than four colors. On a sphere."

"Sorry, old boy."

"Well—" Ransom drew a sketch of a pyramid. "By an odd coincidence, the simplest polyhedron you can squeeze a sphere into is a tetrahedron. You know. Pyramid with a triangular base. It's got four sides, and they all touch each other. So you need four colors to paint it."

"How do you mean you can squeeze a sphere into that, old boy?"

"You just can. Suppose you take a ball of modeling clay. You squeeze it into a tetrahedron, paint the sides, squeeze it into a ball again, and you've got a sphere with a four-color map on it. Right?"

"Right."

"Now." Ransom's eyes began to gleam. "What's the simplest angular solid you can squeeze a doughnut into?" He erased two corners of the pyramid. "A tetrahedron with a hole in it. Just like a doughnut is a sort of a sphere with a hole in it. See? So you run a three-sided hole from one of these vertexes to another, and you've got a seven-sided solid where every side touches each of the others." He drew the lines representing the hole. "You've got to bend the hole in toward the center of the pyramid and flare out the ends of two of its sides. But it



works." He threw the pencil down. "You need seven colors to paint it."

"I see." MacTate looked at the battered moose's head, which seemed to be emitting rumbling noises at regular intervals.

"Old boy, am I crazy, or is that moose making noises? Sounds rather as if he had defective clockwork inside him."

"It's not him. MacTate. Are you going to listen about the seven dimensions, or aren't you?"

"Oh. Yes. You need seven dimensions for the map. I understand."

"No, no, MacTate. You need seven *colors*."

"Of course. Colors. That's what I meant to say."

"All right. But look. Everybody always thinks of dimensions as being at right angles to each other. Don't they?" Ransom leaned back. "But if you get right down to it, that's kind of silly. For instance, how can a time dimension be at 'right angles' to a space dimension? Wouldn't it be a lot more sensible to think of them as contiguous areas on a solid? Like a graph? Let's take *you* as a solid, for instance. We could plot your four co-ordinates on a pyramidal graph. One time co-ordinate and three space. To show where you are in space-time."

"If you say so, old boy."

"But"—Ransom's eyes gleamed again—"if we tried to plot you on a pyramid with a hole in it, which is non-simply connected, we'd be up against seven dimensions, remember? One time and *six* space." His eyes narrowed. "Just suppose you suddenly found yourself in a non-simply connected space. What would you do with the extra three dimensions?"

"Well—" MacTate blinked. "I imagine the problem would require careful study."

Ransom shook his head. "All taken care of by mathematical necessity. Your four dimensions would try to fill seven, and there would suddenly be four of you flipping around. The one you started with plus one for each extra dimension."

"Now really, Ransom—"

"It's mathematical logic, MacTate. What do you call it? Inexorable. Besides, I don't think there's anything particularly *new* about it. Non-simply connected space pockets might explain a lot of things." He reached into his middle desk drawer and took out a Bible. "How about Ezekiel's vision of the wheel within a wheel, for instance?" He turned some pages. "Here. Ezekiel 1:5. 'Also out of the midst thereof—that's the wheels—'came the likeness of four living creatures.' And then it tells about them in—1:10. 'As for the likeness of their faces, they four had the face of a man, and the face of a lion, on the right side: and they four had the face of an ox on the left side; they four also had the face of an eagle.'" He closed the Bible. "Obviously what Ezekiel saw was just one man, lion, ox, and eagle caught in a non-simply connected space pocket."

MacTate noticed a library number on the spine of the Bible. "Old boy, I am not one to disapprove of a sincere Fundamentalism, but—"

"No, no." Ransom grinned. "This isn't Fundamentalism. It's Anti-psychologism. I'm going to demonstrate it at the Abnormal Psychology Society meeting tonight. They think Ezekiel just had hallucinations."

"You're going to *demonstrate* it?"

"Sure. Then if it impresses them, we can show it to Ettiscope."

MacTate looked at the animals. "And these—"

"That's right. I've got to use the owl instead of an eagle and the moose instead of an ox. Best I could do on short notice. But—"

"Where's the lion?"

"He's back of them there. Snoring. Here, Roland." Ransom whistled. "Wake up."

From behind the moose's head came an unhappy grunt, and MacTate perceived that what he had taken for a pile of burlap was a piece of large animal. It got up, stepped carefully around the owl, stretched, yawned, regarded Ransom with a half-open eye, and shuffled toward him.



"That's a lion?"

"No, he's a great Dane. But with a wig he'll do fine." Ransom patted him solidly on the head. "I only wish that damned moose looked half as much like an ox as—"

"But there were four animals in Ezekiel," said MacTate. "What was the other thing he saw?"

Ransom scratched Roland's head intently. "A man."

MacTate smiled. "But won't it be rather trying for you to lecture and take part in the demonstration at the same—" Suddenly he caught the look in Ransom's eye, and his smile disappeared. "No. Now see here, Ransom, if you think you're going to make *me* a psychological guinea pig—"

"No, no. An *anti*-psychological guinea pig, MacTate." Ransom looked up. "Like you said, I can hardly lecture and act in the show at the same time."

"But, Ransom." MacTate waved toward the animals. "With those disreputable-looking—"

"Nothing personal." Ransom opened his bottom desk drawer. "Here. I'll show you how it works." He took out a diminutive flashlight and set it on the floor. "Let's try this fellow first." He set the owl beside the flashlight, flicked the flashlight on, and stepped back. "Takes a few seconds— There."

No light came from the little flashlight, but suddenly there were four owls arranged about it in a square of three or four feet. Roland took one look at the eight glaring eyes, let forth a bass yip, and ran to hide behind Ransom's legs.

"That's certainly a lionlike character, old boy." MacTate gestured.

Roland looked up at him.

"Now lay off him, MacTate. You just don't understand him. He's like a child."

"I see. You have to be a child anti-psychologist to understand him."

"Now look, MacTate. My God, if you can be an angel— Anyway, Roland's not scared. It's just sort of—strange, seeing

four of them at once. He needs a little reassurance, that's all. Look." Ransom took a red ball out of his pocket. "Go get your ball, Roland." He bowled it deftly between the nearer two owls. It turned into four balls, then back into one, and came to rest an inch from the flashlight.

Roland took a tentative step after it, then stopped and looked back uncertainly at Ransom.

"Why don't you put his mane on him?" said MacTate. "Might give him confidence."

Something in his tone made Roland look up at him again.

"MacTate, will you stop trying to hurt his feelings? He——"

Roland began to snarl faintly at the owls.

"Go get your ball, Roland."

The snarling increased in volume, but Roland's legs seemed to have taken root.

"All right, MacTate." Ransom went to the closet in the far corner of the room and opened the door. "We'll try it your way." He took out a rustling mass of straw draped over a pink coat hanger.

"What's that?" MacTate looked at it dubiously.

"Hula skirt." Ransom took it off the hanger and smoothed it out. "Ought to make a wonderful mane." He pulled it over Roland's head. "How's that?"

MacTate smiled. "He looks something like an overgrown porcupine, don't you think?"

"Well——" Ransom pushed the straw aside and hooked the pink coat hanger, upside down, to Roland's collar. "Let's prop it up." He smoothed the straw back. "How about that?"

MacTate nodded. "Pompadoured porcupine."

Roland looked up at him again.

"Listen, MacTate. You're going to give him an inferiority complex. Why can't you——"

"Quite the contrary, old boy." MacTate pointed.

Roland was eying the owls from a menacing crouch. He barked hoarsely two or three times, then uprooted his legs



and charged at the ball. As he approached the owls, he appeared to think better of it and straightened his legs to stop, but his momentum carried him among them. Abruptly there were four twisting, yelping Rolands, connected by a circling blur of incorporeal motion.

"There he's got caught in the magnetic doughnut." Ransom grinned. "Poor Roland. And there's one of Ezekiel's wheels, on account of he's scrambling around. Since the owl just sat still—"

"I say, old boy, what happened to the other owl?" said MacTate. "There are only three of them now."

"Outside the door." Ransom pointed. "Roland's extra mass expanded the doughnut, and since he got inside the owls his circle pushed one of them out of the room." He laughed. "Better shut it off before he goes crazy." He stepped up to the nearest owl, turned into four Ransoms, swung his belly sideways, became one Ransom again, flicked off the flashlight, pocketed the red ball, and stood grinning at MacTate with a miserably vertiginous Roland on one side of him and an impassive owl on the other.

"Ransom." MacTate stared at the flashlight. "What on earth *is* that thing?"

"This? Oh, it's a sort of inside-out electromagnet." Ransom regarded it fondly. "Instead of a light bulb it's got a transistor in it. Little thing made out of germanium with a couple molecules of gallium. See, a germanium atom's got four electrons in its outside shell, while a gallium atom's only got three. If you excite the setup with a touch of electricity, the extra germanium atoms start moving into the vacancies in the gallium shells and creating new vacancies in their *own* shells, so the stuff doesn't know whether it's germanium or gallium and you get a continuous electron flow."

"But, Ransom, does that constitute—"

"An electromagnet? No. But this transistor wasn't made right. Got impurities in it. Nickel and—God knows what all.

You should have seen its Zeeman effect. Spectrum was a bunch of— Well, anyway, I figured it was a non-simply connected magnetic field, and it was.”

MacTate smiled sardonically. “Ezekiel was a pretty clever fellow to make a thing like that, don’t you think?”

“Now stop that, MacTate. Who says that’s the only way you can make them? Non-simply connected magnetic fields. The point is—”

Roland, who had been leaning tipsily against Ransom’s hip, began to stagger toward his lair behind the moose’s head. With each step he wheeled a little farther to the right until he was headed for the closet at the other end of the room.

“Hey!” Ransom put his hands on Roland’s ribs and steadied him. “You better take it easy till your head clears. Here. Let’s take your mane off so you can rest up while we get something to eat.” He took off the straw skirt, unhooked the pink hanger, and led Roland to the moose corner. “We’ll bring you some dog food and ginger ale. How’s that?”

Roland’s only reply was a groan.

He was snoring again when they came back. “Roland.” Ransom tickled his ribs with his foot. “Look what we got you.” He held out a bag and a fifth of ginger ale. “Couldn’t get any dog food, so we brought you these.” He split the bag open and set it down in front of Roland’s nose. It contained six rare hamburgers. Roland opened a bleary eye, flicked an ear, and regarded the hamburgers uncertainly.

“Cheer up, Roland,” said MacTate. “At least I talked him out of the chili sauce and onions.”

Roland looked at him.

“MacTate, let him eat in peace.” Ransom went to his desk, took a plastic bowl out of the middle drawer, and poured the ginger ale into it.

Roland growled faintly and attacked one of the hamburgers. It was hard to tell what he was thinking.

Ransom set the bowl of ginger ale beside the hamburgers.



"Don't poke, Roland." He went to the closet and took out the skirt, the hanger, and a leash. "We've got to get started."

It was still light when the quintet headed into the alley down which Ransom proposed to sneak to the building where the Abnormal Psychology Society held its meetings. MacTate puffed patiently behind the moose's head, around which he had a strangle hold. Ransom, holding the owl and the hula skirt in one hand and Roland's leash in the other, sniffed the culinary odors on the evening breeze, admired the subtle colors of the decaying houses, and hummed snatches of "Ezekiel Saw the Wheel." Roland trotted quietly by his side, burping softly from time to time.

At first the narrow brick sidewalk seemed to be deserted. But as they rounded a large green doorstep, they came upon a baby sailing a toy duck in a tub of water. On the side of the tub opposite the baby perched two sparrows. Roland glanced at MacTate, then at the sparrows. With an aggressive bark he scared the sparrows away, took their place at the tub, and began to add quantities of the improvised duck pond to the ginger ale inside him. Forthwith the baby burst into angry tears and, picking up the duck, heaved it inexpertly but accurately at the intruder's head. As the toy bounced off his nose, Roland yelped and dodged back, pulling Ransom with him down the alley.

MacTate puffed after them. "I should advise a certain degree of circumspection, Roland," he said. "Appears to be a tough neighborhood."

Roland hung his head and slunk close to Ransom.

"Look at that, MacTate. You've got him cringing at the sound of your voice."

"But, Ransom, I was simply——"

"You were simply intimidating him with that nasty, cynical tone you usually save for me. If you could just—— Oh, oh."

MacTate peered around the moose. "What now?"

Roland was looking up at an open window. On the sill, be-

tween two pots of fancy cactus, lay a fat tortoise-shell cat with a pea-green ribbon around its neck. The cat looked down at Roland and opened its mouth in an almost inaudible ladylike mew.

Ransom pulled at the leash. "Roland. No."

Roland worked up a ferocious growl that erupted in a bark. From the depths of a house came a shrill female voice admonishing any visiting dogs to let the cat alone.

As the voice approached the window, Roland backed precipitously away, bumping into MacTate, who raised the moose's head to keep his balance. The moose reached the level of the window just as the owner of the voice, harsh with virginal acrimony, loomed behind it.

"Go away, you nasty dog. Go—" Her remarks were resolved in an earsplitting screech.

The cat, startled, leaped up on one of the cactus pots, knocking it over. To the accompaniment of a feline wail, cat and cactus described wide parabolas that intersected various portions of Roland's anatomy. For a moment there was a chaos of spitting, snapping, and howling, and then suddenly the cat disappeared.

"Good heavens, Ransom. What happened to the cat? Did Roland devour—"

"No, no. She ran under the gate. I saw her. Come on, MacTate. Let's get out of here."

"But, Ransom. That woman— And we broke her flower-pot." MacTate nudged the shattered fragments with his foot.

"We'll send her some money. Anonymously." Ransom grabbed his arm and dragged him and Roland down the alley.

"But, Ransom—"

"Not *now*, MacTate. We're not getting involved with any irate spinsters."

"Well—" MacTate sighed. He looked at Roland. Roland was peering at him from the corner of his eye. MacTate smiled. "Perhaps I was wrong about the toughness of the neighbor-



hood after all. Roland and I appear to be more than a match for some elements of it."

Roland stuck out his tongue and began to pant happily. His trot came suspiciously close to a strut.

"Now look, MacTate. You're going to the other extreme. Giving him a big head." Ransom scowled. "Why can't you treat him like you do me or any other normal organism?"

MacTate looked at him.

"He has his ups and downs the same as—— Roland!"

Roland, barking boisterously, made a sudden leap, jerked the leash out of Ransom's hand, and galloped down the alley.

"Look." Ransom pointed at a fireplug that was being used by a wall-eyed bull terrier. Roland, snarling seismically, drove the terrier away and used the fireplug himself. "You've brought out his bully instincts." Ransom hastened down to the fireplug and, ignoring Roland's grin, tied the leash securely to his wrist. "Thank God the place is just around the corner."

MacTate joined Ransom and Roland at the fireplug. They proceeded down the alley and rounded the corner.

"Oh my God." Ransom stopped. "Look who's going to the Abnormal Psychology meeting." He pointed. The wall-eyed bull terrier was ascending a projecting flight of steps halfway down the block at someone's heels. "Roland, if you don't behave yourself——" He jerked the leash admonitorily.

They went down to the steps, entered the building, and climbed the stairs to the third floor. MacTate peered through the door at a large room with a platform, flanked by two low windows, at the far end. The windows had been opened wide to admit the spring breezes. The Abnormal Psychologists scattered about the room were engaged in commonplace pursuits such as knitting, leafing through magazines, and trying to hog conversations; but their physiognomies seemed somehow to reflect the eccentric nature of their researches.

"Let's fix Roland out here." Ransom put the owl down. "His mane, I mean. Might spoil the illusion if we do it up there."

He hooked the pink coat hanger on Roland's collar and adjusted the hula skirt.

When they entered the room, a little man with a tic over his right eye waved to them from the platform.

"Prof Flatterthwaite," said Ransom. "President of the society. He wrote a couple of books on memory training, but his real love is maniacs." He hesitated and looked around the room. "MacTate. You see any sign of that bull pup?"

MacTate looked around. The terrier was sitting on a chair in the front row next to a woman who was writing rapidly in a notebook, darting her pen every few seconds into a bottle of violet ink that perched precariously on the arm of her chair. "There he is. Down in the—"

"Shh." Ransom frowned warningly. "Don't let Roland— Now look what you've done."

Roland had spotted the terrier and began to growl. The terrier turned around and apparently recognized Roland in spite of his mane, for he jumped unobtrusively off his chair.

"Where is he?" said MacTate.

"Don't worry about it." Ransom shook the leash and pulled Roland forward. "As long as he's had the good sense to disappear."

When they were halfway to the platform, something hurtled past Roland's legs. He saw the terrier leap up beside Roland, swing from the hula skirt by his teeth to pull it over his enemy's eyes, and zip off between two rows of chairs.

"Good heavens, Ransom. He circled the room."

Ransom was in no position to comment. Roland shook off the hula skirt with an outraged roar and took off after the terrier, with his guardian in helpless tow. The terrier circled down to the front of the room and leaped up on the writing woman's lap just as she darted her pen at the violet ink. The bottle whirled into the air, raining violet drops, and struck the top of Roland's skull with a solid clonk, covering him with lurid maculations.



"My God, Roland——" Ransom stopped, perceiving himself transfixed by a pair of wild hyperthyroidal eyes.

"The minutes! You've ruined the minutes!" She wiped a violet drop hysterically from the tip of her nose. "And that's all the ink. All over that hideous beast. I ought to——"

"What's the matter, Izzie?" The little man with the tic came up. "Spill your ink?"

"The minutes——" wailed the woman.

"Shame." The little man clucked sympathetically. "But this gentleman is speaking to us tonight on a message of such vital importance that I'm sure we won't want to wait for the minutes to be read. You can read twice as many next time." He gave Ransom a flaccid hand and waved him to the platform.

Ransom looked at Roland, who was snarling murderously at the terrier. He jerked the leash. "Shut up, Roland." With a contemptuous snort Roland shook his spotted torso and allowed Ransom to drag him to the platform.

MacTate joined them with the pink hanger and hula skirt. "What was it you said about not getting involved with irate spinsters, old boy?"

Ransom groaned. "MacTate, do you get the impression that all this was—foreshadowed? On our way down the alley? First he gets smacked by a duck and busts a pot of cactus; now it's an ink bottle and the minutes."

"Tut-tut, old boy. You're changing your philosophy. You——"

"Tonight——" said the little man with the tic. He was standing at the front of the platform, surveying the room. He cleared his throat several times to call the meeting to order. "Tonight——"

"Listen, MacTate," said Ransom. "I've got it. You take over the pitch and I'll be the angel. You know how everything works. I've got to keep an eye on Roland. He's heading for trouble."

"But, Ransom——"

"Don't argue, MacTate. I can't——"

"And so we are to have the privilege," the little man with the tic was saying, "of hearing Professor—Professor—" He turned to Ransom with a fatuous grin.

"MacTate," said Ransom.

"Professor MacTate speak to us on—" The little man stared earnestly at the owl, the moose, and Roland.

"Ezekiel," said Ransom.

"Yes. Ezekiel." The little man continued to stare dubiously at the animals. "Since the minutes of the last meeting are still in preparation, I present Professor—" He hopped off the platform and sat down beside the hyperthyroidal woman.

"Go ahead, MacTate."

"Ransom, really—"

"It's your fault. You got him stirred up. Now you can just take over."

MacTate sighed and put down the moose's head. He got up and faced the audience uncertainly. "Ladies and gentlemen." He turned to look at Ransom once more. Ransom shook his head and motioned toward Roland. MacTate shrugged. "Ladies and gentlemen, I am given to understand that in the current consensus Ezekiel's vision of the wheel within a wheel was—hallucinatory. Tonight we wish to submit an alternative hypothesis; namely, that the vision was an objective phenomenon effected by—reproducible natural causes." He waved at Ransom and the animals. "With your indulgence we shall substitute an owl for the eagle, a moose for the ox, this—spotted animal for the lion, and my colleague here for the angel." There was a chillingly derogatory cough from someone in the front row. "And now without further delay—" He waved nervously toward Ransom again and stepped off the platform.

Ransom had put Roland's pompadoured mane back on and placed the owl beside him. He picked up the moose's head, stepped as far from Roland as the leash tied to his wrist would permit and, setting the lightless flashlight on the platform, turned it on. Shortly the platform was covered with sixteen



creatures. The Ransoms among them began to swing the moose's heads from side to side with one hand while jerking intermittently at the Rolands' leashes with the other, so that two concentric circular blurs appeared on the platform. At length the four Rolands, lurching drunkenly, upset the four owls, and the Ransoms converged on the flashlight to turn it off.

MacTate stepped up on the platform again. "A wheel within a wheel, as you see." He looked dubiously at the owl. "It strikes me that there may have been some discrepancy between the arrangement of the creatures in Ezekiel and that in our reproduction, but that we have duplicated the motivating principle is, I think—incontestable."

Roland suddenly eructated hollowly. Ransom looked at him apprehensively. "Get down here, Roland." He jumped off the platform, dragging Roland after him, and crouched in its lee. Putting down the moose's head, he took the red ball out of his pocket. "Bite on this and keep your head down." He stuck the ball into Roland's mouth.

MacTate, who had intended to ask Ransom technical questions for the benefit of the audience, had to find some other way to keep the show going. "I—" He looked around. "Here." He picked up the owl, stepped off the platform, and went to the corner of the room. "We might reconstruct the situation in Ezekiel in the following way." He held up the owl and looked at it. "Picture, if you can, a Babylonian noble out for a bit of hunting with his trained eagle." He balanced the owl on his wrist in the manner of a medieval falconer and, he hoped, a Babylonian eagler. "Presently, as we roam the fertile savannas of the Tigris-Euphrates Valley, we encounter a stray from our herd of choice oxen who is beset by a well-starved lion." He gestured toward Roland and the moose and started toward them.

"Look, Roland," said Ransom. "He called you a well-starved lion. That ought to make you feel better." He stepped toward

MacTate, put the flashlight on the floor, nodding to him to carry the demonstration through, and went back to Roland.

Roland straightened his forelegs and looked up.

"Our noble realizes," continued MacTate, "that a frontal attack on the ravenous beast would be futile." He gestured toward Roland again. "Consequently he bethinks him of a stratagem whereby——"

Roland, apparently carried away by his dramatic instincts, opened his mouth and uttered a lionlike sound. The red ball dropped to the floor and bounced away in the direction of the flashlight. The terrier, who had been watching his enemy's tribulation with intense satisfaction, leaped off the hyperthyroidal woman's lap and streaked after the ball.

Roland's lionlike sound turned angrily doglike. He bounded to his feet and charged to intercept the terrier, dragging Ransom as well as the moose, whose antlers had become entangled in the leash, after him.

"Watch him, Roland," warned MacTate. "He's a tricky——"

Just as he was about to collide with Roland, the terrier reversed his field, then swung back, leaped up to grab the hula skirt with his teeth, and pulled it over Roland's eyes again. Roland snarled and snapped blindly at the ball. He clearly missed it, because it bounced off his nose into the teeth of the grinning terrier; but he had ingurgitated something, because his snarl ended abruptly in a gulp.

"MacTate. My God, he's swallowed the flashlight." Ransom grabbed Roland's head and tried to force his jaws apart, but Roland twisted away and bounded about, winding the leash around Ransom's legs.

The terrier, drunk with success, had lingered too near the scene of his victory. As he leaped to escape the circling leash, it caught his hind legs and pinioned him to Ransom. The red ball dropped from his yelping jaws and rolled down the floor.

There was a shriek from the front row, and the hyperthyroidal woman darted into the maelstrom to rescue the terrier.



MacTate noticed that they were all dangerously near one of the low windows. "Be careful, Roland." He ran to close the window, but before he could reach it the hyperthyroidal woman had crowded the others almost through it. She had the terrier around the neck, twisting and tugging to free him from his enemies. In desperation she braced her foot against Roland's brisket and threw her entire weight backward. Amid a horror of assorted howls the terrier came free and sailed back into the room over his toppling mistress's head, while his enemies hurtled through the window. Outside there was a sickening crash. As the terrier and his mistress picked themselves up, MacTate steeled himself to look out the window. The roof of the next building was level with the floor he stood on. Just below the open window was a skylight, lit from beneath so that he could clearly see the immense hole his falling companions had made in it. . . .

For an anti-cigarette sermon with telling scriptural references, his brethren were agreed, nobody could touch Brother Smigg. Anti-liquor, maybe, but not anti-cigarette. As he approached the preparation of his present effort, the Amens and other encouragements from the congregation became almost perfervid.

"And now that we've heard what Paul has to say about this filthy and disgusting habit," he was saying, "let's turn to Revelation 13 and hear from John." He scratched his jaw and beamed at his auditory over his glasses. "'Opening the mouth in blasphemy,' John calls it. And anybody that does it is a beast. Let's just see how John describes him. 'And I stood upon the sand of the sea, and saw a beast rise up out of the sea, having seven heads and ten horns . . .'"

Suddenly there was a crash over Brother Smigg's head, and the congregation saw the beast in question glide down to the platform behind him. On four of the heads an odd pink horn curved up from the neck over the top of the skull. On each

of the other three, which formed a triangle with the end wall of the room as its base, there were two much larger horns, great platelike things with jagged edges.

Brother Smigg, who was stone-deaf, pursued his text. "' . . . And the beast which I saw was like unto a leopard'"—the congregation gasped, for the peculiar fourfold body of the beast was covered with violet spots—"and his feet were as the feet of a bear, and his mouth as the mouth of a lion." The beast's feet, which were hidden in a mass of strawlike stuff, might well have been those of a bear, while the sounds issuing from four of its throats were indeed suggestive of a stricken lion.

"Judgment Day!" A brother in the front row stood up and clasped his hands over his head.

"Lead me down that glory road!" A brother behind him leaped up and waved his arms.

"Hallelujah!" Several other brethren began to rock back and forth, moaning enthusiastically.

Brother Smigg, his nose deep in his text, continued imperturbably: "' . . . And I saw one of his heads as it were wounded to death; and his deadly wound was healed.'"

"Three heads, Brother." Someone in the third row jumped up on the bench and pointed ecstatically. "Three heads has holes in them. Holes of sin."

"But no blood, Brother." A companion hopped up beside him and pointed too. "All healed up, like it says."

"Amen, Brother." They shook hands hysterically, teetered on the rickety bench, and fell back among the raised arms of their swaying brethren.

"' . . . And there was given unto him,'" read Brother Smigg, "'a mouth speaking great things and blasphemies—'"

"God damn it, Roland," bellowed a voice under the beast, "get off my head." Four men writhed away from the beast, untied thongs from their wrists, swung their bellies sideways, and, stepping to the front of the platform, suddenly became



one man. Brother Smigg, looking up, dropped his jaw in astonishment. The congregation rushed forward with a babel of eschatological cries. . . .

As MacTate stepped back from the window he was surprised by a burst of applause from the Abnormal Psychologists. They rose, clapping and shouting, and surged upon him with wild congratulations.

"Greatest demonstration of mass hypnosis I've seen."

"First time in thirty years anyone has put me under."

"The really clever thing was using a *real* red ball for the terrier."

The hyperthyroidal woman's protesting screams were drowned out in the ovation.

"Please understand—" MacTate tried frantically to push his way through them. "It was a living man and dog that fell out—"

"Members of the society." The little man with the tic leaped to the platform and spread his arms for attention. "I move we elect this gentleman to membership by acclaim and appoint him permanent chairman of the program committee."

The society cheered.

"Really," said MacTate. "Another time . . . But now . . ." He succeeded finally in breaking through the crowd and ran down the stairs to the street. There was a light in the second story of the next building. He tried the door. It was locked. "The back. Must have a back door." He ran down to the corner, rounded it, and looked for the alley leading to the rear of the building. Just as he found it he collided heavily with something emerging from it and sat down abruptly on the sidewalk.

"MacTate. You all right?" Ransom helped him up. "Shouldn't run in the dark like that. Not when Roland's running the other way." He grabbed Roland's collar and MacTate's arm and pulled them to the corner. "Let's find a taxi and get out of here. Roland's got to get to a veterinary."

"But the moose and the owl?"

"Forget them. I'll buy the boys' club new ones before I'll go back *there*."

"But Roland doesn't seem to be seriously injured." MacTate glanced at him. "When I saw the hole in that skylight——"

"No, no. When we crashed through it, the jolt turned on the flashlight inside of him. Funny effect. He looked something like an asterisk. Anyway, the magnetic doughnut does something to gravity, and we sort of floated to the floor. I finally shut it off by making him jump around, but it might go on again any minute. Gave me a turn when you ran into him like that. So we've got to take him to a vet and get him pumped out. There." Ransom saw someone getting out of a taxi halfway down the block and began to run. "Take us to that all-night animal hospital out on the old mill road," he told the driver when they had piled in. Roland sank to the floor with an abysmal groan. "Poor Roland. He's had a hard day."

"But, old boy," said MacTate, "were you really serious about never going back again? I incurred—something of an obligation. The society elected me chairman of its program committee, and I hadn't time to decline formally."

"Think nothing of it, MacTate." Ransom laughed. "You're not the only one that incurred obligations tonight. Take Brother Ransom, for instance." He looked out the taxi window and sighed. "I've just been elected moderator of the Happy Little Brotherhood of the Narrow Way."



*You automatically think of gladiatorial arenas as titanic stadiums, like something begotten by Cecil B. DeMille out of the Arizona meteor crater. But obviously a small tanktown arena must have borne about the same relation to the Roman Colosseum as your neighborhood movie house does to the Radio City Music Hall. For the only study we know of a typical small-time arena in the sticks, we are indebted (as for so much else!) to the researches of Professor Cleanth Penn Ransom, that prime pragmatist whose slogan in investigating any of his myriad theories is, "Let's argue about it after we see whether it'll work." His machine for recalling ancestral memories does indeed work — to produce a compendium of knowledge on the two-bit circuits of gladiature, a pretty and insoluble problem in genealogy . . . and the unforgettable Pipula, the Amazon who proves that one sufficiently appealing item may be enough in a field in which popular fiction has always emphasized the necessity for two.*

## The Unidentified Amazon

by H. NEARING, JR.

"DO YOU KNOW who said this?" Professor Cleanth Penn Ransom, of the Mathematics Faculty, bent over the book on his desk and read aloud:

*Und keine Zeit und keine Macht zerstückelt  
Geprägte Form, die lebend sich entwickelt.*

Professor Archibald MacTate, of Philosophy, waved a hand blandly. "Oh, Goethe."

Ransom looked up at him. "My God, that's right. How'd you know that?"

"Well, it rimes, doesn't it?" MacTate smiled. "And it's in German. Anything in German that rimes must be Goethe. It could hardly be Dante." He uncrossed his long legs and leaned forward. "Go over it a bit slower, and I'll tell you what it means."

Ransom shook his head. "This is too tough for you, MacTate. I better translate it. Let's see. *And no Time and no Might . . . mangles, chatters . . . stamped-out Form, which, living, itself develops. Develops itself*, that is. Nothing can shatter identity." He nodded at the book. "Pretty good. You believe that?" He looked up at his colleague.

MacTate pursed his lips. "It all depends on what you mean by identity," he said. "Platonically speaking —"

"Oh, the hell with Plato." Ransom closed the book and leaned back in his swivel chair. "Let me tell you what Ransom has to say on the subject." He jabbed a thumb into his little belly and began to swing back and forth.

"Excuse me," said MacTate sarcastically. "I didn't know you had it all figured out."

"As a matter of fact," said Ransom, "I don't. Not all of it. But" — he stopped swinging and faced MacTate — "I think I've got a way to find out something about it. Look." He held up his right hand. "Why am I right-handed?" He wiggled the fingers. "Because my center of gravity's on the right side of my body? Not at all. There's plenty of left-handed people whose center of gravity's on the right. But if I'm subconsciously remembering the way most of my ancestors used their hands —"

"But, Ransom. Acquired characteristics can't —"

"But tendencies *can*." Ransom aimed a finger at his colleague. "How do you explain the fact that I'm scared of the dark? Am I just skittish, or did I get it from someplace?"

MacTate looked thoughtful. "Well, I suppose you might inherit tendencies of that sort."

"All right." Ransom began to swing again. "Now. How about these little boys you read about that go into a trance and start talking Old Persian or something, and —"

"Talk what?"

"Well, some ancient language or other. They —"

"You've heard them yourself?"

"Well, no. But you hear about them. If you get right down to it, it isn't much different from remembering to use your right hand or to be scared of the dark. Is it? And if they can do that" — Ransom spread his hands — "Why shouldn't we be able to talk some Neolithic patois, maybe? If we could figure out a way to remember it?"

"My dear Ransom —"

"Now look, MacTate." Ransom opened his bottom desk drawer. "There's no sense arguing about it, because I've got the proof right here. One way or another." He took a tangle of wires out of the drawer, threw it on the desk, and began to straighten it out. It consisted of a metal box, of about one cubic foot, to which were wired a floor plug and two metal skullcaps topped with electrodes. "Here. I put this little cap on my head and plug it in, and —"

"But you have two caps there." MacTate looked at his colleague warily. "Ransom. You're not thinking —"



"Of course there's two caps. One person by himself wouldn't know whether he'd dreamed his ancestors' lives or not. So you have to have one for the — control. Two people wouldn't be very likely to have the same dream simultaneously. Would they?"

MacTate started to say something about Peter Ibbetson and the Brushwood Boy, but reflected on the circumstances and decided not to press the point. He looked at the two skull caps. "I take it you haven't tried this out yet."

"No. I just —"

"And I suppose you intend to be the first to wear one of those caps."

"Sure. I —"

"But who" — MacTate looked at him with almost poignant suspicion — "is going to be your 'control'?" One corner of his mouth turned down. "As if I didn't know."

Ransom grinned. "Good for you, MacTate. I was hoping you'd volunteer."

"Ransom, you —"

"Look, MacTate, we're wasting time. Don't argue about it. Just sit over here —"

"But how —?" MacTate gestured toward the apparatus.

"Look." Ransom put down the skullcaps and leaned back in his chair. "You know how they shock catatonics to get them back to normal. With insulin, for instance, or that camphor stuff. Makes their brains relive the whole embryonic process — fish, chickens, all those things. Well, we don't want to go back quite that far in an evolutionary sense, but we want to go a lot farther back in . . . historical identity. So I fixed these skullcaps to sort of shock the brain out of its immediate identity by sending out waves that upset the rhythm of your cortical vibrations." He waved a hand over his head demonstratively. "It gives you a sort of electric — well, in music they call it a beat note. And that stirs up centers of what you might call memory tendency. See?"

"But, Ransom. For the two of us —"

"Now don't worry about that." Ransom pointed to the metal box. "See this thing? It's a compatibility tube."

"A what?"

"Compatibility tube. It's sensitive to identical micro-electro . . . Well, anyway, if we've ever met before, this thing will make us remember it. Before this century."

"But —"

"Let's argue about it after we see whether it'll work." Ransom got up, put one of the skullcaps on MacTate and the other on himself, and stuck

the plug into a floor socket. Then he sat down again. "You just" — he turned a switch on the metal box — "sit there and relax, and . . ."

Ransom the German — Redemptio Germanicus he was called in the Illyrian town of Salona on the Adriatic — put his elbows on a battered table in the lion's stall that served him for an office and rested his jaw disconsolately in his hands. His partner, MacTate the Gaul — Filiuscapitis Gallicus — leaned forward on his bench and drew recondite curves in the sand with a rusty sword.

"This is terrible, MacTate. What are we going to do about tomorrow's show?" Ransom picked up a leather bag that lay on the table and spilled out its contents. "About twenty denarii. That's all that's left. And even if Hyacinthus hadn't run out on us —"

"You shouldn't have made those remarks about his archery, Ransom. He was quite a sensitive chap. Especially since his best days were over."

"Well, his worst days are over now, too. The Ransom-MacTate Arena is the end of the road for gladiators." Ransom sighed. "What a business. You know, MacTate, sometimes I think I should have been a mathematician. I love to count things." He grinned. "Especially money." His grin soured as he looked down at the coins. "If we hadn't flunked out of gladiator school we might have —"

"Well now, Ransom. If we hadn't, we'd probably be covered with glory in a grave somewhere by this time." MacTate scratched out his designs and stuck the sword upright beside the bench. He smiled. "Perhaps I should have been a philosopher."

"You couldn't have been much poorer than you are now." Ransom nodded lugubriously. He looked at his partner. "MacTate, you've got to think of something. For tomorrow, I mean. I give up. There's nobody in town we don't owe money to, and there hasn't been a new —"

A shadow fell across the sunlit threshold of the stall. Ransom and MacTate looked up. Peering at them around the gatepost, an astonishing distance above the ground, was a handsome if somewhat rat-like face.

"You Ransom and MacTate?" The newcomer stepped into the stall and glanced from one to the other. "I've just finished an engagement at . . . Pompeii" — he turned and spit expertly into a corner — "and decided to take a little vacation over this way. I didn't know you had an arena here." He looked out the door at the unkempt little circle of sand that constituted the Ransom-MacTate investment. It was clear from the way he looked that he had used the word *arena* as a matter of courtesy. He turned back to Ransom and MacTate. "How would you like to feature a big name in your show? I want to keep in practice, and I could lower my rates to —"



"Well now, we might be able to arrange something." Ransom's eyes began to gleam. "What did you say your name was?"

"Taurus. Taurus the Lydian." He said it a little too quickly. "I've met —"

"What's your specialty?"

"Secutor. But of course I can handle the net." Taurus waved a hand deprecatingly. "If you need a retiarius —"

"Well, we could leave that to the challengers. There'll be more of them if you're versatile."

"Challengers?" Taurus leaned against the gatepost and bent his head dubiously to one side. "I don't know as I'd like to murder the customers. Might start —"

"Wait." Ransom held up a hand and smiled. "I better warn you while we're on the subject. No killing in this arena. Except by accident, of course. The prefect won't stand for it. He's also the flamen, and he's got it in his head that if everybody sees too much blood in the arena, they won't get a proper thrill out of his sacrifices. You know how it is out in these places."

"But that only makes it worse." Taurus frowned. "Sometimes you can't help maiming the local talent. When they're trying to be heroes. Don't you have your own boys? Anybody would do as long as they're professional."

Ransom put his hands on the table, spread out his fingers and looked at them intently. "Frankly, Taurus, we're operating on a rather slim budget right now. Number of outside investments we've made that haven't paid off yet, you know. You'd have to settle for a percentage of the proceeds, with no guarantees. I know that's not what you're used to. On the other hand —"

"Hello." The voice was feminine, sultry and rather breathless. Ransom and MacTate looked up. Taurus was gazing down at a woman whose red hair, glowing with a sunbeam, reached about half way between his elbow and his shoulder. She had a cowlick that flopped wantonly over her forehead, a wide mouth, and lithe arms and legs. Where her right breast should have been, there was a white scar, but the swell of her garment as it rose to the opposite shoulder betokened a certain compensation. She stepped into the stall and smiled uncertainly.

"I'm looking for a job."

Taurus grinned sardonically. MacTate raised his eyebrows.

Ransom's mouth fell open. "What?"

"You must be Ransom. The promoter." She went over to him, raised one knee, and sat on the edge of the table. "I've heard a lot about you."

Ransom's eyes narrowed. "What are you doing here?"

"I told you." She brushed the cowlick out of one eye. "I want a job."

Ransom glowered at her, raised his arm and pointed in the direction of the waterfront. "The best place for you to find a job —"

"Ransom." MacTate leaned forward. "Perhaps the young lady has been misdirected. This is an arena, my girl. A place where men of the male sex — that is to say, gladiators of the male sex — fighters, you know — this is a place where they . . . fight. Now if you could tell us where you —"

"I know it's an arena." The girl turned to MacTate and widened her eyes at him. "That's why I came here. I'm a gladiator, too. Of the female sex." She mimicked the accents of his explanation.

"A gladi —" Ransom scowled. "Listen. I don't know what you're after, but —"

"I am so a gladiator." The girl stood up and faced him. "I've been in more fights than —"

"Where were you in any fights?" said Ransom.

Taurus roared out an enthusiastic laugh in appreciation of his employer's retort. The girl looked at him dirtily. She turned back to Ransom. "Plenty of places. Not around here. Back East, where they know how to put on a real show. If you want —" She stopped, noticing that Ransom's eyes were fixed on her right breast. "Sure. Look at that." She pointed to the scar. "That's my recommendation. All Amazons have their right breast cut off, so their sword arm —"

"You mean you're an Amazon?" Ransom stared at her.

"Sure. What did you think I was? A —"

"Then what are you doing in Illyria?" He aimed an accusing finger at her.

Taurus laughed again. The girl threw him an impatient glance. "Well, I mean I used to be one. But I got . . . kidnaped by pirates, and when I escaped I was . . . here." She waved vaguely at the environs. "That's why I need a job. I —"

"No, no." Ransom shook his head. "The prefect's an old woman. Keeps yapping at us about just a little manly roughness. If we went and used a girl —" He looked at her. "What could we do with you?"

"You could throw her to an ape," said Taurus.

The girl twisted one corner of her mouth. She sighed. Turning, she sauntered over to Taurus. He stopped laughing and eyed her warily.

She put her hands on her hips and looked up at him. "That's quite a laugh you've got," she said.

He looked down at her without replying. Though he still leaned carelessly against the gatepost, his muscles looked somehow ominously alert.

"What was it you said they ought to do with me?" said the girl quietly.

Taurus grinned. "Give you to an ape."

"Who would that be? You?"

Taurus sneered nastily and stood straight. "Listen —!"

She turned to Ransom. "You know, he's got something there, Ransom,"



she said. "I could fight him." She snapped her fingers. "Look. Watch this."

Wheeling suddenly, she lowered her head and butted Taurus violently in the midriff. He emitted a hoarse wheeze and reached out to grab her. Dropping sideways, she pivoted on her hands to swing her body at his shins. He leaped over her, spun around, and lunged at her again. Ducking under his outstretched hands, she bit him on the back of the arm, just above the elbow, and slipped behind him. He let forth a howl. Cursing, he swung around — to find the point of MacTate's rusty sword pressed against his abdomen. She twisted the sword a little to assure him of his position. He smiled, though his fingers were twitching.

"Let's find another sword," he said. "I'll show you a trick."

"Now listen." Ransom came to them, knocked the sword out of the girl's hand, and pushed them apart. "Taurus and — you. What's your name?"

"Pipula."

"All right. Now listen. You've got to get it through your heads that there's a tough prefect in this town. What if he'd looked in here just now? It's bad enough —"

"Oh, just let us finish this pass," said Taurus, advancing toward Pipula. "I won't hurt her. Only a little bit."

"MacTate." Ransom stood in front of Pipula and pushed Taurus back. "You show Taurus here around the . . . grounds while I get rid — I mean, I want to talk to Pipula about her . . . qualifications." He pushed Taurus to the gate.

"I'll take him down the street for some wine," said MacTate. "Cool him off. You . . . ah . . ." He looked at the denarii on the table.

"Oh, yes," said Ransom. "You left your change over here." He put the coins into the leather bag and gave it to MacTate. "I'll probably join you in a few minutes." He looked darkly at Pipula. "So don't drink too fast." His laugh was somewhat forced.

When MacTate showed the tavern-keeper his denarii, the latter bit one of them, looked at Taurus suspiciously, and poured two bowls of wine. Taurus downed his without stopping for breath. MacTate looked at him, shrugged, and ordered another. On the third bowl, Taurus slowed down. Between gulps he entered upon a more or less analytical comparison of the wine at hand with all the other wines he could remember drinking. When half the denarii were gone, Ransom had still not come. MacTate stood up.

"Perhaps we'd better see what's keeping Ransom," he said. "That little — what's her name? Pipula. She — That is, I'm not sure —"

Taurus agreed with him. He got up and led the way out of the tavern.

Back in the lion's stall they found Ransom lying prone on the bench, drawing numbers in the sand with MacTate's sword.

"Did you have much trouble getting rid of her?" said MacTate.

Ransom grunted. He scratched out the numbers in the sand.

"Why didn't you follow us? To the tavern? After what she did to Taurus, I didn't know —"

"MacTate." Ransom rolled over and sat up. "When you come to think of it — I mean, don't you think —? What I mean is, after all, why should we bow down to the prefect's whims all the time? Now you take this show tomorrow, for instance. If we were to post announcements that Taurus was fighting — well, to take a hypothetical example, let's say this Amazon, or whatever you want to call her — now wouldn't that have an . . . exotic appeal? We might clean up on it, for all we know. And then what would we care what the prefect thought?"

Taurus muttered a few tipsy obscenities apropos of the subject.

MacTate pursed his lips. "I don't know, Ransom. I still like the idea of Taurus taking on challengers. Women — well, I don't know." He looked at Ransom and caught him glancing furtively at something under the bench. Following the glance, he saw a diminutive pair of sandals.

"Just put her in the arena with me," said Taurus. "Just give me a chance at her. She can have the sword. I'll squeeze her out of her skin. I'll —"

"Ransom." MacTate gestured toward the sandals.

Ransom looked apprehensively at Taurus. "MacTate, maybe Taurus would like some more wine. Why don't you —?"

"Well. Here you are again." Pipula entered the stall and slipped into the sandals. She looked at Ransom. "Is it all settled?"

Taurus began to growl. She looked at him, and a wicked gleam came into her eye.

"MacTate. Look." Ransom grabbed Taurus by the arm and pulled him to the gateway. "I'll take Taurus this time. You argue with her." He motioned for the coin bag.

MacTate tossed it to him. He sighed. "I'll be with you shortly."

When they were gone, he turned to Pipula. "Now, young lady, I don't like to be unkind, but I must say that I myself am somewhat opposed to exposing women to the vicissitudes of the arena. Not that I'm narrow-minded, but —"

"MacTate." Pipula stood close to him and hung her head. "I know why you don't like me. It's because I'm . . . mutilated. Isn't it?" She touched the scar on her breast.

MacTate found himself blushing. "My dear young lady —"

"I can't think of any other reason why you wouldn't want me to work for you. It's not as if it were something I could help. Is it?"

"Now see here, Pipula. You know very well —"



"I'm rather attractive otherwise, don't you think? I'm healthy, and well-proportioned, and . . . strong. Look." She took his hand, put it on her biceps, and looked up at him inquiringly. "Don't you think?" Her cowlick tickled his chin.

MacTate was, as he had guessed, a philosopher at heart. Bowing philosophically to the inevitable, he finally agreed to employ Pipula as Taurus's opponent. Ransom, returning to the stall to report that he had deposited Taurus safely in one of the waterfront houses, commented sarcastically on his partner's failure to join the drinking party, but showed no surprise. It was almost as if he too had turned philosophical. Pipula put on her sandals again and went out with the two philosophers to supper.

The next morning there were excited rumors astir in the town. The conjectures arising from the somewhat lurid notice chalked on the front gate of the arena had been repeated as fact, and then served, in turn, to generate new conjectures. At the scheduled starting-time that afternoon, the seats surrounding the arena were packed beyond Ransom's fondest hope. It was a raucous, volatile crowd, displaying several crews of piratical-looking sailors of varicolored garments and complexions. In the midst of their brawling sat a gaunt, stern man with heavy eyelids, a long nose, and a mouth like a pair of millstones. Taurus and Pipula recognized him for the prefect before Ransom pointed him out.

After the salute, Taurus stretched his arms happily, raising shield and sword, and turned to Pipula, who tossed off her robe and stood deliciously naked, except for one or two scanty concessions to propriety. The crowd gasped. Smiling wickedly, she began to dance around Taurus, feinting with her trident and her net.

Suddenly he slashed out murderously with his sword so fast that the crowd could not follow the blow. There was a second or two of silence, and then the arena was filled with delighted roaring. There was no blood on Pipula's dazzling skin.

Taurus shook his head disgustedly. He rushed at Pipula and followed her dodges relentlessly, trying to drive her against the wall. Finally she turned and ran from him, and in his rage he chased her around the ring several times. But his armor was too heavy for racing, and he could not approach her. Stopping, he banged his sword on his shield petulantly and called her an indelicate name. She danced toward him, grinning.

"My, Taurus, what a brute you are. You do this to all your victims?"

Taurus's eyes glittered under his helmet. He smiled coldly. "Look, sweetheart. Look at those clouds up there. It's going to rain in a few minutes."

Pipula had noticed that the sky was growing dark. She kept her eyes on Taurus. "What do I care? I don't have anything to get wet."

"But everybody will be going home. You don't want to spoil their fun, do you? Stand still and let me carve you up."

"Sure. Go right ahead."

Taurus slashed out with his sword again. As Pipula slipped aside, he swung his shield at her. She danced nimbly away and laughed. Taurus stood flat-footed and lowered his shield. "Look. You fight me awhile."

Pipula regarded him appraisingly. The weight of the armor was clearly slowing him down. She smiled, as if about to reply. Then, with a flick of her wrist, she sent her net flying at his head. He tried to duck, but it caught on his sword and swung around over his helmet. As he struggled to free his sword, Pipula raised her trident and dashed in at him.

Suddenly, from the clouds overhead, streaked a long bright bolt of lightning. It struck the ground a few yards behind Pipula with a nerve-shattering thunderclap. She dropped her trident and reeled away from it.

Taurus recovered first. Releasing his entangled sword, he threw off the net, took his shield from his arm and hurled it at Pipula. It struck her squarely and knocked her over. Leaping to her side, Taurus set the shield on top of her and brought his knee down on it.

"Taurus—!" She gasped and looked up at him wild-eyed. He grinned savagely and brought his knee down on the shield again.

"Taurus. The prefect—"

"Don't worry about the prefect, sweetheart. There won't be any blood at all." He leaned over and grinned in her face. "I'm just going to pulverize you. Internally."

"Taurus—!"

Pipula, as Ransom and MacTate had learned, was a remarkable woman. Even in her present position she was able to use her voice and her eyes to advantage. They insinuated a reproach to Taurus, an imputation of sadistic oafishness, as if he were torturing a baby.

"You've been asking for this," he said stubbornly. He brought his knee down on the shield again, but not quite so hard as before.

He looked at her eyes and felt a pang of guilt again. He looked at her mouth and wondered if he ought to be satisfied with capitulation. The prefect would stop the fight.

A large raindrop splattered on Pipula's left eye. She tried to blink it away. Without thinking, Taurus took one hand off the shield to brush it away for her. As she felt the pressure on her shifting, Pipula rolled with it. Taurus felt himself losing his balance and tried to hold the shield steady, but it was too late. Twisting her body violently, Pipula was loose. She bounced to her feet, snatched up her trident and net, and flung Taurus's sword, which she shook from the net, into the stands.



Taurus gaped at her. "You gave —" He stopped, remembering that she had not given up. Furthermore, she had disarmed him. As she sprang toward him, he grabbed up his shield and began trying to maneuver her against the wall. But it was hard for him to concentrate. He felt somehow that he had been cheated, and that it was his own fault, and he wanted to kick himself for it and Pipula too. Dimly, he was able to recognize the emotion. He had had it before.

The raindrops were splashing heavily over the whole arena by this time. The overcast had grown quite dark. As Taurus and Pipula circled about, another lightning bolt thundered down, striking the wall near the prefect's seat, and suddenly the raindrops turned into hailstones.

There were howls from the crowd. Pipula, whose condition was particularly vulnerable, threw her net at Taurus and ran to the lion's stall, where Ransom and MacTate stood watching their production.

"Turn your backs while I put on some clothes," she said.

Ransom looked at her. "That would bother you?"

She jerked her head toward the gateway. "Taurus will be coming in, too." She smiled. "We don't want to corrupt clean-living youth."

Taurus, whose armor made an exit less urgent, had paused to salute the prefect before leaving the arena. That worthy, however, had scampered with the rest of the crowd to more sheltered parts. Taurus looked around at the deserted seats, shrugged, and tramped into the lion's stall.

He leaned his shield against the gatepost and gestured at Pipula, who was pinning on the final brooch.

"What does she think she's doing?"

Ransom grinned. "She says she doesn't want to corrupt you."

"But she'll just have to take them off again." Taurus looked out at the arena. "It's stopped hailing. Just a little rain. Before long they'll be coming back, and —"

Ransom put his hand on Taurus's shoulder. "Look, Taurus. Do I tell you how to handle a sword? You let me handle the show. They paid their admission and left, didn't they? Now they can just pay again tomorrow to see the rest of it." He looked out at the sky speculatively. "I wish there was some way to make it hail every—"

"Ransom." MacTate, at the table, had arranged the admission coins in three piles. He handed the smallest one to Pipula and the next to Taurus, scooped the largest into the leather bag, and turned to his partner. "Were you watching the prefect during the engagement?"

"Oh, sure. But he always looks that way. Don't worry about him. Look, Taurus —"

Taurus, who had taken off his armor and started to leave, turned around.

He jingled the coins in his hands with good-natured impatience.

"Tomorrow, same time. Keep out of trouble."

Taurus looked at Pipula, then at Ransom. He grinned, nodded, and left.

Ransom shook his head wonderingly. "That's a mighty big boy there." He turned to Pipula. "I thought it was the end of you when he started to jump on that shield."

Pipula got a far-away look in her eye. "Sometimes the big ones are the easiest to handle," she said dreamily. Suddenly she noticed Ransom and MacTate staring at her. She made a contemptuous face and shrugged. "He didn't worry me."

Ransom smiled with puzzled amusement. "What's got into you, Pipula? You sound as if you enjoyed getting crushed. Did you think —?"

"That reminds me." Pipula put her hands on her stomach. "How about restoring some of the energy he crushed out of me? I'm hungry. Let's —" "Greetings."

Pipula and her employers turned toward the gate. Ransom and MacTate recognized the newcomer. He was a centurion in the prefect's guard. He came into the stall, eyed Taurus's armor lying in the corner, and grinned at Pipula. "Quite a show this afternoon."

Pipula smiled back. Ransom sat down uneasily at the table. "We always try to give the town the best talent available," he said.

The centurion looked at him. "You outdid yourselves today," he said dryly. "This new boy you have. What's his name?"

Ransom and MacTate looked at him without answering. They sensed he was not referring to the name chalked on the arena gate.

The centurion shrugged. "Brave boy, whoever he is. I know I wouldn't trust *my* swordsmanship against such perilous charm." He bowed gallantly to Pipula and turned back to Ransom and MacTate. "Has he been in town long?"

Ransom waved his hands. "We only hire them. We don't write their biographies." He looked at the centurion narrowly. "Why don't you ask him what you want to know?"

The centurion laughed ingratiatingly. "Good heavens, Ransom. I was just making conversation." He went to the gate. "I came down here to congratulate him. Thought he'd still be here. But the visit wasn't entirely wasted." He bowed to Pipula again. "I'll catch him another time. I suppose he'll be fighting the . . . lady again soon?"

"Just watch the gate notices," said Ransom. He blinked superciliously. "We don't care to make rigid plans too far ahead."

"All right." The centurion nodded and went to the gate. "By the way," he said, "I'd appreciate it if you didn't tell anybody I was here. You see,



"I'm supposed to be on duty." He grinned at Pipula. "It's been a stolen pleasure." He turned and left.

Ransom looked at MacTate. "Now, what —?"

"Listen," said Pipula, going to the gate and looking after the centurion. "If you don't mind, I think I'll eat alone this time."

Ransom stared at her. "But I thought —"

"Well, I've changed my mind. There's . . . something I have to do. Don't worry about me. I'll be on hand tomorrow." She looked again to make sure the centurion was out of sight. "Sorry."

"Pipula —"

She was gone.

The partners looked at each other. Ransom shrugged.

MacTate hefted the bag of coins. "Well, let's go eat, old boy. She was right about that fight. I got depleted just watching them."

When they ordered supper, the tavern-keeper smiled at them for the first time they could remember. "Hear you fellows made a hit this afternoon," he said. "Sorry I couldn't be there to see it. You're going to put on a return bout, I guess?"

Ransom looked at him importantly. "We'll see. One of these days, maybe. Maybe tomorrow."

The tavern-keeper looked at him slyly. "You better hurry up, if you ask me."

The partners looked up at him. "What do you mean?" said Ransom.

The tavern-keeper smiled knowingly. "You hear a lot of talk," he said. "Most of it's just talk, but you can usually tell when something's in the air."

Ransom frowned. "What's in the air?"

"Well, this boy of yours. What's his name? The prefect's centurion was here looking for him a little while ago. And a couple of sailors said —"

"What did he want with him?" said Ransom.

The tavern-keeper scratched his head. "He didn't say exactly. Something about having a message for him. But these sailors —"

"Well, why didn't he tell me that?" Ransom scowled at the tavern-keeper. "I'm his employer, not you. If he had a message, why didn't he give it to me?"

The tavern-keeper looked at him. "I can't say as I know just why he didn't." His eyes grew large and rather angry. "But I'll tell you this. Everybody was saying it was mighty funny a big-time gladiator like that should all of a sudden have to go to work in your —" His expression supplied the noun. "You better keep your eye on him, if you ask me." He turned his fat shoulders coldly and went to get their food.

The tavern-keeper's insinuation inspired Ransom with an emotion akin to motherly protectiveness. By the end of supper he had convinced himself, despite uncoöperative doubts on MacTate's part, that his protégé was the victim of invidious and unwarranted backbiting. MacTate, philosophically yielding to his partner's optimism, eventually brought up the problem of how to spend their unaccustomed wealth, and they passed the rest of the evening arguing about its disposal.

When Ransom chalked up the notice on the gate the next morning — a statement that there would be a show that afternoon, with a sketch of a leering wink — an effluvium of anticipation spread through the atmosphere of the town. Ransom, sniffing it, began to dream of villas in Etruria and orgies with chilled wine. When the crowd began to fill the arena more than an hour before starting time, his visions became too dazzling to bear, and he suddenly remembered that neither Taurus nor Pipula had come to the arena all morning. He laughed at the flash of panic that struck him with the recollection. There was no good reason why they should have come to the arena earlier. No doubt they had become absorbed in exploring a town that was new to them.

But as the starting time came closer, Ransom began to feel a vague uneasiness somewhere in his mind. Trying to analyze it, he discovered that the crowd was the cause. Not its size, for it was bigger than the arena had ever held, but something in its quality. Something missing from it. Suddenly it hit him. The prefect was not there.

This discovery made him aware that his gladiators were by now well overdue. He began to feel panicky again. Finally he turned the admissions box over to his equally anxious partner and ran down to the tavern to see if Taurus was there.

The tavern-keeper's face bore an evil I-told-you-so look. "Not here," he said, shaking his head happily. "But your — the female was in here. Last night. Told me to give you this." He held out a small piece of slate with minute scratches on it.

Ransom took it and looked at it closely. The scratches were letters. It was a note from Pipula, in Pontine Greek. Laboriously he spelled it out:

*Ransom and MacTate, a sorrowful farewell. I hope you won't think too badly of me for deserting you, as I am in the grip of the Ate and cannot answer for my actions. Since the moment when Cassidus (whom you knew as Taurus) tried to crush me with his shield, I knew I could not live without him. That must sound foolishly sentimental to you, but there it is. In Rome he had the misfortune to kill the brother of your prefect, over dice or something of the sort as he told me. Busybodies who knew of this were fated to arrive in Salona by ships sailing with his, and the prefect, as you may have guessed, seeks his life. We are on our way*



*to the corners of the earth to make a new life together. I shall often think of you.*

When Ransom showed the slate to his partner, MacTate sighed and looked from the admissions box to the crowd inside. "Maybe we'd better join them," he said.

"Join them? What are you talking about? Join who?"

"Pipula and Taurus, or whatever his name is. Right now we're somewhat lynchable ourselves."

Ransom looked at the crowd and gasped. "MacTate. What are we going to do?"

MacTate shrugged. "You might go pick a fight with the tavern-keeper and get him to chase you back here."

"Jokes." Ransom kicked the gate. "Here we are as good as murdered, and all you can do is make jokes. If you —"

"Well, do you have a better idea? As I see it, we can either run away, which is probably more sensible, or put on the show ourselves."

"But, MacTate, they'd tear us apart. If we went out there when they're expecting Pipula —"

MacTate looked at the crowd. "They'll probably do that anyway. If you're too proud to run away."

"Well, I am." Ransom stood up straight and listened to an imaginary trumpet call. "Come on, MacTate. We'll go down doing our duty to the public." He eyed the crowd thoughtfully. "Anyway, we don't have a head start like . . . them. This way we just might have a chance."

MacTate sighed and got up. The partners closed the arena gate and went to their lion's stall.

When the crowd saw them saluting the commander of the garrison, there was an awful silence in the arena. When MacTate, naked, with trident and net, and Ransom, armored, with sword and shield, faced each other and squared off, a babble of angry mutters rose from the seats. Suddenly a clear sense of having been cheated flooded the crowd, and it let forth lusty howls of indignation.

"Come on, MacTate. Let's mix it up. They've caught on." Ransom charged at his partner with raised sword. MacTate, twisting away, dragged his net behind him. Suddenly Ransom found his feet enmeshed in the net. MacTate tried to rip it away, but succeeded only in throwing his partner heavily to the ground. He stood over Ransom's supine figure, gaping incredulously at the result of his accidental prowess. The crowd screamed with rage.

"MacTate. Don't just stand there. Jab at me."

MacTate looked startled. Raising his trident, he began to ping gingerly at the more solid portions of Ransom's armor.

"No, no." Ransom rolled over and scrambled to his feet. As he turned to face MacTate, he heard something whiz past his ear. From the corner of his eye, he saw the missile strike the ground and bounce across the sand. It was a rotten orange.

"MacTate. Did you throw that?"

MacTate ducked. Ransom saw a stone bounce behind his partner. He looked up at the crowd. "They've started already. Let's keep moving."

MacTate turned and ran up to the other end of the arena. Ransom followed him, brandishing his sword. "Look, MacTate. Let's really mix it up. Maybe they'll stop."

MacTate faced him and nodded. Dropping his net, he swung his trident with both hands in a great arc at the level of Ransom's shoulders. Ducking, Ransom swung his sword in an opposing arc. But both his timing and his aim were faulty. The trident and the sword met with a great clank at their respective points of percussion and rebounded crazily through the air. MacTate hugged his hands to his chest and cringed over them. Ransom dropped his shield, grasped his sword arm with the other hand, and howled. Suddenly two or three stones struck his armor and bounced off. He saw MacTate wince and hop up and down.

"MacTate. Hurry up. We've got to keep moving."

They scrambled to pick up their weapons. When they faced each other, Ransom waved the trident angrily at his partner. "MacTate. Look at that. You've got my sword. Why —?" He noticed the weapon in his own hand. "Oh, well." He jabbed at MacTate half-heartedly. "Look at that. Not a cloud in the sky. And if there was ever a time for it to hail —"

From the seats above came a shower of stones. MacTate grabbed up Ransom's shield and held it between himself and the crowd. He began to jab back at Ransom with the sword.

"Look out!" Ransom saw a sandal flying at his partner's unprotected side. MacTate looked up and jumped away from it without halting his jabs. Ransom, at the same instant, noticed a wooden board flying at his head from the other direction. He stepped aside without lowering his trident.

Suddenly the partners looked at each other incredulously. The prongs of the trident were imbedded in MacTate's midriff. The point of the sword was somewhere inside Ransom's throat. Simultaneously they let go their weapons and stepped back.

"My God, MacTate, what happened? I didn't —"

"I don't know, old boy. But it's probably better than the stones. Here. Pull out the sword so you'll —"

"But, MacTate. We didn't plan it *this* way. How did —? Oh, my God." Ransom opened his eyes.



MacTate was sitting placidly across the desk with his eyes closed. The metal skullcap was poised precariously on the back of his head, about to fall off. Ransom's skullcap was already on the floor. He pulled out the plug and began to wind up the wires.

MacTate opened his eyes and blinked sleepily. Then he started and looked at Ransom curiously. "I say, Ransom. What's the matter? What happened to your armor?"

Ransom pointed at him. "Look at yourself. What happened to your — nudity?"

"Look here, old boy. Am I crazy or have we just murdered each other?" MacTate looked around the room. Whatever was in his mind, he decided definitely against it. "This certainly doesn't look like —."

Ransom laughed. "We only remembered killing each other. As our own ancestors, about 2000 years ago. Remember?" He waved at the black box.

"Then it did work." MacTate's eyes brightened. "Who would have thought?" He looked at the black box. "Just imagine how many gruesome situations you could get yourself into with that thing."

Ransom leaned back in his swivel chair and started to swing. "On the other hand," he said, "think how many Pipulas you might meet."

"See what I mean?" MacTate smiled. "But I'll agree with you that that situation was gruesome with a difference." He looked thoughtfully over Ransom's head. "Pipula," he muttered. He looked at Ransom again. "Tell me, old boy. Speaking of Pipula, do you recall being married at all? It seems to me that neither of us —"

"Married?" Ransom stopped swinging. "I don't know." He scowled in concentration. "I don't think. . . . No, I'm sure I wasn't. That is, — Look, MacTate. What are you getting at? How do I know whether —"

"Do you remember having any children?" MacTate was absolutely serious.

Ransom frowned at him. "Of course I don't. Did you see any around the arena? You know perfectly well —"

"Then tell me this." MacTate leaned forward. "How do you account for our descent?"

"Descent?" Ransom looked puzzled. "Why, I don't. Account for it. How do you account for anybody's descent? They just — descend." He aimed a finger at his colleague. "Look, MacTate. What's all this about, anyway? We might have got married later on, for all you know. You don't —"

"But how could we, when we killed each other?"

"My God." Ransom sank back in his chair. "That's right. That would make *her* —"

MacTate nodded. "Our great, great, great and so on grandmother."

Ransom stared at him. "No, wait a minute." He sat up and shook a finger at MacTate. "She couldn't be an ancestor of both of us. You were your ancestor, and I was mine. And how long was she around? Only —"

"But that's it, old boy." MacTate shrugged. "If you're descended from Ransom the German and I'm descended from MacTate the Gaul, there has to be a maternal line for each of us. How would we get those memory cells in our brains otherwise? Do you see?"

Ransom stared at him again. "No, no, MacTate. Look." He pulled open his top desk drawer and took out a tablet and a pencil. "Now I'm  $x$  and you're  $y$ ." He wrote the letters on the tablet. "Just to simplify the problem, let's say that Ransom the German and MacTate the Gaul are only — let's say three generations back. Now." He drew two diverging lines above each letter. "Here's my mother and father,  $x$ -sub-one and  $x$ -sub-two. Odd numbers will be feminine. And here's yours,  $y$ -sub-one and  $y$ -sub-two. That's the second generation back. Now for the third — well, let's say that  $y$ -sub-four — that's MacTate the Gaul — is the father of  $y$ -sub-one by — no. Let's say that  $y$ -sub-four is the father of  $y$ -sub-two. And  $y$ -sub-two's mother is  $y$ -sub-three. Right? And  $x$ -sub-two's father is  $x$ -sub-four — that's Ransom the German — and his mother is  $x$ -sub-three. So  $y$ -sub —"

"Just a moment, Ransom." MacTate leaned over and pointed to the tablet. "You have to make  $x$ -sub-three and  $y$ -sub-three the same person. There was only one Pipula, you know."

"All right, all right. I'm coming to that. You see —" Ransom stared at the tablet. Suddenly he tore off the top sheet and threw it into the wastebasket. "Look. We'll start over again. My God, we *are* here, aren't we? Look. Let  $x$  equal Ransom the Gaul — Ransom the German, rather — and  $y$  . . ."





# XI

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## THE AWARD

**“‘Math Prof Named Superman,’”** MacTate read from the campus newspaper. “‘Professor Cleanth Penn Ransom of the Mathematics Department has been named Superman of the Year by the Nietzsche Society, it was announced yesterday. The president of the society explained that while Professor Ransom was at first considered for the usual title of Renaissance Man of the Year, the nominating committee felt that his achievements, pointing as they did to a realization of that higher species which Nietzsche called Superman, merited an entirely new title. The award includes a mustache cup once used by Nietzsche, a complete set of his works, and \$25. . . .’” He looked up. “Why, Ransom. Congratulations.”

Ransom grunted.

"Somehow," said MacTate, "it never occurred to me that you might represent a higher species." His eyes twinkled.

Ransom leaned back in his swivel chair. "That's right. Twist the knife, MacTate. You've got it right between my shoulder blades. And they talk about Benedict Arnold."

"Old boy, is that the way to greet me after I tear myself from the decadent lures of New York to witness your triumph?"

Ransom sniffed. "A Roman triumph. With me in the cage. You fixed me good, MacTate."

"What on earth did *I* do? And speaking of Rome, how did you make out with—"

"You know perfectly well what you did. You ran off and deserted a colleague in his hour of need."

"Well, really, Ransom. If you wanted someone to hold your hand while they presented you with Nietzsche's mustache cup—"

"No, no. I don't mean *that*. The demonstration. If you'd been here, it would have been two against one, at least. And you might have thought of something to say to him."

"Who? The president of the Nietzsche—"

"My God, MacTate, will you forget about this Superman business? Now think. Why didn't I want you to go to New York?"

"Well, you were going to show your ancestral-memory thing to Ettiscope, and——"

"Exactly."

"But surely it didn't fail to delight him? That's what I was about to ask you. Where——"

"Oh, he was delighted with the *idea*. Could hardly wait to try it out."

"So?"

Ransom sighed. "Where, in all the backwaters of history, MacTate, *where* do you think we went? Ettiscope and me? When we put the caps on?"



"To judge from your expression, old boy, it must have been the Black Hole of Calcutta."

"Worse." Ransom shook his head. "You'll never guess. We went right back to Salona."

"Salona? Where we—"

"Arena, Pipula, Taurus, and all." Ransom nodded.

"Imagine! But wasn't he impressed?" MacTate cocked an eyebrow. "Perhaps Pipula—"

"He was impressed all right."

"Then what—"

"The trouble with you, MacTate, is you never finish reading anything." Ransom pointed at the newspaper. "Cast your eye on the rest of that hogwash."

MacTate glanced down the Superman column. ". . . regret that Superman-of-the-Year Ransom will be unable to accompany the society on its pilgrimage to the philosopher's quarters at Basel this summer, because he is scheduled to present a series of weekly lectures on calculus over the University of the Air beginning at noon today." He looked at Ransom. "What does it mean? Don't tell me Ettiscope didn't *like* your gadget. No matter where it took you."

"There were complications." Ransom looked at his wrist watch. "Of all the people he should turn out to be. In Salona."

MacTate stared at him. "I don't understand, old boy. Who—"

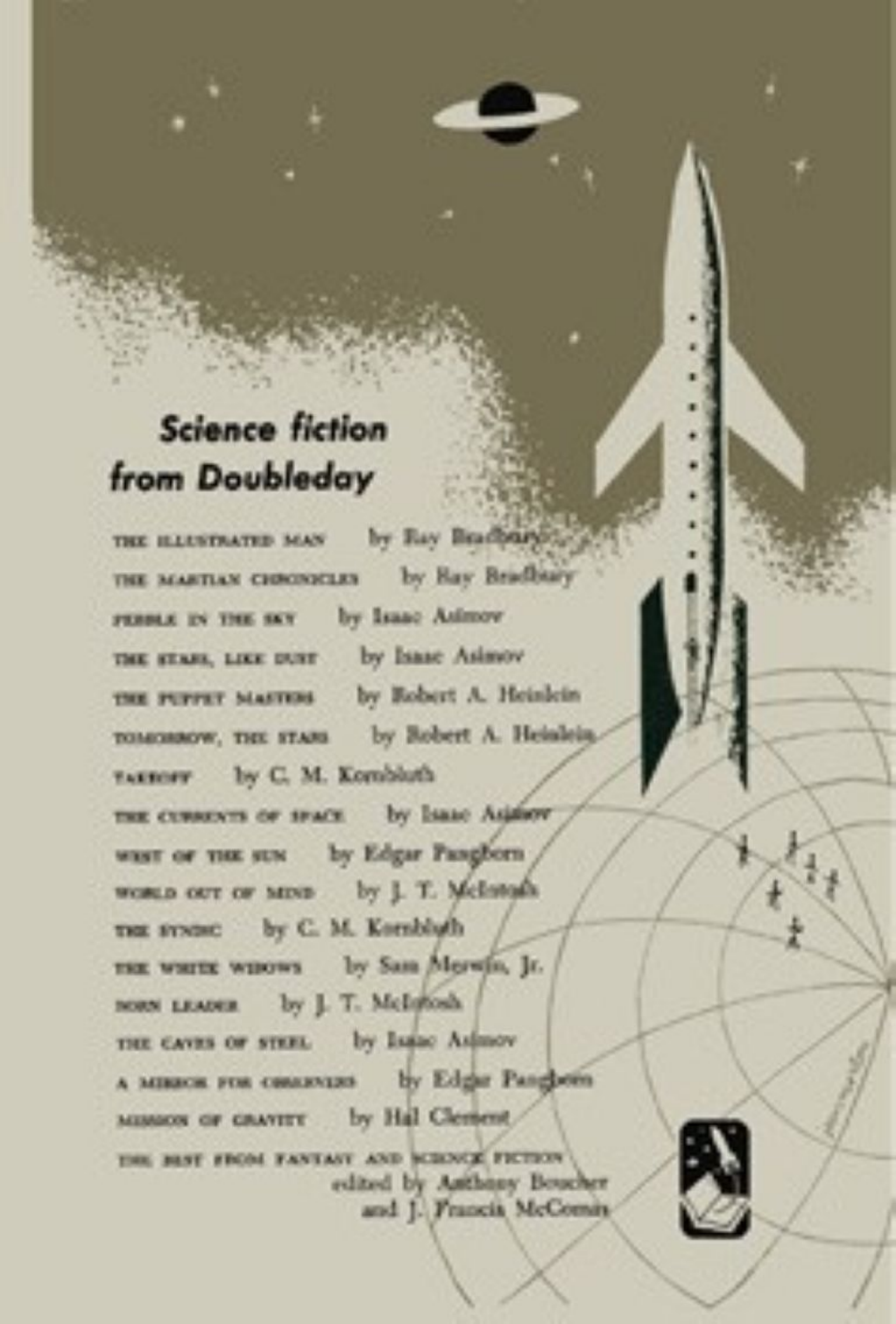
"It would have been funny if the consequences hadn't been so awful." Ransom got up. "Because—"

"Ransom. Who—"

"He was in such an emotional state he couldn't even talk straight." Ransom put on his hat and went to the door. "Just said never to let him see me again."

"Ransom. For the love of heaven, who *was* he?"

"The prefect. I told you I'd seen him before. After, I mean." Ransom opened the door. "*Morituri te salutamus*, MacTate. Superman's on his way to Siberia."



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