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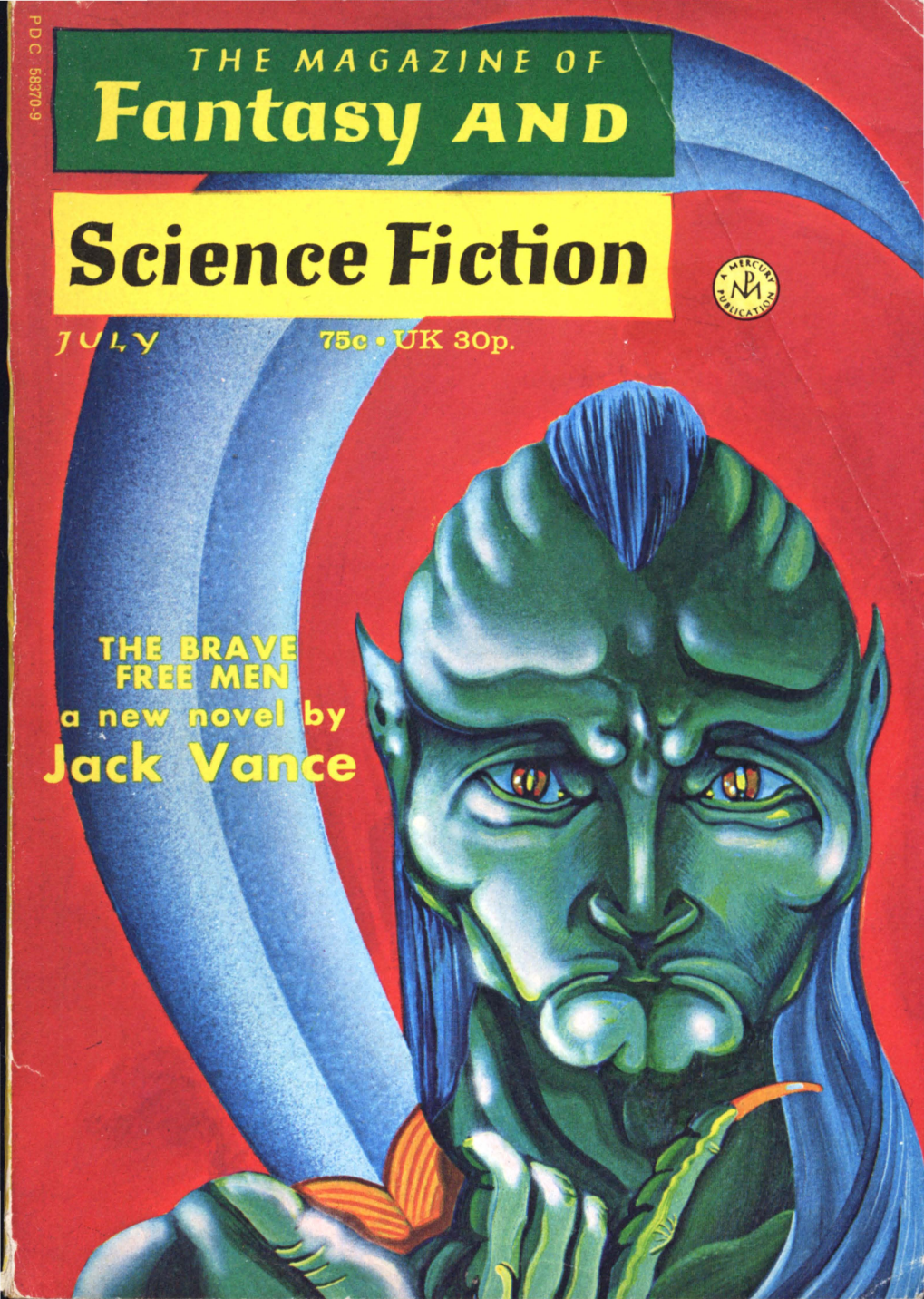
THE BRAVE FREE MEN

a new novel by

Jack Vance



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Here, we begin the second novel of Jack Vance's "Durdane" trilogy. It is not necessary to have read the first book (THE FACELESS MAN, F&SF, Feb.-March 1971) to enjoy and understand this one, however Mr. Vance has provided a synopsis which will give you the necessary background. About Mr. Vance himself, we can say nothing; he has told us, "I'm absolutely convinced that a writer—especially a writer of fantasy—does himself and his story a disservice by intruding his face upon the reader's attention . . . If I ever use a pseudonym, it'll be 'Joe Smith' or 'William Jones' or maybe just XXXX." About his work we can say only the obvious: that he is one of the field's master storytellers. We are pleased and proud to be able to offer this major work.

The Brave Free Men

by JACK VANCE

Synopsis Book I: THE FACELESS MAN. The planet Durdane lies far to the back of the Schiafarilla Cluster and after nine thousand years has drifted below the horizon of terrestrial memory; for the folk of Durdane, Earth is only a myth.

Three suns, pale-blue, pink, pearl-white, illuminate Durdane, casting a lavender-tinted light. The single large continent is Caraz, a world-mass inhabited by barbarians. A second smaller continent to the east includes Shant and Palasedra, separated by the Great Salt Bog. The most populous region of Durdane is Shant, an agglomeration of sixty-two cantons with little in common save language, music, color symbology, and submission to the rule of the Anome (sometimes known as the Faceless Man). The Anome's identity is a mystery even to his assistants, the 'Benevolences': a system conducing to maximum scope and efficiency. The Anome's authority derives from his ability to explode by radio signal the coded tore worn by every adult of Shant. This penalty is rare; in any event the Anome merely enforces cantonal law. Across the placid centuries there has been little need to project a strong or personal decisiveness.

At Bashon in Canton Bastern is the temple community of the Chilites. Under the influence of the drug galga, the Chilite men worship the sublime female principle Galexis. Ordinary women are excluded from the rite and are held to be unclean. The young women of the community inhabit cottages along Rhododendron Way, consorting with wayfarers; older women work in the tannery. To Eathre is born a child, Gastel Etzwane, sired by Dystar, a wandering musician of great power. Etzwane, a serious, sensitive child, learning the identity of his blood-father, is stimulated to play a khitan discarded by a wandering musician: unorthodox activity by Chilite standards. When Etzwane's bearded 'Soul Father' Osso discovers Etzwane's secret, he wrathfully punishes both Etzwane and Eathre. Etzwane manages to escape; he is still too young for a torc. Eathre, not so lucky, must remain; she is sent to work in the tannery.

Etzwane makes his way west, encountering hardships and adventures. Without a torc he lacks legal identity and cannot claim the Anome's protection; he is seized by a labor-factor, indentured to the Balloonway System and sent to Angwin Junction, a switching station high in the Hwan. One of his co-workers is Jerd Finnerack, a blond good-natured lad a year or two older than himself.

A balloon sails into the junctions, guided by guy-lines attached to a dolly which rolls in a slot. Etzwane sets the balloon loose and clinging to the guy-lines is swept up and away from Angwin Junction, while Finnerack watches open-mouthed from below. The balloon drifts north on the wind and finally settles upon a Canton Trestevan meadow. Etzwane flees to a forest and for a period lives a wild free life. From a farm-house he steals a coat, but is noticed; the irate farmers put ahulphs, the semi-intelligent indigenes of Durdane, on his track. In desperation Etzwane implores the aid of a passerby—a tall white-haired man of uncertain age. This man, a certain Ifness, austerely declares himself unable to help. Etzwane, with the ahulphs almost upon him is finally rescued by the musician Frolitz, who allows Etzwane to join his troupe.

In due course Frolitz brings the troupe to the ancient glass city Garwiy, in Canton Garwiy. The Anome reputedly lives in one of the Aesthete palaces on the Ushkadel, above the city, and in the Corporation Plaza maintains an agency where petitions may be registered. Etzwane addressed to the Anome a five florin petition protesting the harsh penalties visited upon his mother. The Anome instructs Etzwane that his recourse, in accordance with the laws of Canton Bastern, is to pay off his mother's indenture, a matter of fifteen hundred florins.

Years pass. In Shant's central Wildlands the Roguskhoi, andromorphic savages eight feet tall, have suddenly become a menace. No one knows their origin, though Palasedra, the traditional enemy of Shant is suspected. The Roguskhoi display an insatiable lust and engage human females of any age or condition in a joyless frenzy of copulation. The issue is unnatural; in four months the woman gives birth to a dozen

Roguskhoi imps, and henceforth can produce only further litters of Roguskhoi. Inexplicably, the Anome will not move against the Roguskhoi, in spite of the popular will for action.

In the city Brassei, Frolitz gives Etzwane (now an accomplished musician) a bonus, which augments Etzwane's savings to where he can discharge Eathre's indenture. In a tavern he once again encounters Ifness who by chance is journeying east; the two sail east by the same balloon. At Carbado in Canton Bastern they meet horrifying news: the Roguskhoi, raiding down from the Hwan, have pillaged Bastern.

Etzwane and Ifness hasten to Bashon, to find devastation. The Chilites have secured themselves within their fortress-like temple; the women however have been herded back into the Wildlands.

Ifness, for all his peculiar detachment, is interested in the Roguskhoi. He helps Etzwane poison two casks of wine which they load aboard a wagon, then set off in pursuit. At Mirk Meadow, fifteen miles south of Bashon, they come upon the Roguskhoi. The time is sunset; the Roguskhoi are setting up camp.

Etzwane and Ifness display themselves, then flee, abandoning the wagon with the poisoned wine. The Roguskhoi drink the wine, then discovering themselves poisoned, wrathfully destroy the captured women, including Eathre, Etzwane's mother.

Etzwane and Ifness return to Garwiy, where Etzwane addresses a petition to the Anome, demanding that vigorous action be taken against the Roguskhoi. The Anome's response is bland and casual; he seems to consider the Roguskhoi as little more than a nuisance. Etzwane is astounded: how can the Anome assert such a patently incorrect point of view? Etzwane expresses dissent, in terms so bitter and vehement that the Anome's antagonism is aroused. Unwittingly Etzwane involves Ifness in the situation. Ifness can hardly speak for exasperation; his anonymity has now been compromised. He reveals himself to Etzwane as a Fellow of the Historical Institute of Earth, an organization which gathers data pertaining to the history of mankind from everywhere in the human ucosmos. Fellows of the Institute may not purposefully alter or influence events on the worlds they study. Ifness already has violated this prohibition, for motives which remain a mystery to Etzwane; Ifness is not a man for confidences.

Ifness continues to disregard Institute regulations. With Etzwane's assistance, he undertakes to discover the Anome's identity, but only uncovers new mysteries. Garstang, one of the Anome's 'Benevolences', in effect commits suicide for no rational reason. They kidnap another Benevolence, the beautiful Jurjin of Xhiallinen. Ifness's truth-drug induces not a flow of information but almost immediate coma. Ifness is baffled. Why do Garstang and Jurjin display such extraordinary conduct? Even more mystifying is the basic question: why does the Anome refuse to fight the Roguskhoi?

Eventually Etzwane and Ifness penetrate to the identity of the Anome; he is Sajarano, an Aesthete of the House of Sershan. Before

they can profit by the knowledge, an event occurs which causes Etzwane shock and dismay. Ifness's unorthodox conduct has attracted the attention of his superiors, and Ifness is forced to leave Durdane. Etzwane is left to cope with a demoralizing set of responsibilities.

Etzwane is by no means at a total disadvantage. He knows the Anome's identity. Ifness has taught him a technique to remove and disarm the torcs which subjugate the folk of Shant to the power of the Anome. On the other hand he is proscribed and hunted; his opponent controls the total power of Shant, and meanwhile the Roguskhoi strike ever more ferociously.

In a small cafe Etzwane chances upon Sajarano of Sershan: ostensibly an ordinary citizen of Garwiy. Etzwane uses one of Ifness's coercive drugs and forces Sajarano to Ifness's cottage, where Jurjin of Xhiallinen still lies in a coma. He activates Sajarano's torc; henceforth Etzwane can take Sajarano's head.

Etzwane now controls Sajarano, but problems and mysteries remain.

Why do the Roguskhoi attack Shant? Where is their homeland? Are they a natural or artificial race? If the latter, who sent them against Shant? If so, for what purpose? What influence compels Sajarano and the Benevolences to such self-defeating conduct? Etzwane can resolve none of these questions; neither Sajarano nor Jurjin can or will provide him information. He now wields unqualified power over them, and so allows them to go their own ways. Etzwane himself returns to Fontenay's Tavern, to decide how to use his awesome new power.

THE BRAVE FREE MEN

CHAPTER 1

IN A CHAMBER HIGH UNDER the dormers of Fontenay's Inn, Etzwane stirred on his couch. Presently he arose and went to the window where the stars had paled on the violet dawn. The far slopes of the Ushkadel showed only the occasional green sparkle of a street lamp; the Aesthete palaces were dark.

In one of these palaces, thought Etzwane, the Faceless Man had slept no better than himself.

He turned away from the window and went to the washstand. A carbon-fume mirror gave back his image, a face altered both by the gloom of dawn and the umbral quality of the mirror. Etzwane peered close. This unreal, somewhat menacing person might well be himself most truly: the face sardonic, drooping of mouth, hollow of cheek; the skin sallow with a leaden sheen; the eyes dark holes, punctuated by a pair of glittered reflections. He thought: here stands Gastel Etzwane, first Chilite Pure Boy, then Pink-Black-Azure-Deep Greener, now a man of enormous power. He spoke to the image: "Today is a day of important events; Gastel Etzwane must now allow himself to be killed." The image gave back no reassurance.

He dressed and went down to the street. At a booth on the riverbank

he ate fried fish and bread and considered his prospects for the day.

In broad essence his job was simple. He must go to Sershan Palace and there compel Sajarano, the Anome of Shant, to do his bidding. If Sajarano demurred, Etzwane need merely press a button to explode his head, for now Sajarano wore a torc and Etzwane did not. It was work of stark and brutal simplicity—unless Sajarano divined his solitary condition, his lack of ally or confederate, in which case his situation became precarious.

With his breakfast finished there was nothing to deter him; he set forth up Galias Avenue. Sajarano, he reflected, would desperately be seeking to escape from his intolerable predicament. Etzwane asked himself: What, in Sajarano's place, would be his own response? Flight? Etzwane stopped short. Here was a contingency he had not considered. From his pouch he brought the pulse-emitter, once Sajarano's basic tool of law enforcement. Etzwane encoded the colors of Sajarano's torc. The yellow button would now—if necessary—detonate the torc, thereby removing Sajarano's head. Etzwane pushed the red "Seek" button. The box hummed, the sound fluctuating with change of direction. At maximum the box pointed toward Sershan Palace. Etzwane proceeded, more thoughtful than ever. Sajarano had not taken to flight. He might have evolved a strategy more active.

Galias Avenue terminated at the Marmione Plaza, where a fountain of milk-white water played over artifacts of purple glass; the Koronakhe Steps opposite, constructed by King Caspar Pandamon, rose toward the terraces of the Ushkadel. At the Middle Way, Etzwane left the steps and proceeded eastward, around the sweep of the Ushkadel. The prismatic Palace Xhiallinen rose above him; here lived Jurjin, the Faceless Man's "Benevolence." Among a dozen other mysteries, this: Why had Sajarano selected so conspicuously beautiful a girl for his deputy? . . .

The mystery, in this case, might be more apparent than real. So Etzwane speculated. The Anome, like any man, could suffer the pangs of love. Jurjin of Xhiallinen perhaps had reacted coolly to the attentions of Sajarano, who was neither handsome, dashing, nor distinguished. Perhaps she wondered when the Faceless Man had ordered her into his service, and had commanded her to take no lovers. In due course the Faceless Man might have ordered her to look kindly upon Sajarano. So Etzwane conjectured. . . He came to the palace Sershan, neither more nor less splendid than any of the others; here he halted, to review all circumstances. The next half hour would determine the future of Shant; each minute carried more weight than all the days of a normal man's life. He looked up and down the facade of Sershan Palace. Columns of crystal, more lucid and transparent than air itself, fractured the beams of the triple suns; the violet and green domes beyond sheltered chambers

where sixty Sershan generations had lived, celebrated their festivals, and died.

Etzwane trudged forward. He crossed the loggia, approached the portico, and here he paused. Six doors of inch-thick glass, each fifteen feet high, barred his way. No light or movement appeared within. Etzwane hesitated, uncertain how to proceed. He began to feel foolish, hence angry. He rapped on the glass. His bare knuckles made little noise; he pounded with his fist. He saw movement within; a moment later a man came around the side of the palace. It was Sajarano himself.

"These are ceremonial doors," said Sajarano in a mild voice. "We seldom open them; would you come this way?"

In glum silence Etzwane followed Sajarano to a side entrance. Sajarano motioned him within. Etzwane halted and searched Sajarano's face, to which Sajarano returned a faint smile, as if he found Etzwane's wariness amusing. With his hand on the yellow button Etzwane entered the palace.

"I have been expecting you," said Sajarano. "Have you breakfasted? Perhaps you'll take a cup of tea. Shall we go up to the morning room?"

He led the way to a sunny chamber with a floor of green and white jade tiles. The wall to the left was shrouded in dark-green vines; the wall to the right was clear white alabaster Sajarano motioned Etzwane to a wicker chair beside a wicker table, then at a sideboard served himself a few morsels of food and poured tea into a pair of silver-wood cups.

Etzwane carefully seated himself; Sajarano took the chair opposite, his back to the ceiling-high windows. Etzwane studied him with somber calculation, and Sajarano once again gave back his faint smile. Sajarano was not an imposing man physically, his features were small; under a broad high forehead his nose and mouth seemed almost immature, his chin was a nubbin. The Anome of popular conception was vastly different from this mild man.

Sajarano sipped his tea. Best to take the initiative, thought Etzwane, he spoke in a careful monotone: "As I previously mentioned, I represent that segment of the public which is seriously concerned in regard to the Roguskhoi. We believe that if decisive steps are not taken, in five years there will be no more Shant—only a great horde of Roguskhoi. As the Anome it is your duty to destroy these creatures; such is the trust the people of Shant repose in you."

Sajarano nodded without emphasis, and sipped his tea. Etzwane left his cup untouched. "These considerations," Etzwane continued, "forced my friends and myself to extreme lengths, as you know."

Sajarano nodded once more, a kindly reassuring nod. "These friends, who are they?"

"Certain persons who are shocked by the acts of the Roguskhoi."

"I see. And your position: You are the leader?"

"I?" Etzwane gave an incredulous laugh. "By no means."

Sajarano frowned. "Would it be fair to assume that the others of your group are known personally to me?"

"It is a matter which really has no bearing on the issue," said Etzwane.

"Perhaps not, except that I like to know with whom I am dealing."

"You need deal with no one; you need only muster an army and drive the Roguskhoi back into Palasedra."

"You make it sound so simple," said Sajarano. "A further question: Jurjin of Xhiallinen spoke of a certain Ifness, who demonstrated remarkable abilities. I confess to curiosity regarding this Ifness."

"Ifness is a remarkable man indeed," said Etzwane. "As to the Roguskhoi, what do you propose to do?"

Sajarano ate a slice of fruit. "I have considered the matter carefully, to this effect. The Anome is what he is only because he controls the lives of all the people of Shant but is himself exempt from such control. This is the definition of the Anome. It no longer defines me; I wear a torc. I can take no responsibility for acts or policies not my own. In short, I propose to do nothing."

"Nothing whatever? What of your normal duties?"

"I resign them all to you and your group. You wield the power; you must bear the burdens." Sajarano laughed at Etzwane's glum expression. "Why should I go into a hysteria of effort over policies whose wisdom I doubt? What nonsense this would be!"

"Am I to understand that you longer consider yourself Anome?"

"That is correct. The Anome must work anonymously. I can no longer do this. You, Jurjin of Xhiallinen, others in your group know my identity. I am no longer effective."

"Then who is to be Anome?"

Sajarano shrugged. "You, your friend Ifness, another member of your group. You control the power; you must accept the responsibility."

Etzwane frowned. Here was a contingency for which he had not prepared. Obduracy, threats, scorn, anger: yes. Supine relinquishment: no. It was too easy. Etzwane became wary. Sajarano's subtlety far exceeded his own. He asked cautiously, "You will cooperate with us?"

"I will obey your orders, certainly."

"Very well. First, a state of national emergency is to be proclaimed. We will identify the danger, then make it clear that an effort of major proportions must be made."

Sajarano made a polite sound. "So much is easy. Remember, however, that the population of Shant is over thirty million souls; to cry emergency to so many is a serious affair."

"Agreed; no dispute here whatever. Secondly, women must be evacuated from all areas adjacent to the Wildlands."

Sajarano gave him a look of polite

bewilderment. "Evacuated to where?"

"To the coastal cantons."

Sajarano pursed his small mouth. "It is not all so simple. Where will they live? Will their children accompany them? What of their homes, their ordinary duties? The cantons affected would number twenty or thirty. That is a large number of women."

"Which is precisely why we want them moved," said Etzwane. "That number of women impregnated by Roguskhoi means a vast horde of Roguskhoi!"

Sajarano shrugged. "What of the other difficulties I mentioned? They are real."

"Administrative detail," said Etzwane.

"To be handled by whom? Me? You? Your group?" Sajarano's tone had become patronizing. "You must think in terms of practicalities."

His strategy becomes clear, thought Etzwane. He will not oppose, but he will not help, and will do all in his power to induce indecision.

"Thirdly," said Etzwane, "the Anome, by executive order, must call into being a national militia."

Etzwane politely waited for Sajarano's objections; Sajarano did not disappoint him. "I regret the role of the carper, the defeatist; nevertheless I must point out that it is one matter to issue fiats; it is quite another to implement them. I doubt if you realize the full complexity of Shant. There are sixty-two cantons, with nothing in common but language."

"Not to mention music and color-lore.* Additionally, every citizen of Shant, with the seeming exception of yourself, hates and fears the Roguskhoi. The cantons are more united than you think."

Sajarano gave his little finger an annoyed jerk. "Let me recite the difficulties; perhaps then you will understand why I have drawn back from an intolerable confusion. To integrate sixty-two distinct militias, with sixty-two versions of life itself, is a stupendous task. An experienced staff is necessary. There is only myself and my single Benevolence—a girl."

"Since you consider my proposals inept," said Etzwane, "what were your own plans?"

"I have learned," said Sajarano, "that not every problem requires a solution. Many apparently urgent dilemmas dwindle and disappear if ignored. . . Will you drink more tea?"

Etzwane, who had drunk no tea, signaled in the negative.

Sajarano leaned back in his chair. He spoke in a reflective voice: "The army you propose is impractical for yet another reason—perhaps the most cogent of all. It would be futile."

"Why do you say that?"

"It is really obvious. When any problem must be solved, when some

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*Ael'skian. *More exactly: the symbology of color and color combinations; in Shant an intensely meaningful aspect of life, adding another dimension to the perception.*

irksome duty must be performed, it is referred to the Faceless Man. When folk complain of the Roguskhoi—have you heard them?—they always call on the Faceless Man to act! As if the Anome need only issue an ordinance to abate all and any nuisances! He has maintained peace for two thousand years, but it is the peace of a father upon a household of children."

Etzwane was silent for a period. Sajarano watched him with peculiar intensity. His gaze dropped to Etzwane's cup of tea. An idle thought drifted into Etzwane's head, which he rejected; certainly Sajarano would not attempt to poison him.

Etzane said, "Your opinions are interesting, but they argue only for passivity. My group insists that definite steps be taken: First, a declaration of national emergency. Second, women must be evacuated from regions surrounding the Hwan. Third, each canton must mobilize and train a militia. Fourth, you must designate me as your first aide, with all the authority you yourself command. If you are finished with your breakfast, we will issue these proclamations now."

"What if I refuse?"

Etzwane brought out the metal box. "I will take your head."

Sajarano nibbled at a wafer. "Your arguments are convincing." He sipped his tea and indicated Etzwane's cup. "Have you tasted it? I grow it at my own plantation."

Etzwane pushed his cup across the table. "Drink it."

Sajarano raised his eyebrows. "But I have my own cup."

"Drink it," said Etzwane in a harsh voice. "Otherwise I will believe that you have tried to drug me."

"Would I attempt so banal a ploy?" demanded Sajarano in a brassy voice.

"If you believed that I would discount such a trick as banal, then it becomes subtle. You can refute me by drinking."

"I refuse to be hectored!" spat Sajarano. He tapped his finger on the table. From the corner of his eye Etzwane saw the dark-green ivy tremble; he glimpsed a glinting trifle and jerked back. From his sleeve he brought the wide-effect tube he had taken from Sajarano and pointed it at the ivy. Sajarano emitted a terrible screech; Etzwane pushed the button. From behind the ivy sounded an explosion. Sajarano sprang across the table at Etzwane. "Murderer, Murderer! Oh, the horror, the murder, the blood of my dear one!"

Etzwane struck Sajarano with his fist; Sajarano fell to the rug and lay moaning. From under the ivy a red puddle began to well out across the jade.

Etzwane fought to control his stomach. His mind twisted and reeled. He kicked Sajarano, who looked up with a yellow face and a wet mouth. "Get up!" cried Etzwane hoarsely. "If Jurjin is dead, the fault is yours; you are her murderer! You are my mother's murderer as well; if you had controlled the Roguskhoi long ago, there would not be this

trouble!" He kicked Sajarano again. "Get up! Or I take your head in the bargain!"

Sajarano uttered a sob and staggered to his feet.

"So you instructed Jurjin to stand behind the ivy and kill me at your signal!" said Etzwane grimly.

"No, no! She carried an ampule gun, to drug you."

"You are insane! Can you imagine I would not have taken your head? And the tea—poisoned?"

"A soporific."

"What purpose does drugging me serve? Answer!"

Sajarano only shook his head. He had totally lost his poise; he pounded his forehead as if to subdue his thoughts.

Etzwane shook his shoulder. "What do you gain by drugging me? My friends would kill you!"

Sajarano mumbled, "I act as my inner soul dictates."

"From now on I am your inner soul! Take me to your office. I must learn how to communicate with the Discriminators* and the cantonal governments."

Sajarano, round shoulders slumping, led the way through his private study to a locked door. He touched code keys; the door opened; they climbed a spiral staircase to a chamber overlooking all Garwiy.

A bench along the far wall supported a number of glass boxes. Sajarano made a vague gesture. "This is radio equipment. It sends a narrow beam to a relay station on top the Ushkadel, and cannot be tracked. I press this button to transmit messages to the Office of Proclamations; by this, to the Chief Discriminator; by this, to the Hall of Cantons; by this, to the Office of Petitions. My voice is disguised by a filtering device."

"What if I were to speak?" asked Etzwane. "Would anyone know the difference?"

Sajarano winced. His eyes were dull with pain. "No one would know. Do you plan to become Anome?"

"I have no such inclination," said Etzwane.

"In effect this is the case. I refuse all further responsibility."

"How do you answer the petitions?"

"This was Garstang's job. I regularly checked his decisions on the display board. Occasionally he found it necessary to consult; not often."

"When you use the radio, what is your routine? What do you say?"

"It is very simple. I say: 'The Anome instructs that such an act be accomplished.' That is the end of it."

"Very good. Call now the Office of Proclamations, and all the rest. This is what you must say:

'In response to the depredations of the Roguskhoi, I proclaim a state of emergency. Shant must now mobilize its strength against these creatures and destroy them.' "

* *Avistioi. literally* Nice Discriminators: *the constabulary of the Garwiy Aesthetic Corporation, and the single sophisticated police force of Shant.*

Sajarano shook his head. "I cannot say that; you must do so yourself." He seemed disoriented. His hands twitched; his eyes jerked from side to side, his skin showed an ugly yellowish tint.

"Why can't you say it?" asked Etzwane.

"It is contrary to my inner soul. I cannot participate in your venture. It means chaos!"

"If we don't destroy the Roguskhoi, it means no more Shant, which is worse," Etzwane said. "Show me how to use the radio."

Sajarano's mouth trembled; for a moment Etzwane thought that he would refuse. Then he said, "Push that switch. Turn the green knob until the green light glows. Push the button of the agency you choose to call. Press the purple button, to signal the monitor. When the purple light flashes, speak."

Etzwane approached the bench; Sajarano drew back a few steps. Etzwane pretended to study the equipment. Sajarano darted for the door, passed through, swung it shut. Etzwane hurled himself into the opening; the two struggled. Etzwane was young and strong; Sajarano thrust with hysterical frenzy. Their two heads, on opposite sides of the opening, were only inches apart. Sajarano's eyes bulged, his mouth hung open. His feet slipped, the door swung back.

Etzwane said politely, "Who lives here beside yourself?"

"Only my staff," muttered Sajarano.

"The radio can wait," said Etzwane. "First I must deal with you."

Sajarano stood with sagging shoulders. Etzwane said, "Come. Leave these doors open. I want you to instruct your staff that I and my friends will be taking up residence here."

Sajarano gave a fatalistic sigh. "What are your plans for me?"

"If you cooperate, your life is your own."

"I will do my best," said Sajarano, in the voice of an old man. "I must try, I must try... I will call Aganthe, my major-domo. How many persons will be coming? I live a solitary life."

"I'll have to take counsel with them."

CHAPTER 2

Sajarano lay drugged in his bedchamber; Etzwane stood in the hall. What to do with the corpse? He did not know. Unwise to order the servants to remove it. Let it stay then, until he had organized matters... Lovely Jurjin! What a waste of beauty and vitality! He could summon no more fury against Sajarano; such emotion seemed stale. Sajarano clearly was insane.

Now: the proclamation. Etzwane returned to the radio room, where he wrote what he considered a succinct and emphatic message. Then he manipulated the array of dials and buttons as Sajarano had instructed. He first signaled the Bureau of Proclamations.

The purple light flashed.

Etzwane spoke. "The Anome orders dissemination throughout Shant the following proclamation:

"In response to the dangerous presence of the Roguskhoi in our midst, the Anome proclaims a state of emergency, effective immediately.

"For several years the Anome has attempted to deal with the invaders on the basis of peaceful persuasion. These efforts have failed; we now must act with the total force of our nation; the Roguskhoi will be exterminated or repelled into Palasedra.

"The Roguskhoi exhibit an unnatural lust, from which many women have suffered. To minimize further episodes of this type, the Anome orders that all women depart those cantons adjacent to the Wildlands. They are to travel to maritime cantons, where the authorities must prepare safe and comfortable accommodations.

"Simultaneously, the authorities in each canton shall organize a militia of able men, to the number of at least one man for each one hundred persons of population. Further orders in this regard will be forthcoming. Cantonal authorities, however, must immediately start the process of recruitment. Delay will not be tolerated.

"The Anome will make additional proclamations at an appropriate time. My executive aide is Gastel Etzwane. He will coordinate the separate efforts and speak with my voice. He must be obeyed in all regards."

Etzwane called the Chief Discriminator of Garwiy and once again read his proclamation. "Gastel Etzwane must be obeyed as if he were the Anome himself. Is this clear?"

The Chief Discriminator's voice returned: "Gastel Etzwane will be accorded full cooperation. I may say, your Excellency, that this policy will be welcomed through Shant. We are pleased that you are taking action!"

"It is not I," delcared Etzwane. "The folk of Shant are taking action. I only direct their efforts. I alone can do nothing!"

"This of course is correct," came the response. "Are there further instructions?"

"Yes. I want the most able technists of Garwiy assembled tomorrow at noon in the Corporation Offices, in order that I may take advice upon weapons and weapon production."

** Vitran: a process of visual representation unique to Garwiy. The artist and his apprentices use minute rods of colored glass a quarter-inch long, one twentieth of an inch in diameter. The rods are cemented lengthwise against a backplate of frosted glass. The finished work, illuminated from behind, becomes a landscape, portrait or pattern vital beyond all other representational processes, combining radiance, chromatic range, flexibility, refinement, detail and scope. Inordinate effort and time are required to produce even a small work, with approximately sixty thousand individual rods comprising each square foot of finished surface.*

"I will see to this."

"For the moment that is all."

Etzwane explored Sershan Palace. The staff watched him askance, muttering and wondering. Never had Etzwane imagined such elegance. He found richness accumulated over thousands of years: glass columns inlaid with silver symbols, rooms of pale blue opening upon rooms of old rose, whole walls worked into vitran* landscapes, furniture and porcelain of the far past, magnificent rugs of Maseach and Cansume, a display of distorted gold masks stolen at fearful risk from the interior of Caraz.

Such a palace, mused Etzwane, could be his own if he desired. Absurb that Gastel Etzwane, casually fathered by the druithine Dystar upon Eathre of Rhododendron Way, should be—why not admit the situation?—effectively Anome of Shant!

Etzwane gave a melancholy shrug. During his youth he had known penury; each florin he could save represented the fifteen-hundredth part of his mother's freedom. Now the wealth of Shant lay open to his hand! It held no appeal. . . And what to do about the corpse in the morning room?

In the library he sat down to ponder. . .Sajarano seemed not a villain, but a figure of doom. Why could he not have expressed himself frankly? Why could they not have worked together? Etzwane reviewed the dismal circumstances. Sajarano could not be kept drugged indefinitely; on the other hand he could not be trusted in any other condition—except dead.

Etzwane grimaced. He longed for the presence of Ifness, who seemed never to lack resource. In the absence of Ifness, allies of any sort would be welcome.

There was always Frolitz and his troupe: the Pink-Black-Azure-Deep Greeners. A ridiculous idea, which Etzwane rejected at once. . .who else? Two names entered his mind: Dystar his father, Jerd Finnerack.

Essentially he knew little of either. Dystar was not even aware of his existence. Etzwane nevertheless had heard Dystar's music and had been provided evidence as to Dystar's inner self. As for Finnerack, Etzwane remembered only a sturdy youth with a determined brown face and sun-bleached blond hair. Finnerack had been kind to the desperate waif Gastel Etzwane; he had encouraged Etzwane to attempt escape from Angwin Junction, an island in the air. What had become of Jerd Finnerack?

Etzwane returned to the radio room. He called the Chief Discriminator's office and requested that information regarding Jerd Finnerack be solicited from the baloon-way office.

Etzwane looked in upon Sajarano, who lay supine in drugged slumber. Etzwane scowled and left the room. He summoned a footman to the great parlor and sent him to Fontenay's Inn, where he was to find Frolitz and fetch him to Sershan Palace.

In due course Frolitz arrived, at

once truculent and apprehensive. At the sight of Etzwane, he stopped short, jerked his head back in suspicion.

"Come in, come in," said Etzwane. Waving away the footman, he led Frolitz into the great parlor. "Sit down. Will you take tea?"

"Certainly," said Frolitz. "Are you about to divulge the reason for your presence here?"

"It is a queer set of circumstances," said Etzwane. "As you know, I recently submitted a five hundred florin petition to the Anome."

"Of this I am aware; more fool you."

"Not altogether. The Anome had come to share my views; he therefore asked me to assist in what will be a great campaign against the Roguskhoi."

Frolitz gaped in astronishment. "You? Gastel Etzwane the musician? What fantasy is this?"

"No fantasy. Someone must do these jobs. I agreed; additionally, I volunteered your services in this same cause."

Frolitz's grizzled jaw dropped even further. Then his eyes took on a sardonic gleam. "Of course! Precisely what is needed to send the Roguskhoi scuttling: old Frolitz and his savage troupe! I should have thought of it myself."

"The situation is extraordinary," said Etzwane. "Still, you need only accept the evidence of your senses."

Frolitz gave a qualified assent. "We seem to be sitting like Aesthetes in an uncommonly luxurious palace. What next?"

"It is as I told you originally. We are to assist the Anome."

Frolitz examined Etzwane's face with renewed suspicion. "One matter must be clear beyond any reconsideration: I am not a warrior; I am too old to fight."

"Neither you nor I will actually wield a sword," said Etzwane. "Our duties are to be somewhat clandestine and—naturally—profitable."

"In what regard and to what degree?"

"This is Sershan Palace," said Etzwane. "We are to take up residence here: you, I, the entire troupe. We will be fed and lodged like Aesthetes. Our duties are simple, but before I tell you more, I want to learn your opinion of this appointment."

Frolitz scratched his head, working his sparse gray hair into a bristle. "You spoke of profit. This sounds like the Gastel Etzwane of old, who nurtured each florin as if it were a dying saint. All else carries the flavor of hallucination."

"We sit here in Sershan Palace. Hallucination? I think not. The proposal is unexpected, but as you know, strangs things happen."

"True! The musician lives a startling life... I certainly have no objection to occupying Sershan Palace, for as long as the Sershans permit. This would not be your idea of a prank, to see old Frolitz hauled off to Stonebreakers' Island, protesting innocence all the while?"

"Absolutely not, I swear it. What of the troupe?"

"Would they ignore such an opportunity? What then would be our duties—assuming the matter not to be a hoax?"

"It is a peculiar situation," said Etzwane. "The Anome wants Sajarano of Sershan kept under observation. To be blunt, Sajarano is to be held under house arrest. That is to be our function."

Frolitz grunted. "Now I am beset by another fear: if the Anome starts to employ his musicians as jailers, he may decide to use the displaced jailers as musicians."

"The process will not go so far," said Etzwane. "Essentially, I was instructed to recruit a few trustworthy persons; I thought first of the troupe. As I say, we will all be well paid; in fact, I can requisition new instruments for everyone in the troupe: the best woodhorns, blackbirk khitans with bronze hinges, silver tipples, whatever may be needed or desired, and no thought for expense."

Frolitz's jaw dropped again. "You can do all this?"

"I can."

"If so, you may count upon the cooperation of the troupe. Indeed, we long have needed such a period of relaxation."

Sajarano occupied chambers high in a tower of pearl glass to the back of the palace. Etzwane found him primly at ease on a green satin couch, toying with a beautiful set of puzzle ivories. His face was drawn; his skin showed the color and texture of old paper. His greeting was reserved; he refused to meet Etzwane's gaze.

"We have acted," said Etzwane. "The force of Shant is now committed against the Roguskhoi."

"I hope that you find the problems as easy to resolve as to create," said Sajarano curtly.

Etzwane seated himself across from Sajarano on a white wood chair. "You have not altered your views?"

"When they derive from earnest study over a period of years? Of course not."

"I hope however that you agree to desist from adverse actions?"

"The power is yours," said Sajarano. "I must now obey."

"So you said before," noted Etzwane. "Then you attempted to poison me."

Sajarano gave a disinterested shrug. "I could only do as my inner voice dictated."

"Hmmf... What does it dictate now?"

"Nothing. I have known tragedy and my only wish is for seclusion."

"This you shall have," said Etzwane. "For a brief period, until events order themselves, a company of musicians with whom I am associated will ensure this seclusion. It is the minimal inconvenience I can impose on you. I hope you will take it in good part."

"So long as they do not rehearse or indulge in destructive horseplay."

Etzwane looked out the window

toward the forests of the Ushkadel. "How should we remove the corpse from the morning room?"

Sajarano said in a low voice, "Push the button yonder; it will summon Aganthe."

The major-domo appeared. "In the morning room you will find a corpse," said Sajarano. "Bury it, sink it in the Sualle, dispose of it as you like, but with all discretion. Then clean the morning room."

Aganthe bowed and departed.

Sajarano turned to Etzwane. "What else do you require?"

"I will need to disburse public money. What procedure do I follow in this regard?"

Sajarano's lips twitched with bitter amusement. He put aside the ivories. "Come."

They descended to Sajarano's private study, where for a moment Sajarano stood in cogitation. Etzwane wondered if he planned another grim surprise, and ostentatiously put his hand into his pouch. Sajarano gave the slightest of shrugs as if dismissing from his mind whatever idea had entered. From a cabinet he extracted a packet of vouchers. Etzwane cautiously came forward, finger on the yellow button. But Sajarano's defiance had waned. He muttered, "Your policies are far too bold for me. Perhaps they are right; perhaps I have buried my head in the sand... Sometimes I feel as if I have been living a dream."

In a dull voice he instructed Etzwane in the use of the vouchers.

"Let us have no misunderstandings," Etzwane told Sajarano. "You must not leave the palace, use the radio, send the servants on missions or entertain friends. We intend you no inconvenience, so long as you do nothing to provoke our suspicion."

Etzwane then summoned Frolitz and made him known to Sajarano. Frolitz spoke with a waggish cordiality. "This for me is unfamiliar employment; I trust that our association will be placid."

"It will be so on my part," said Sajarano in a bitter voice. "Well, then, what else do you require?"

"At the moment, nothing."

At the Bank of Shant the sum of twenty thousand florins was paid over without question or formality; never in his life had Etzwane thought to control so much money!

The function of money was its use; at a nearby haberdashery Etzwane selected garments he deemed consonant with his new role: a rich jacket of purple and green velour, dark green trousers, a black velvet cape with a pale-green lining, the finest boots to be had... He surveyed himself in the haberdasher's massive carbon-fume mirror, matching this splendid young patrician with the Gastel Etzwane of earlier days, who never spent a florin on other than urgent need.

The Aesthetic Corporation was housed in the Jurisdictionary, a vast construction of purple, green and blue glass at the back of the Corporation Plaza. The first two

levels dated from the Middle Pandamons; the next four levels, the six towers and eleven domes, had been completed ten years before the Fourth Palasedran War, and by a miracle had escaped the great bombardments.

Etzwane went to the office of Aun Sharah, Chief Discriminator of Garwiy, on the second level of the Jurisdictionary. "Be so good as to announce me," he told the clerk. "I am Gastel Etzwane."

Aun Sharah himself came forth: a handsome man with thick silver hair worn close to his head, a fine aquiline nose, a wide half-smiling mouth. He wore the simplest of dark-gray tunics, ornamented only by a pair of small silverwood shoulder clips: a costume so distinguished that Etzwane wondered if his own garments might not seem oversumptuous by comparison.

The Chief Discriminator inspected Etzwane with easy curiosity. "Come into my rooms, if you will."

They went to a large high-ceilinged office overlooking the Corporation Plaza. Like Aun Sharah's garments, the furnishings of his office were simple and elegant. Aun Sharah indicated a chair for Etzwane and settled upon a couch at the side of the room. Etzwane envied him his ease; Aun Sharah was distracted by no trace of self-consciousness. All his attention, so it appeared, was fixed upon Etzwane, who enjoyed no such advantage.

"You know of the new state of affairs," said Etzwane. "The Anome has committed the power of Shant against the Roguskhoi."

"Somewhat belatedly," murmured Aun Sharah.

Etzwane thought the remark a trifle insouciant. "Be that as it may, we must now arm ourselves. In this regard, the Anome has appointed me his executive deputy; I speak with his voice."

Aun Sharah leaned back into the couch. "Isn't it strange? Only a day or so ago a certain Gastel Etzwane was the object of an official search. I assumed you to be the same person."

Etzwane regarded the Chief Discriminator with pointed coolness. "The Anome sought me; he found me. I put certain facts at his disposal; he reacted as you know."

"Wisely! Or such is my opinion," said Aun Sharah. "What, may I ask, were the 'facts'?"

"The mathematical certainty of disaster unless we gave instant battle. Have you arranged the assembly of technists?"

"The arrangements are being made. How many persons did you wish to consult?"

Etzwane glanced sharply at the Chief Discriminator, who seemed bland and relaxed. Etzwane feigned perplexity. "Did not the Anome issue a specific command?"

"I believe that he left the number indefinite."

"In that case, assemble the most expert and well-regarded authorities, from which we can select a chairman or director of research. I want you to be on hand as well. Our first

objective is to assemble a corps of capable men, to implement the Anome's policies."

Aun Sharah nodded slowly and thoughtfully. "How much progress has been made along these lines?"

Etzwane began to find the casual gaze somewhat too knowing. He said, "Not a great deal. Names are still under discussion. . . In regard to the person Jerd Finnerack, what have you learned?"

Aun Sharah picked up a slip of paper. He read: " 'Jerd Finnerack: an indentured employee of the baloonway. Born in the village Isperio in the eastern region of Morningshore. His father, a berry grower, used the child's person as security against a loan; when he failed his obligation, the child was seized. Finnerack has proved a recalcitrant worker. On one occasion he criminally loosed a balloon from the switching-wheel at Angwin Junction, resulting in extensive charges against the company. These costs were added to his indenture. He works now at Camp Three in Canton Glaiy, which is an accommodation for refractory workers. His indenture totals somewhat over two thousand florins.' " He handed the paper to Etzwane. "Why, may I ask, are you interested in Jerd Finnerack?"

More stiffly than ever Etzwane said, "I understand your natural interest; the Anome however insists upon total discretion. In regard to another matter: the Anome has ordered a movement of women to the maritime cantons. Unpleasant incidents must be minimized. In each canton at least six monitors should be appointed, to hear complaints and note down particulars for subsequent action. I want you to appoint competent officers and station them as quickly as possible."

"The measure is essential," Aun Sharah agreed. "I will dispatch men from my own staff to organize the groups."

"I leave the matter in your hands."

Etzwane departed the office of the Chief Discriminator. On the whole, matters had gone well. Aun Sharah's calm visage undoubtedly concealed a seethe of clever formulations, which might or might not persuade him to mischief. More than ever, Etzwane felt the need of a completely trustworthy and trusted ally. Alone, his position was precarious indeed.

He returned by a roundabout route to Sershan Palace. For a period he thought that someone followed him; but when he stepped through Pomegranate Portal and waited in the gloom behind the pillar, no one came past; and when he continued, the way behind seemed clear.

CHAPTER 3

Exactly at noon Etzwane entered the main conference hall of the Jurisdictionary. Looking neither right nor left he marched to the speaker's platform; placing his hands on the solid silver rail, he looked out over the attentive faces.

"Gentlemen: the Anome has prepared a message, which by his instructions I will read to you." Etzwane brought forth a sheet of parchment. "Here are the words of the Anome:

" 'Greetings to the technical aristocracy of Garwiy! Today I solicit your counsel in regard to the Roguskhoi. I have long hoped to repel these creatures without violence, but my efforts have been in vain; now we must fight.

'I have ordered formation of an army, but this is only half the work; effective weapons are needed.

'Here is the exact problem. The Roguskhoi warrior is massive, savage, fearless. His principal weapons are a metal cudgel and a scimitar: this latter both a cutting and a throwing weapon, effective to a distance of fifty yards or more. In hand-to-hand combat an ordinary man is helpless. Our soldiers therefore must be armed with weapons useful to a range of one hundred yards, or preferably more.

'I place this problem in your hands, and direct that you immediately concentrate all your efforts upon this single task. All the resources of Shant will be at your disposal.

'Naturally, it is necessary that the effort be organized. So now I wish you to choose from among your present number a chairman, to supervise your efforts.

'For my executive representative I have appointed the person who reads this message, Gastel Etzwane. He speaks with my voice; you will report to him and follow his recommendations.

'I reiterate the urgency of this matter. Our militia is gathering and soon will need weapons.' "

Etzwane put down the paper, and looked out over the ranked faces. "Are there any questions?"

A stout and somewhat florid man rose ponderously to his feet. "The requirements are less than clear. What sort of weapons does the Anome have in mind?"

"Weapons to kill the Roguskhoi, and to drive them back, at minimal risk to the user," said Etzwane.

"This is all very well," complained the stout man, "but we are afforded no illumination. The Anome should provide a general set of specifications, or at least basic designs! Are we required to grope in the dark?"

"The Anome is no technist," said Etzwane. "You people are the technists! Develop your own specifications and designs! If energy weapons can be produced, so much the better. If not, contrive whatever is practical and feasible. All over Shant the armies are forming; they need the tools of war. The Anome cannot ordain weapons out of thin air; they must be designed and produced by you, the technists!"

The florid man looked uncertainly from right to left, then sat down. In the back room Etzwane noticed Aun Sharah, who sat with a ruminative smile on his face.

A tall man with black eyes burning from a waxen face rose to his feet. "Your remarks are to the point, and we will do our best. But remember: we are technists, not innovators. We refine processes rather than create concepts."

"If you can't do the work, find someone who can," said Etzwane. "I delegate to you the responsibility for this task. Create or die."

Another man spoke: "A matter to affect our thinking is the size of the proposed army. This controls the number of weapons required. Elegance might well be less important than availability and effectiveness."

"Correct," said Etzwane. "The army will number between twenty thousand and one hundred thousand, depending upon the difficulty of the campaign. I might add that weapons are only the most urgent need. We also want communication equipment so that the commanders of the various groups may coordinate their efforts. Your chairman should appoint a team to develop such equipment."

Etzwane stood waiting for further inquiries, but a glum and dubious silence persisted. Etzwane said, "I will leave you to your work. Select a chairman, a man whom you know to be competent, decisive and, if necessary, harsh. He will designate work groups as he deems practical. Questions or recommendations will reach me through the Chief Discriminator Aun Sharah."

Etzwane bowed and departed the way he had come.

Etzwane rode a diligence to Sershan Palace. In the radio room he adjusted the filter, to disassociate himself from the previous message; he then called Aun Sharah. "This is Gastel Etzwane. I have taken counsel with the Anome. He has ordered that you and I go forth as plenipotentiaries to all regions of Shant. You are required to visit the cantons east of the Jardeen and north of the Wildlands, including Shkoriy, Lor-Asphen, Haghead and Morningshore. I am assigned the cantons to west and south. We are to stimulate and, if necessary, coerce the mobilization and training of the various militias. Do you have any questions?"

There was a brief silence. "You used the word 'coerce.' How is this to be effected?"

"We are to note particulars of recalcitrance; the Anome will inflict penalties. Conditions vary. I can offer no explicit instructions; you must use your best judgment."

Aun Sharah's voice was a trifle bleak: "When am I to leave?"

"Tomorrow. Your first cantons should perhaps be Wale, Purple Fan, Anglesiy, Jardeen and Conduce; then you can take the balloon-way at Brassei Junction for the far west. I go first to Wild Rose, Maiy, Erevan and Shade, then take balloon for Esterland. For funds we are to issue drafts against the Bank of Shant, and naturally stint ourselves nothing," Etzwane concluded.

"Very well," said Aun Sharah without enthusiasm. "We must do what is required."

CHAPTER 4

The balloon *Iridixn*, requisitioned by Etzwane, swayed at the loading platform: a triple-segmented slab of withe, cord and glossy film. The winch-tender was Casallo, a young man of airs and graces, who performed the sensitive acts of his trade with bored disdain. Etzwane stepped into the gondola; Casallo, already in his compartment, asked: "What, sir, are your orders?"

"I want to visit Jamilo, Vervei, Sacred Hill in Erevan, Lanteen in Shade. Then we will proceed directly across Shant to Esterland."

"As you wish, sir." Casallo barely stifled a yawn. Over his ear he wore a sprig of purple arasma, souvenir of last night's revelry. Etzwane watched with suspicion as Casallo checked the action of his winches, tested gas valves and ballast release, then dropped the semaphore. "Up we go."

The station gang walked the judas-dolly down the slot, allowing the balloon a medium scope. Casallo negligently adjusted cant and aspect, to lay the balloon on a broad reach across the wind. The guys were detached from the sheave on the judas-dolly; the running-dolly was released from its clamp; the balloon slid away; the dolly whirred cheerfully down the slot. Casallo adjusted the guys with the air of a man inventing a new process; the balloon perceptibly accelerated and sailed east through Jardeen Gap. The Ushkadel became a dark blur to the rear, and presently they entered Wild Rose, where among wooded hillocks, vales, ponds and placid meadows the Aesthetes of Garwiy maintained their country estates.

So began Etzwane's inspection tour of the southern cantons. His first stop was the market town Jamilo in central Wild Rose, where no one had so much as noticed the Emergency Proclamation. At Vervei in Maiy, the Negociants declared themselves unable to recognize the emergency until they had fulfilled their annual quota of toys, candelabra, wooden bowls and salvers. In Conduce, Etzwane found simple confusion; in Shade, where the Roguskhoi were known and notorious, the aristocrats had organized a militia of indentured bondsmen, who performed but listlessly.

Etzwane organized, coerced, counseled and threatened, and wondered if sixty-two disparate cantons could be persuaded to act in effective unison by any means whatever.

The balloon-way led into the Wildlands, the *Iridixn* now sailing at the full length of its guys, the better to catch the most direct draughts of wind. At Angwin an endless cable drew the *Iridixn* across Angwin Gorge to Angwin Junction, an island in the sky which Etzwane long ago had escaped with the unwitting assistance of Jerd Finnerack.

The *Iridixn* continued southeast, across the most dramatic regions of the Wildlands. Casallo scrutinized the panorama through binoculars. He

pointed down into a mountain valley. "You're concerned with the Roguskhoi? Look there! A whole tribe before your eyes!"

Taking the binoculars, Etzwane observed a large number of quiet dark spots, perhaps as many as four hundred, beside a stockade of thorn bush. From under a dozen great cauldrons came wisps of smoke, to drift away down the valley. Etzwane examined the interior of the stockade. Certain ambiguous bunches of rags he saw to be huddles of women, to the number of possibly a hundred. At the back of the stockade, under the shelter of a rude shed, were perhaps others... Etzwane examined other areas of the camp. Each Roguskhoi squatted alone and self-sufficient; a few mended harness, rubbed grease on their bodies, fed wood into the fires under the cauldrons. None, so far as Etzwane could detect, so much as glanced up at the passing balloon or toward the dolly which rolled whirring through the slot not a quarter-mile distant... The *Iridixn* passed around a crag of rock; the valley could no longer be seen.

Etzwane put the binoculars on the rack. "Where do they get their swords? Those cauldrons are metal—a fortune wouldn't buy them."

Casallo laughed. "Metal cauldrons and they cook grass, leaves, black worms, dead ahulph and live ones too, anything they can get down their throats. I've watched them through the binoculars."

"Do they ever show any interest in the balloon? They could cause trouble if they meddled with the slot."

"They've never bothered the slot," said Casallo. "Many things they don't seem to notice. When they're not eating or breeding, they just sit. Do they think? I don't know. I talked to a mountain man who walked past twenty sitting quietly in the shade. I asked, 'Were they asleep?' He said, no; apparently they felt no urge to kill him. It's a fact: they never attack a man unless he's trying to keep them from a woman, or unless they're hungry—then he'll go into the cauldron along with everything else."

"If we were carrying a bomb, we could have killed five hundred Roguskhoi," said Etzwane.

"Not a good idea," said Casallo, who tended to contest or qualify each of Etzwane's remarks. "If bombs came from balloons, they'd break the slot."

"Unless we used free balloons."

"So then? In a balloon you can only bomb what lies directly below; not often would you drift over a camp. If we had engines to move the balloons, there's a different story; but you can't build engines from withe and glass, even if someone remembered the ancient crafts."

Etzwane said, "A glider can fly where a balloon can only drift."

"On the other hand," Casallo troubled himself to point out, "a glider must land, when a balloon will drift on to safety."

"Our business is killing Rogusk-

hoi," snapped Etzwane, "not drifting safely back and forth."

Casallo merely laughed and went off to his compartment to play his khitan, an accomplishment of which he was very proud.

They had reached the heart of the Wildlands. To all sides ridges of gray rock humped into the sky; the slot veered first this way, then that, compromising between vertical and horizontal variations, the first of which made for an uneasy ride and the second for continuous exertion on the part of the winch-tender. As much as possible, the slots led across the prevailing winds, to afford a reach to balloons in either direction. In the mountains the winds shifted and bounced, sometimes blowing directly along the slot. The winch-tender then might luff and cant, to warp his balloon off the side and low, thus minimizing the reverse vector. In worse conditions, he could pull the brake cord, wedging the wheels of the dolly against the side of the slot. In conditions worse yet, when the wind roared and howled, he might abandon the idea of progress and drift back down the slot to the nearest station or siding.

Such a windstorm struck the *Iridixn* over Conceil Cirque: a vast shallow cup lined with snow, the source of the river Mirk. The morning had shown a lavender-pink haze across the south and high in the east a hundred bands of cirrus through which the three suns dodged and whirled, to create shifting zones of pink, white and blue. Casallo predicted wind, and before long the gusts were upon them. Casallo employed every artifice at his command: luffing, warping high and low; braking, swinging in a great arc, then releasing the brake at a precise instant to eke out a few grudging yards, whereby he hoped to reach a curve in the slot a mile ahead. Three hundred yards short of his goal the wind struck with much force as to set the frame of the *Iridixn* groaning and creaking. Casallo released the brake, put the *Iridixn* flat on the wind, and drifted back down the slot.

At Conceil Siding the station gang brought the balloon down and secured it with a net. Casallo and Etzwane rested the night in the station house, secure within a stockade of stone walls and corner towers. Etzwane learned that the Roguskhoi were very much in evidence. The size of the groups had increased remarkably during the last year, the superintendent reported. "Before we might see twenty or thirty in a group; now they come in bands of two or three hundred, and sometimes they surround the stockade. They attacked only once, when a party of Whearn nuns were forced down by the wind. There wasn't a Roguskhoi in sight; then suddenly three hundred appeared and tried to scale the walls. We were ready for them—the area is sown thick with land mines. We killed at least two hundred of them, twenty or thirty at a time. The next day we hustled the nuns into a balloon and sent them

off and had no more trouble. Come, I'll show you something."

At the corner of the stockade a pen had been built from iron-wood staves; two small red-bronze creatures peered through the gaps. "We took them last week; they'd been rummaging our garbage. We strung up a net and baited it. Three tore themselves free; we took two. Already they're as strong as men."

Etzwane studied the two imps, who returned a blank stare. Were they human? derived from human stock? organisms new and strange? The questions had been raised many times, with no satisfactory answers. The Roguskhoi bone structure seemed generally that of a man, if somewhat simplified at the foot, wrist and rib cage. Etzwane asked the superintendent, "Are they gentle?"

"To the contrary. If you put your finger into the cage, they'll take it off."

"Do they speak, or make any sound?"

"At night they whine and groan; otherwise they remain silent. They seem little more than animals. I suppose they had best be killed, before they contrive some sort of evil."

"No, keep them safe; the Anome will want them studied. Perhaps we can learn how to control them."

The superintendent dubiously surveyed the two imps. "I suppose anything is possible."

"As soon as I return to Garwiy, I will send for them, and of course you will benefit from your efforts."

"That is kind of you. I hope I can hold them secure. They grow larger by the day."

"Treat them with kindness, and try to teach them a few words."

"I'll do my best."

Down from the Wildlands drove the *Iridixn*, and across the splendid forests of Canton Whearn. For a period the wind died completely; to pass the time Etzwane watched forest birds through the binoculars: undulating air-anenomes, pale-green flickers, black and lavender dragon birds... Late in the afternoon the wind came in a sudden rush; the *Iridixn* spun down the slot to the junction city Pelmonte.

At Pelmonte water of the river Fahalusra, diverted by flumes, provided power for six huge lumber mills. Logs floating down the Fahalusra from the forests were cleaned, trimmed, ripped into planks by saws of sintered iron-web. In seasoning yards the lumber dried in clamps, underwent surfacing, impregnation with oils, stains and special ointment; then it was either loaded aboard barges or cut to patterns for far assembly. Etzwane had visited Pelmonte as a Pink-Black-Azure-Deep Greener; he well remembered the redolence of raw sap, resin, varnish and smoke which permeated the air. The Canton superintendent gave Etzwane an earnest welcome.

The Roguskhoi were well-known in North Whearn; for years the lumbermen had kept a watch along the Fahalusra, turning back dozens

of minor incursions, using crossbows and pikes, which in the forests were weapons more advantageous than the thrown scimitar of the Roguskhoi.

Recently the Roguskhoi had been attacking by night and in larger bands; the Whears had been driven back beyond the Fahalusra, to their great disturbance. Nowhere in Shant had Etzwane found so much zeal. The women had been sent south; the militia drilled daily. "Take this message to the Anome!" declared the superintendent. "Tell him to send weapons! Our pikes and crossbows are futile in the open country; we need energy-darts, flashing lights, death-horns, and dire contrivances. If the Anome in his power will provide weapons, we will use them!"

"At Garwiy the best technists of Shant work to this end," said Etzwane. "Meanwhile, if your crossbows kill Roguskhoi, build bigger crossbows, with greater range." He remembered the Roguskhoi encampment high in the Hwan. "Build gliders: one, two and six-man carriers; train flyers. Send to Haghead and Azume; demand their best gliders. Take these apart and use the pieces for patterns. For fabric and film, send to Hinthe, Marestiy, Purple Stone; require their best in the name of the Anome. For cordage obtain the finest from Cathriy and Frill. In Ferriy the iron workers must set out new tanks; even though they lose their secrets, they must train new men. . . Call on the resources of all Shant in the name of the Anome."

From Pelmonte the *Iridixn* flew to Luthe and the southeast cantons Bleke, Esterland, Morningshore and Ilwiy. The *Iridixn* then returned to Pelmonte, and swung out along the Great Southern Line, through those wild cantons fronting on the Salt Bog. In each canton Etzwane found a different situation, a different point of view. In Dithibel the women who owned and managed all shops refused to leave the mountain areas, out of the certain knowledge that the men would loot their stocks. At the town Houvannah, Etzwane, hoarse with rage, cried: "Do you then encourage rape? Have you no sense of perspective?"

"A rape is soon; a loss of goods is long," stated the Matriarch. "Never fear, we have pungent remedies against either nuisance." But she craftily refused to spell out the remedies, merely hinting that "bad ones will rue the day. The thieves, for instance, will find themselves without fingers!"

In Burazhesq, Etzwane encountered a pacifist sect, the Aglustids, whose members wore only garments fashioned from their own hair, which they argued to be natural, organic, and deleterious to no other living organism. The Aglustids celebrated vitality in its every aspect, and would eat no animal flesh, no vegetable seed or kernel, or nut, and fruit only when the seed might be planted and afforded a chance to exist. The Aglustids argued that the Roguskhoi, more fecund than man, produced more life and were hence to be

preferred. They called for passive resistance to "the Anome's war." "If the Anome wants war, let the Anome fight," was their slogan, and wearing their garments of matted hair they paraded through the streets of Manfred, chanting and wailing.

Etzwane was at a loss as to how to deal with them. To temporize went against the grain of his temperament. Still, in what direction should he act? To take the heads of so many tattered wretches was an intolerable idea: on the other hand, why should they be allowed to indulge themselves in recalcitrance while better men suffered for the common good?

In the end Etzwane threw up his hands in disgust and went his way into Shker, where he encountered a condition once more new and distinct, though with haunting echoes of the situation in Burazhesq. The Shker were diabolists, worshiping a pantheon of demons known as *golse*. They espoused an intricate and saturnine cosmology, whose precepts were based on a syllogism, thus:

Wickedness prevails throughout Durdane.

The *golse* are evidently more powerful than their beneficent adversaries.

Therefore it becomes the part of simple logic to appease and glorify the *golse*.

The Roguskhoi were held to be avatars of the *golse* and creatures to be revered. Arriving at the town Banily, Etzwane learned that none of the Anome's orders had been heeded, much less acted upon. The Vay of Shker said with doleful fatalism: "The Anome may well take our heads; still we cannot range ourselves against creatures so sublime in their evil. Our women go willingly to them; we offer food and wine to their appetites; we make no resistance to their magnificent horror."

"This must stop," declared Etzwane.

"Never! It is the law of our lives! Must we jeopardize our future simply for your irrational whims?"

Once more Etzwane shook his head in bafflement and went on into Canton Glaiy: a region somewhat primitive, inhabited by a backward folk. They offered him no problems: the regions near the Hwan were uninhabited save for a few feudal clans, who knew nothing of the Anome's instructions. Their relationship with the Roguskhoi was not unequal; whenever possible they waylaid and killed single Roguskhoi, in order to obtain the precious metal in bludgeon and scimitar.

At the principal town, Orgala, Etzwane taxed the three High Judges with their failure to commission a militia; the Judges merely laughed. "Anytime you wish a band of able men for your purposes, give us two hour's notice. Until you can provide weapons and definite orders, why should we inconvenience ourselves? The emergency may pass."

Etzwane could not dispute the logic of the remarks. "Very well," he said. "See that when the time comes

you are able to perform as promised... Where is Camp Three, the balloon-way's work agency?"

The Judges looked at him curiously. "What will you do at Camp Three?"

"I have orders from the Anome."

The Judges looked at each other and shrugged. "Camp Three is twenty-five miles south, along the Salt Bog Road. You plan to use your fine balloon?"

"Naturally; why should I walk?"

"No reason, but you must hire a tow of pacers; there is no slot."

An hour later Etzwane and Casallo in the *Iridixn* set forth to the south. The balloon-guys were attached to the ends of a long pole, which counteracted the buoyancy of the balloon. One end of the pole was attached to the backs of two pacers; the other end was supported by a pair of light wheels, with a seat on which the driver rode. At a fast trot the pacers set off down the road, with Casallo adjusting the aspect of the balloon to produce as little strain as possible. The ride was noticeably different from the movement of a balloon on the wind, a rhythmic impulse being communicated up the guys to the balloon.

The motion and a growing tension put Etzwane into a dour dyspeptic mood. The airy Casallo, with no concerns other than the abatement of his own boredom brought forth his khitan; assured of his own musicianship and Etzwane's envious admiration, he attempted a mazurka of the classical repertory which Etzwane knew in a dozen variations. Casallo played the tune woodenly and almost accurately, but on one of the modulations he consistently used an incorrect chord, which presently exasperated Etzwane to a state where he cried out in protest: "No, no, no! If you must pound that instrument, at least use the correct chords!"

Casallo raised his eyebrows in easy amusement. "My friend, you are hearing the Sunflower Blaze; it is traditionally rendered thus and so; I fear you have no ear for music."

"In rough outline, yes. The tune is recognizable, though many times I have heard it played correctly."

Casallo languidly extended the khitan. "Be so good as to instruct me, to my vast gratitude."

Etzwane snatched the instrument, tuned the thumb-string, which was a pinprick sharp, played the passage correctly, with perhaps unnecessary brilliance. Then, working through a second modulation, he played an inversion of the melody in a new mode; then modulating again, he performed an excited staccato improvisation upon the original strain, more or less in accordance with his mood. He struck a double-handed coda with offbeats on the scratch-box and handed the khitan back to the crestfallen Casallo. "So goes the tune, with an embellishment or two."

Casallo looked from Etzwane to the khitan, which he now somberly hung on a peg, and set about oiling his winches. Etzwane went to stand by the observation window.

The countryside had become wild, almost hostile: patches of white and black rain forest stood like islands on a sea of saw grass. As they traveled south, the jungles grew darker and denser, the saw grass showed patches of rot, and presently gave way to banks of blue-white fleshmolt. Ahead gleamed the Brunai River; the road swung somewhat away and to the west, up and across a volcanic flow of rotten gray rocks, then detoured a vast field of overgrown ruins: the city Matrice, besieged and destroyed by the Palasedrans two thousand years before, now inhabited by the huge blue-black ahulphs of South Glaiy, who conducted their lives in a half-comic, half-horrifying travesty of human urbanity. The ruins of Matrice overlooked a peneplain of a thousand ponds and marshes; here grew the tallest osiers of Shant, in clumps thirty and forty feet tall. The workers of Camp Three cut, peeled, cured and bundled the withe, barged it down the Brunai to Port Palas, whence coastal schooners conveyed it to the balloon factories of Purple Fan.

The road passed through a grove of lowering black sambals. The north wind blew the baloon ahead of the pacers; for a period Casallo's attention was devoted to steering the balloon, to avoid fouling the towline in the trees. The baloon passed into the open; Casallo went back to the task of oiling the winches. The ride suddenly became velvet-smooth. Casallo stopped short in his work. He sprang to the observation port. "We've been cut loose!" He snatched at a lever, releasing the emergency grapnel; it fell toward the ground trailing two hundred yards of braided Cathriy filament. The hooks skimmed the ground, then engaged in a thicket of rotten osiers. The *Iridixn* halted with a downward swing.

"A very near thing," said Casallo. "Ten seconds later we would have been too high and out over the bog. . . I can't imagine what occurred. I'll soon find out."

Casallo slid down the towline to the ground; Etzwane came behind him. Casallo examined the end of the towline. "Not broken; cut. Someone has done us a mischief. Why should they want us out over the Salt Bog—unless to kill us?"

They scrutinized the sambal grove with care, but saw no movement. They picked their way over the soggy hummocks to the road and slowly approached the sambals. In the shade the pacer team stood quietly. The driver was nowhere to be seen.

Step by step, Etzwane and Casallo moved up the road, watching, listening. In the road behind the cart the body of the driver came into view; the two stopped short in consternation.

A faint sound. Etzwane flung himself to the ground, and over his head sang a barely glimpsed projectile. Etzwane touched the button of the wide-effect tube; the foliage was disturbed by a double explosion.

Etzwane went to examine the headless corpses. One wore a pale

canvas tunic, gray trousers, boots of chumpa* leather, and carried a crossbow. The other wore a coarse gray smock and withe sandals.

The driver lay dead, a splint of black gandle-wood protruding from his forehead.

Etzwane and Casallo drove the cart south along the road, the *Iridixn* swinging ahead on the wind. Etta, Sassetta and Zael whirled through zones of color; the air over the wasteland quivered; mirages could not be differentiated from the myriad sloughs and ponds.

In due course the two men arrived at the Camp Three stockade. Three men came slowly forward: one tall, full-fleshed, with bitter grey eyes; the second stocky, bald, with an enormous chin and jaw; the third somewhat younger, lithe and supple as a lizard, with inappropriate black ringlets and flint-black eyes. They were part with the landscape: harsh, humorless men without ease or trust. They wore wide-brimmed hats of bleached saw-grass cord, white tunics, gray trousers, ankle boots of chumpa-hide; at their belts hung small crossbows, shooting gandle-wood splints. Each stared coldly at Etzwane, who could not understand the near-palpable hostility and so for a moment was taken aback. He said: "I am Gastel Etzwane, executive assistant to the Anome. I speak with the Anome's voice. Who is director of the camp?"

"Shirge Hillen is Chief Custodian," said the first man. "He is not here at the moment."

Etzwane displayed a crossbow. "Is this the property of Shirge Hillen?"

After a brief hesitation the man nodded. "It is."

"Shirge Hillen is dead," said Etzwane. "Where is Jerd Finnerack? Bring him forth."

"He is not here."

Etzwane felt a sudden terrible fear. "Did he go forth with Shirge Hillen?"

"No. He is in confinement at the penal camp."

"Take me there at once."

At Angwin Junction, Finnerack had been a sturdy blond youth, mild and trusting. From sheer goodness, so it then had seemed, Finnerack had urged escape upon Etzwane and had even offered assistance. Certainly he had never envisioned Etzwane's dramatic act, which after the event had cost Finnerack dearly. Etzwane now realized that he had bought his own freedom at the cost of Finnerack's suffering.

From the detention house stumbled a thin crooked man of indeterminate age. His yellow-white hair hung in snarls past his ears. The assistant custodian jerked his thumb toward Etzwane. Finnerack turned to look, and across fifty yards

* *Chumpa: amphibious creatures of the Salt Bog, cousin to the ahulph, but larger, hairless, and somewhat more sluggish of habit. The chumpa, combining the subtlety and malice of the ahulph with a hysterical obstinacy, were proof against domestication.*

Etzwane felt the hot blue-white gaze. Slowly, painfully, as if his legs ached, Finnerack came down the road.

Finnerack halted. "What do you want of me?"

Etzwane searched the corded brown face, seeking the placid Finnerack of old. Finnerack clearly did not recognize him. Etzwane asked, "You are the Jerd Finnerack who served at Angwin Junction?"

"I am and I did."

"How long have you been here?" Etzwane indicated the detention house.

"Five days."

"Why were you brought here?"

"So they could kill me. Why else?"

"But you are still alive."

"True."

"Finnerack, you are now a free man."

"Indeed. Who are you?"

"There is a new Anome in the land of Shant. I am his executive assistant. What of the other prisoners? What are their crimes?"

"Three assaults on a guard. I have assaulted only twice; Hillen no longer can count to three."

"Hillen is dead," said Etzwane. "The new Anome is about to declare indenture contrary to public interest. Release the other prisoners."

Finnerack and Etzwane rode the diligence back to Camp Three. Finnerack studied Etzwane from the side of his eyes. "Somewhere I have known you," said Finnerack. "Where? Why did you come for me?"

Sooner or later the question must be answered. Etzwane said, "Long ago you did me a service which I finally am able to repay. This is the first reason."

In Finnerack's corded brown face the eyes glinted like blue ice.

Etzwane went on. "A new Anome has come to power. I serve as his executive assistant. I have many anxieties; I need an assistant of my own, a confederate upon whom I can rely."

Finnerack spoke in a voice of awe and wonder, as if he doubted either Etzwane's sanity or his own. "You have chosen me for this position?"

"This is correct."

Finnerack gave a chuckle of wild amusement, as if his doubts were now resolved: both he and Etzwane were mad. "Why me, whom you hardly know?"

"Caprice. Perhaps I remember how you were kind to a desperate waif at Angwin."

"Ah!" The sound came up from the depths of Finnerack's soul. The amusement, the wonder were gone as if they had never existed. The bony body seemed to crouch into the seat.

"I escaped," said Etzwane. "I became a musician. A month ago the new Anome came to power, and instantly called for war against the Roguskhoi. He required that I enforce this policy, and I myself was given power. I learned of your condition, though I did not realize the harshness of Camp Three."

Finnerack straightened in his seat. "Can you guess your risk in telling this tale? Or my rage toward those who have made my life? Do you know what they have done to me, to make me pay debts I never incurred? Do you know that I consider myself mad: an animal that has been made savage? Do you know how taut is the film that halts me from tearing you to pieces?"

"Restrain yourself," said Etzwane. "The past is the past; you are alive, and now we have work to do."

"Work?" sneered Finnerack. "Why should I work?"

"For the same reason I work: to save Shant from the Roguskhoi."

Finnerack uttered a harsh laugh. "The Roguskhoi have done me no harm. Let them do as they like."

For a period the diligence rolled north along the road. Etzwane finally spoke. "Have you never thought how you would better the world, had you the power?"

"I have indeed," said Finnerack in a voice somewhat milder than before. "I would destroy those who had ravaged me: my father, Superintendent Dagbolt at Angwin, the wretched boy who took his freedom and made me pay the cost, the balloon magnates, the camp custodians. There are many."

"This is the voice of your anger," said Etzwane. "By destroying these people you do nothing real; the evil continues, and somewhere other Jerd Finneracks will ache to destroy you for not helping them when you had power."

"Correctly so," said Finnerack. "All men are bags of vileness, myself as well. Let the Roguskhoi kill all."

"It is foolish to be outraged by a fact of nature," said Etzwane. "Men are as they are, and on Durdane even more so. Our ancestors came here to indulge their idiosyncracies; an excess of extravagance is our heritage. Viana Paizafiume understood this well and put torcs around our necks to tame us."

Finnerack tugged at his torc so viciously that Etzwane shrank away for fear of an explosion.

"I have not been tamed," said Finnerack. "I have only been enslaved."

CHAPTER 5

Camp Three was no more. The erstwhile indentured men, free of all debt, each with a draft for five hundred florins upon the Bank of Shant, marched singing and shouting up the road to Orgala. The custodians and guards, in fear for their lives, remained within the stockade.

The *Iridixn* had been pulled to the ground; Etzwane stepped into the gondola, followed by Finnerack, whom Casallo regarded with shock and fastidious dismay; for a fact Finnerack was somewhat unkempt. He had neither bathed, nor changed his clothes; his hair was tangled and overlong; his smock was torn and filthy.

The *Iridixn* lifted into the air, the pacers set off to the north. Etzwane

felt like a man awakening from a nightmare. Two questions occupied his mind. How many more Camp Threes existed in Shant? Who had warned Shirge Hillen of his visit?

At Orgala the *Iridixn* returned to the slot, and reaching on a fresh breeze, spun off into the northwest. Late in the following day they entered Canton Gorgash, and the following morning put down at the city Lord Benjamin's Dream. Etzwane found no fault with the Gorgash militia, though Finnerack made sardonic criticisms in regard to the pompous leadership, almost equal in numbers to the uninterested and sluggish soldiers themselves. "It is a start," said Etzwane. "They have no experience in these matters. Compared with the folk of Dithibel or Burazhesq or Shker, these folk are proceeding with intelligence and urgency."

"Perhaps so—but will they fight the Roguskhoi?"

"That we will learn when the time comes. How would you alter matters?"

"I would strip the uniforms and plumed hats from the officers and make cooks of the lot. The troops I would split into four corps and skirmish them daily against each other, to anger them and make them vicious."

Etzwane reflected that a similar process had altered a placid blond youth into the corded brown recalcitrant now in his company. "It may come to that before we're done. At the moment I'm content to see so earnest a turnout."

Finnerack gave his jeering laugh. "When they find out what they're up against, there'll be less."

Etzwane scowled, not liking to hear his secret fears verbalized so openly. Finnerack, he thought, was by no means tactful. Etzwane looked him over critically. "Time we were repairing your appearance, which at the moment is a cause for adverse comment."

"I need nothing," Finnerack muttered. "I am not a vain man."

Etzwane would not listen. "You may not be vain, but you are a man. Consciously or unconsciously you are affected by your appearance. If you look untidy, unkempt and dirty, you will presently apply the same standards to your thinking and your general mode of life."

"More of your psychological theories," growled Finnerack. Etzwane nonetheless led the way to the Baronial Arcades, where Finnerack grimly allowed himself to be shorn, barbered, bathed, manicured, and attired in fresh garments.

At last they returned to the *Iridixn*, Finnerack now a wiry, taut-muscled man with a square, deeply lined face, a head of tight bronze curls, a bright ever-shifting gaze, a mouth clenched back in what at first view seemed a good-natured half smile.

At Maschein in Canton Maseach, the *Iridixn* reached the terminus of Calm Violet Sunset Route.

Etzwane bade Casallo farewell, while Finnerack stood somberly to the side; then the two set forth into the city.

A passenger punt which plied the many canals of Maschein took them to the River Island Inn, which, with its terraces, gardens, arbors and pergolas, occupied the whole of a rocky islet in the Jardeen. During his visits to Maschein as a penurious Pink-Black-Azure-Deep Greener, Etzwane had long and often gazed across the water at this most agreeable of hostelries; he now commanded a suite of four chambers giving on a private garden banked with cyclamen, blue spangle, lurlinthe.

Etzwane ordered an urn of frosted wine and copies of the local journals. Finnerack accepted a goblet of wine but showed no interest in the news, which was grim. Paragraphs by turns black, brown and mustard-ocher reported that in Cantons Lor-Asphen, Bundoran, Surrume the Roguskhoi were on the move, that Canton Shkoriy had fallen entirely under Roguskhoi control.

Another article surrounded in dark scarlet and gray described the Maseach militia, in sufficient detail that Etzwane decided to make no personal representations. With an uncomfortable grimace he read the final sentences:

> Our brave men have come together; they now familiarize themselves with military minutiae, long put aside and almost forgotten. With eagerness and hope they await the powerful weapons the Anome prepares; inspired by his majestic leadership they will smite the vicious red bandits and send them howling like scalded ahulphs.

"So they await my 'powerful weapons,' my 'majestic leadership,' " muttered Etzwane. If they knew him as he was, a bewildered musician, they would be less sanguine in their hopes... His eye fell on a notice bordered in gray and ultramarine. Etzwane read:

> Last night at the Silver Samarsanda the druithine Dystar made his appearance. His meal was bought long before he ordered it and anonymous gifts were pressed upon his uninterested attention. As usual he rewarded the company with astonishing hurusthra* and told of places where few are privileged to go. Dystar may return tonight to the Silver Samarsanda.

The Silver Samarsanda stood above the Jardeen, behind a line of tall pencil cypress: an irregular bulk of masonry, plastered and whitewashed, with a wide many-slanted roof of mossy tiles. Beside the entrance five colored lanterns hung in a vertical line: deep green, a dark smoky scarlet, a gay light green, violet, and once more dark scarlet; and at the bottom, slightly to the side, a small steady yellow lamp, the

Hurusthra: roughly, musical panoramas and insights.

purport of all being: *Never neglect the wonder of conscious existence, which too soon comes to an end!*

Etzwane and Finnerack entered the vaulted hall, still almost empty, and took a table close beside the musician's bench. A dish of sharp, bitter, pungent and salt pastilles was set before them. Partly from a malicious desire to confound Finnerack, Etzwane commanded the traditional feast of Forty-Five Dishes, and also instructed the steward to lay out the best for Dystar when and if he appeared.

The meal was served, one dish after another, with Finnerack at first grumbling at the smallness of the portions, which he considered overdainty, until Etzwane reminded him that so far he had consumed only twelve of forty-five dishes. At the twenty-eighth dish Dystar appeared in the entrance: a tall spare man with well-shaped features, wearing gray trousers and a loose gray-black tunic. He carried a khitan and a darabence with a green jade fingerplate; these he placed on the bench and settled at a table only six feet from Etzwane and Finnerack. Etzwane had seen him on a single previous occasion and had then been fascinated by Dystar's ease, strength, certainty.

The steward announced that his meal had been spoken for, to which Dystar gave an indifferent nod. Etzwane studied him sidelong, trying to read the flow of Dystar's thoughts. Here was his father, half of himself. Perhaps it was his duty to announce himself... Dystar might have a dozen sons, here and there across Shant, reflected Etzwane. The revelation might only irritate him.

The steward brought Dystar a salad of leeks in oil, the crust of a loaf, a dark sausage of meats and herbs, a jug of wine: a modest meal. Dystar had been sated with fine food, thought Etzwane; richness was no novelty to him, nor the attention of beautiful women...

Dish after dish after dish. Finnerack, who perhaps never in his life had tasted good wine, had become more relaxed, and examined the surroundings with a lessening of reserve.

Dystar finished half his food, pushed the rest away, and sat back, fingers around the stem of his goblet. His eyes passed across Etzwane's face; with a faint frown, he looked back, as if troubled by a fleeting recollection... He took up his khitan, and for a moment he examined it as if surprised to find such an ungainly and complicated instrument in his hands. He touched it lightly here and there, bringing all the unlikely parts into consonance, then put it aside for the darabence. He played a soft scale, adjusted whines and drones, then played a merry little jig, first with simple harmony, then with two voices, then three: a bit of virtuosity which he managed without effort or even any great interest. He put the darabence down and mused over his wine... The tables nearby were now crowded, with the most discriminat-

ing and perceptive folk of Maschein on hand to gain enlightenment.

Etzwane and Finnerack examined their thirty-ninth dish: pith of marrow-tree, slivered, crisped, salted, in a pale-green syrup, with a ball of purple jelly flavored with maroes and ernice, barely sweet. The accompanying wine, a subtle quick liquid, tasted of sunlight and air. Finnerack looked doubtfully at Etzwane. "Never in my life have I eaten so much. Yet—my appetite remains."

"We must finish the forty-five dishes," said Etzwane. "Otherwise they are not allowed to accept our money, the pleasant fiction being that the cooks have incorrectly prepared the dishes, or served in a crude manner. Eat we must."

"If such be the case I am the man for it."

Dystar began to play his khitan: a soft lilt, with no obvious pattern, but as he proceeded, the ear began to anticipate and hear the pleasant corroboration. So far he had played nothing which Etzwane could not easily duplicate. . . Dystar struck a set of soft strange chords, and began to play the melody with the chords tolling below like mournful sea bells. . . Etzwane wondered as to the nature of Dystar's talent. Part, he thought, derived from ease and simplicity, part from profundity, part from a detachment which made him indifferent to his audience, part from a sleight which allowed him to play as the whim took him. Etzwane felt a pang of envy; for his part he often avoided passages the resolution of which he could not foresee, knowing well the fragile distinction between felicity and fiasco. The music came to an end, without notable accent or emphasis, the sea gongs fading into mist. Dystar put the instrument aside. Taking up his goblet, he gazed across the hall; then, as if in sudden recollection, he again lifted the khitan and tested a set of phrases. He played them a second time with an alteration of harmony, and they became a twitching eccentric melody. He modulated into another mode and the melody altered; effortlessly Dystar played the first and second together in wry counterpoint. For a moment he seemed to become interested in the music and bent his head over the neck of the khitan. . . He slowed the tempo, the doubled tunes became one, like a pair of colored images joining to create the illusion of perspective. . .

The last of the forty-five courses was served to Etzwane and Finnerack: a sour-sweet frost in shells of purple lacquer, with thimble-size goblets of Thousand Year Nectar.

Finnerack consumed the frost and tasted the nectar. His brown face seemed less gaunt; the mad blue glitter was gone from his eyes. Suddenly he asked Etzwane, "how much must be paid for this meal?"

"I don't know. . . Two hundred florins, I suppose."

"At Camp Three a man might not reduce his indenture two hundred florins in a year." Finnerack seemed rueful rather than angry.

"The system is archaic," said Etzwane. "The Anome will make changes. There will be no more Camp Threes, or Angwin Junctions, for that matter."

Finnerack turned him a glance of dour appraisal. "You seem very sure of the Anome's intentions."

For want of an appropriate reply, Etzwane let the remark go by. He raised a finger to the steward, who brought a tall earthenware flask, velvet with dust, from which he poured a cool pale wine, soft as water.

Etzwane drank; Finnerack cautiously followed suit.

Etzwane made an oblique reference to Finnerack's remark. "The new Anome in my opinion is not a man hidebound by tradition. After the Roguskhoi are destroyed, important changes will be made."

"Bah!" said Finnerack. "The Roguskhoi are no great problem; the Anome need only hurl the might of Shant against them."

Etzwane chuckled sadly. "What might? Shant is feeble as a baby. The last Anome turned his face away from danger. It is all very mysterious; he is neither a wicked nor a stupid man."

"No mystery," said Finnerack. "He enjoyed ease above exertion."

"I might agree," said Etzwane, "were there not other mysteries as well: the Roguskhoi themselves, in the first instance."

"Again no mystery: they derive from Palasedran malice."

"Hmm... Who informed Hillen of my coming? Who gave orders that I be killed?"

"Is there any doubt? The balloon-way magnates!"

"Possible again. But there are other mysteries less easily explained." Etzwane recalled the Benevolence Garstang's suicidal attack and the peculiar mutilation worked upon his corpse, as if a rat had gnawed a hole in his chest.

Someone sat at their table. It was Dystar. "I have been studying your face," he told Etzwane. "It is a face I know, from the far past."

Etzwane collected his thoughts. "I have heard you play at Brassei; there perhaps you chanced to notice me."

Dystar glanced at Etzwane's torc to read the locality code. "Bastern; a strange canton."

"The Chilites no longer worship Galexis," said Etzwane. "Bastern is not so strange as before." Dystar, he noted, wore the rose and dull blue of Shkoriy. He asked, "Will you share our wine?"

Dystar gave a polite acquiescence. Etzwane signaled the steward, who brought another diorite goblet, eggshell thin, polished to the color and sheen of pewter. Etzwane poured. Dystar raised a finger. "Enough... I no longer enjoy food or wine. An innate fault, I suppose."

Finnerack gave his sudden harsh laugh; Dystar glanced at him with curiosity. Etzwane said, "For long years my friend has labored under indenture at a camp for recalcitrants, and has known bitter times. Like yourself, he has no taste for fine

food or wine, but for exactly opposite reasons."

Dystar smiled; his face a winter landscape suddenly illuminated by a shaft of sunlight. "Surfeit is not my enemy. I am troubled rather by what I would term an aversion to purchased pleasure."

"I am glad it is for sale," grumbled Finnerack. "I would find little elsewhere."

Etzwane looked ruefully at the expensive flask of wine. "How then do you spend your money?"

"Foolishly," said Dystar. "Last year I bought land in Shkoriy: a high valley with an orchard, a pond and a cottage, where I thought to pass my senility... Such is the folly of foresight."

Finnerack tasted the wine, put the goblet down, and looked off across the hall.

Etzwane began to feel uncomfortable. A hundred times he had envisioned the meeting between Dystar and himself, always in dramatic terms. Now they sat at the same table, and the occasion was suffocated in dullness. What could he say? *Dystar! You are my father; in my face you see your own bathos.* In desperation Etzwane said, "At Brassei your mood was better than tonight; I recall that you played with zest."

Dystar gave him a quick glance. "Is the situation so evident? Tonight I am stable; I have been distracted by events."

"The trouble in Shkoriy?"

Dystar was silent for a moment, then nodded. "The savages have taken my valley, where I often went, where nothing ever changed." He smiled. "A mood of melancholy induces music; on occasions of real tragedy I become merely insipid... By repute I am a man who plays only by caprice. Still, here are two hundred people come to listen, and I would not wish to disappoint them."

Finnerack, now drunk, his mouth sagging in a crooked smile, said, "My friend Etzwane professes musicianship; you should press him into service."

" 'Etzwane'? The master musician of old Azume," said Dystar. "Do you know this?"

Etzwane nodded. "My mother lived on Rhododendron Way. I was born nameless and took the name 'Gastel Etzwane' for my own."

Dystar reflected a moment, perhaps occupied with his own recollections of Rhododendron Way. Too long ago, thought Etzwane; he would remember nothing.

"I must perform." Dystar moved back to his bench. He took up the darabence to play a somewhat trivial set of melodies, as might be heard in the Morningshore dancehalls. Just as Etzwane began to lose interest, Dystar altered the set of his blare valve, to construct a sudden new environment: the same melodies, the same rhythm, but now they told a disturbed tale of callous departures and mocking laughter, of roof-demons and storm-birds. Dystar muted the whines, throttled the valves, and slowed his tempo. The music asserted

the fragility of everything pleasant and bright, the triumph of darkness, and ended in a dismal twanging chord... A pause, then a sudden coda remarking that, on the other hand, matters might easily be quite the reverse.

Dystar rested a moment. He struck a few chords, then played a complicated antiphony: glissandi swooping above a placid melody. His expression was abstracted, his hands moved without effort. Etzwane thought that the music came from calculation rather than emotion. Finnerack's eyelids were drooping; he had taken too much food and wine. Etzwane called the steward and paid the score; then he and Finnerack departed the Silver Samarsanda and returned to the River Island Inn.

Etzwane went out into the garden and stood in the quiet, looking up at the Schiafarilla, behind which, according to legend, lay old Earth... When he returned to the drawing room, Finnerack had gone to his couch. Etzwane took a stylus and on a card wrote a careful message, upon which he impressed the sigil of the Anome.

He summoned a boy. "Take this message to the Silver Samarsanda; deliver it into the hands of Dystar the druithine, none others. Do not respond to any questions· give over the message and depart Do you understand?"

"I do." The boy took the message and went off, and presently Etzwane went to his own couch. . As for the Repast of Forty-Five Dishes, he doubted if ever again he would dine so lavishly.

CHAPTER 6

Prompted by doubt and uneasiness, Etzwane decided to pass by the cantons of the far west and return at once to Garwiy. He had been gone longer than he intended, in Garwiy events moved faster than elsewhere in Shant.

Etzwane and Finnerack departed Maschein by riverboat; at Brassei Junction they boarded the balloon *Aramaad.* The Sualle gales had waned; the Shellflower winds provided a splendid reach; the *Aramaad* spun north along the slot at a steady sixty miles an hour Late in the afternoon they slid down the Vale of Silence, through the Jardeen Gap, and five minutes later descended to Garwiy Station.

At sunset Garwiy was at its most entrancing, with the low light from three suns drenching the glass of the spires, generating color in prodigal quantities. From all directions, high and low, on and through glass slabs, bulbs, bosses and carved ornaments, among and around the balustrades of high balconies, the ranked arches and buttresses, the crystal scrolls and prismatic columns, flowed the tides of saturated color: pure purples to charm the mind; limpid greens, dark and rich; water-green, leaf-green, emerald, dark and light blues, with ultramarine, smalt, and the range of middle blues, reflections and after-

images of crimson, inner shadows of light which could not be named; on near surfaces the luster of time: acrid metallic films. . . At a kiosk Etzwane bought a journal. The colors black, ocher, brown immediately struck his eyes. He read:

From Marestiy arresting news! The militia and a band of Roguskhoi have been engaged in a battle. The savage intruders, having worked awful damage in Canton Shkorly, which must now be reckoned totally under Roguskhoi control, sent a foraging party north. At the border a Marest troop staunchly denied the intruders passage, and a battle ensued. Though greatly outnumbered, the insensate red brutes advanced. The Marest men discharged arrows, killing or at least incommoding certain of the enemy; the others pressed forward without qualm. The Marest militia, adopting flexible tactics, fell back into the forest, where their arrows and fire-wad flings denied the Roguskhoi entry. The treacherous savages returned the fire-wads to set the forest ablaze, and the militia was forced back into the open. Here they were set upon by another band of savages assembled for just such a bloodthirsty purpose. The militia suffered many casualties, but the survivors have resolved to extract a great revenge when the Anome provides them potency. All feel certain that the detestable creatures will be defeated and driven away.

Etzwane showed the report to Finnerack, who read with half-contemptuous disinterest. Etzwane's attention meanwhile had been drawn to a box outlined in the pale blue and purple of sagacious statement:

Here are presented the remarks of Mialambre:Octagon, the respected High Arbiter of Wale:

The years during and immediately after the Fourth Palasedran War were decisive; during these times was forged the soul of the hero Viana Paizafiume. He has rightly been called the progenitor of modern Shant. The Hundred Years War undeniably derived from his policies; still, for all its horror, this century now seems but a shadow on the water. Paizafiume created the awful authority of the Anome and, as a logical corollary, the employment of the coded torc. It is a system beautiful in its simplicity: unequivocal rigor balanced against responsibility, economy, effectiveness, which in the main has been kind to Shant. The Anomes have been largely competent; they have honored all their commitments—to the cantons, allowing each its traditional style; to the patricians, imposing no arbitrary restraints; to the generality, making no exorbitant demands. The previous cantonal wars and depredations have receded to the

edge of memory, and are currently unthinkable.

Critical minds will discover flaws in the system. Still, when all is weighed, we have enjoyed many placid centuries.

If the study of human interactions could become a science, I suspect that an inviolate axiom might be discovered to this effect: *Every social disposition creates a disparity of advantages.* Further: *Every innovation designed to correct the disparity, no matter how altruistic in concept, works only to create a new and different set of disparities.*

I make this remark because the great effort which must now wrench Shant will beyond all question change our lives, in modes still unimaginable.

Etzwane looked once more to see who had formulated the piece. Mialambre:Octagon of Wale... Finnerack demanded somewhat peevishly: "How long do you propose to stand reading in the street?"

Etzwane signaled a passing diligence. "To Sershan Palace."

Finnerack presently spoke: "We are being followed."

Etzwane looked at him in surprise. "Are you sure?"

"When you stopped to buy the journal, a man in a blue cape stepped off to the side. While you read, he stood with his back turned. When we walked forward, he did likewise. Now a diligence follows behind."

"Interesting," said Etzwane.

The diligence turned left from Kavalesko Avenue out upon the Parade of the Chama Reyans. A diligence coming at no great distance behind turned also.

"Interesting," said Etzwane once again.

For a space they rolled along the Parade, then swung up the Metempe, a marble avenue connecting central Garwiy with the three Ushkadel terraces. Similax trees stood against the sky to cast plum-colored gloom over the pale stone. Behind, inconspicuously, came the second diligence.

A road glanced off to the side, under tape trees and similax. Etzwane called up to the driver: "Turn here!"

The driver tapped the neck of the long-legged pacer; smartly the diligence swung to the left, under tape trees so full and supple that the foliage stroked the top of the diligence. "Stop," said Etzwane. He jumped out. "Drive forward slowly."

The diligence continued, the pacers walking. Etzwane ran back to the intersection.

Silence, except for the rustle of the tapes, then the jingle of an approaching diligence. The sound grew louder; the diligence reached the intersection, halted. A keen-featured face peered up the side road... Etzwane stepped forward; the man turned him a startled look, then spoke a quick word to his driver. The diligence spun away up the Metempe.

Etzwane rejoined Finnerack, who

turned him a crooked side-glance, expressing a variety of emotions: dislike, vindication, saturnine amusement; and together, in an unlikely combination, curiosity with indifference. Etzwane, at first inclined to keeping his own counsel, decided that if his plans were to have application Finnerack had best be informed as fully as possible. "The Chief Discriminator of Garwiy is disposed to intrigue. This is my supposition, at least. If I am killed, he is the first to suspect."

Finnerack gave a noncommittal grunt. Etzwane looked back down the Metempe; no one seemed to be following.

The diligence turned into the Middle Way as green-spark street lamps came to life. Far around the arc of the Ushkadel they drove, past the ranked palaces of the Aesthetes, and at last came to the portal of the Sershans. Etzwane and Finnerack alighted; the diligence jingled off into the gloom.

Etzwane crossed the wide loggia, followed, at a casual stroll, by Finnerack. Etzwane stopped to listen; from within came that almost imperceptible stir which told of routine and unexcited occupation. Was that not the rasp of new fibers in a woodhorn? Etzwane grimaced; he had no real bent for intrigue, coercion, large designs. What an improbable condition that he, Gastel Etzwane, should be master of Shant! Still, better he than Finnerack—or so came a message from the underpart of his mind.

Etzwane put his misgivings aside. He took Finnerack to the entrance, where in response to his signal a footman drew aside the door.

Etzwane and Finnerack stepped into the reception hall, into a magic environment of opposing vitran panels, where nymphs disported in arcadian landscapes. Aganthe came slowly forward. He looked drawn, even a trifle unkempt, as if events had eroded his morale; he saw Etzwane with a gleam of hope. Etzwane asked, "Have affairs gone well?"

"Not well!" declared Aganthe, with a ring in his voice. "The ancient Sershan Palace has never before been so misused. The musicians play jigs and ballintries in the Pearl-web Salon; the children swim in the garden fountain; the men have ranged their caravans along the Ancestral Parade. They tie clothelines between the Named Trees; they strew refuse without remorse. Lord Sajarano—" Aganthe controlled his flow of words.

"Well?" Etzwane prompted. "What of Lord Sajarano?"

"Again I use candor, since this is what you require. I have often speculated that Lord Sajarano might suffer a nervous disease, and I have wondered at his odd activities. I have not recently seen Lord Sajarano, and I fear a tragedy."

"Take me to the musician Frolitz," said Etzwane.

"He will be found in the Grand Parlor."

Etzwane found Frolitz drinking

Wild Rose wine from a ceremonial silver mug and gloomily watching three children of the troupe who disputed possession of a hand-illuminated geography of West Caraz. At the sight of Etzwane and Finnerack he wiped his mouth and rose to his feet. "Where have you stayed so long?"

"I have traveled a wide circuit of the south," replied Etzwane, with the diffidence of long habit. "Naturally in all haste. I hope that you have profited by your rest?"

"Such profits are brummagem," snapped Frolitz. "The troupe rusticates."

"What of Sajarano?" asked Etzwane. "Has he given you difficulty?"

"No difficulty whatever; in fact he has vanished. We have been distracted with bewilderment."

Etzwane sank into a chair. "How and when did he disappear?"

"Five days ago, from his tower. The stairs were closed off; he acted no more distrait than usual. When he was served his evening meal, the window was open; he was gone like an *eirmelrath**."

The three went up to Sajarano's private rooms. Etzwane looked from the window. Far below spread patterns of moss. "Never a mark!" declared Frolitz. "Not a bird has disturbed the lay of the growth!"

A single narrow stairs connected the tower to the lower floors. "And here sat Mielke, on these selfsame stairs, discussing affairs with an undermaid. Agreed: they were not alert to the possibility of Sajarano stepping upon them on his way to freedom; still the occasion seems remote."

"Was there a rope in the room? Could he have torn up the draperies or bed linen?"

"Even with a rope he must have disturbed the moss. The linens were intact." Frolitz jumped to his feet. Holding his arms wide, fingers clenched and quivering, he asked: "How then did he leave? I have known many strange mysteries, but none so strange as this."

Etzwane wordlessly brought forth his pulse-emitter. He encoded the colors of Sajarano's torc and touched the red "Seek" button; the instrument immediately returned the thin whine of contact. He swung the mechanism in an arc; the whine waxed, then waned. "However Sajarano escaped, he fled no great distance," said Etzwane. "He seems to be up on the Ushkadel."

With Finnerack and Frolitz, Etzwane set forth into the night. They passed through the formal garden and climbed a flight of alabaster steps, the Schiafarilla casting a pale white light to show them the way. They crossed a pavilion of smooth white glass, where the secret Sershan pageants were performed, then pushed through a dense grove of similax, giant cypress, contorted ivory-woods, which ended only when they stepped out upon High Way. The pulse-emitter took

**Eirmelrath: a malicious ghost of Canton Green Stone.*

them neither right nor left, but up into the dark forest above High Way.

Frolitz began to grumble. "By training and by inclination I am a musician, not a prowler of forests, nor a searcher for creatures who chose to flit off alone, or in company."

"I am no musician," said Finnerack, staring up into the forest. "Still I think it sensible to proceed only with lanterns and weapons."

Frolitz reacted sharply to implications latent in Finnerack's remark. "A musician knows no fear! Sometimes he takes heed of reality; is this fear? You speak like a man with his head above the clouds."

"Finnerack is no musician," said Etzwane. "This is stipulated. Still, let us go for lights and weapons."

Half an hour later they returned to High Way, with glass lanterns and antique swords of forged iron-web. Etzwane additionally carried the energy pistol given him by Ifness.

Sajarano of Sershan had not moved from his previous position. Three hundred yards up the Ushkadel they found his corpse, laid out on a growth of white and gray lovelace.

The three swung their lanterns; the rays jerked nervously through the shades and nooks. One at a time they turned back to the shape at their feet. Sajarano, never large nor imposing, seemed a gnomish child, with his thin legs straight, his back arched as if in pain, his fine poet's forehead thrust back into the lovelace. The jacket of violet velvet was disarranged; the bony chest was bare, to display a ghastly gaping wound.

Etzwane had seen such a wound before, in the body of the Benevolence Garstang, on the day following his death.

"This is not a good sight," said Frolitz.

Finnerack grunted as if to say that he had seen worse, far worse.

"The ahulphs perhaps have been here," muttered Etzwane. "They might return." He played his lantern once more through the shadows. "Best that we bury him."

With sword blades and hands they scratched a shallow grave into the mold; presently Sajarano of Sershan, erstwhile Anome of Shant, was covered away from sight.

The three trudged back down to High Way, where by common impulse they turned a final glance up the hill. Then they proceeded down to Sershan Palace.

Frolitz would not pass through the great glass doors. "Gastel Etzwane," he stated, "I want no more of Sershan Palace. We have enjoyed the best of foods and liquors; we own the finest instruments in Shant. Still, let us not deceive ourselves: we are musicians, not Aesthetes, and it is time that we depart."

"Your work is done," Etzwane agreed. "Best that you return to the old ways."

"What of you?" demanded Frolitz. "Do you desert the troupe?

Where will I find a replacement? Must I play your parts and my own as well?"

"I am involved against the Roguskhoi," said Etzwane, "a situation even more urgent than good balance in the troupe."

"Can't other folk kill Roguskhoi?" growled Frolitz. "Why must the musicians of Shant leap to the forefront?"

"When the Roguskhoi are gone, I will rejoin the troupe, and we will play to draw the ahulphs down from the hills. Until then—"

"I will not hear this," said Frolitz. "Kill Roguskhoi during the day, if this is to your taste, but at night your place is with the troupe!"

Etzwane laughed weakly, half convinced that Frolitz's suggestion was sound. "You're off to Fontenay's?"

"At this very instant. What keeps you here?"

Etzwane looked up at the palace where Sajarano's personality pervaded every room. "Go your way to Fontenay's," said Etzwane. "Finnerack and I will be along as well."

"Spoken like a rational man!" declared Frolitz with approval. "It's not too late for a few tunes yet!" In spite of his previous declaration, he marched into the palace to rally the troupe.

Finnerack spoke in a wry voice: "A man flits from a high tower to be found with a hole in his chest, as if an ahulph had tested him with an auger. Is this how life goes in Garwiy?"

"The events are beyond my comprehension," said Etzwane, "although I have seen something similar before."

"This may be... So now you are Anome, without challenge or qualification."

Etzwane stared coldly at Finnerack. "Why do you say that? I am not Anome."

Finnerack gave a coarse laugh. "Then why did not the Anome discover Sajarano's death five days ago? It is a grave matter. Why have you not communicated with the Anome? If he existed, you would think of nothing else; instead you argue with Frolitz and make plans to play your tunes. That Gastel Etzwane should be Anome is strange enough; that he should not be is too much to believe."

"I am not Anome," said Etzwane. "I am a desperate makeshift, a man struggling against his own deficiencies. The Anome is dead; a void exists. I must create the illusion that all is well. For a period I can do this; the cantons control themselves. But the Anome's work accumulates: petitions go unanswered, heads are not taken, crimes go unpunished; sooner or later some clever man like Aun Sharah will learn the truth. Meanwhile I am impelled to mobilize Shant against the Roguskhoi as best I can."

Finnerack gave a cynical grunt. "And who then will be Anome? The Earthman Ifness?"

"He has returned to Earth. I have two men in mind: Dystar the

druithine, and Mialambre:Octagon. Either might qualify."

"And how do I fit into your schemes?"

"You must guard my back. I don't want to die like Sajarano."

"Who killed him?"

Etzwane looked off into the darkness. "I don't know. Many strange events happen in Shant."

Finnerack showed his teeth in a tight grin. "I don't want to die either. You are asking me to share your risks, which obviously are large."

"True. But are we not both motivated? We equally want peace and justice for Shant."

Finnerack again gave his dour grunt; Etzwane had no more to say. They went into the palace. Aganthe came to their summons. "Master Frolitz and his troupe are leaving the palace," said Etzwane. "They will not be returning and you can put matters to rights."

Aganthe's mournful face lit up. "Good news indeed! But what of Lord Sajarano? He is nowhere in the palace. I find here a cause for concern."

"Lord Sajarano has gone forth on his travels," said Etzwane. "Lock the palace securely; make sure that no one intrudes. In a day or so I will make further arrangements."

"I live by your commands."

When they stepped forth, Frolitz and the troupe were already departing, with a rumble of wheels and jocular calls.

Etzwane and Finnerack slowly descended the Koronskhe Steps. The Schiafarilla had dropped below the Ushkadel; up had come Gorcula the Dragon-fish, with the twin orange eyes Alasen and Diandas blazing down at Durdane. Finnerack began to look back over his shoulder. Etzwane became infected by his restiveness. "Do you see someone?"

"No."

Etzwane quickened his pace; they reached the pale expanses of Marmione Plaza; here they paused in the shadows beside the fountain. No one came behind. With somewhat more assurance they continued down Galias Avenue and presently arrived at Fontenay's Inn, on the banks of the Jardeen River.

At the side of the common room Etzwane and Finnerack consumed a supper of stewed clams, bread and ale. Looking across the well-remembered room, Etzwane was moved to reminiscence. He told of his adventures after fleeing Angwin Junction. He described the Roguskhoi raid of Bashon and the events subsequent; he spoke of his association with Ifness, the cold and competent Fellow of the Historical Institute. In this very room Etzwane had encountered the bewitching Jurjin, now, like Sajarano and Garstang, dead. "These events run black and yellow with mystery. I am fascinated and bewildered; I also fear a dreadful enlightenment."

Finnerack pulled at his chin. "I share only little of your fascination;

still I risk the full scope of this enlightenment."

Etzwane felt a throb of frustration. "You now know the circumstances; what is your decision?"

Finnerack drank his ale and set the mug down with a thud: the most emphatic gesture Etzwane had yet seen him make. "I will join you and for this reason: the better to further my own ends."

"Before we go further, what are these ends?"

"You already must know. In Garwiy and elsewhere through Shant rich men live in palaces. They gained their wealth by robbing me, and others like me, of our lives. They must make restitution. It will cost them dear but pay they shall, before I die."

Etzwane said in a voice without accent: "Your goals are understandable. For the present they must be put aside, lest they interfere with larger matters."

"The Roguskhoi are the imminent enemies," said Finnerack. "We shall drive them back to Palasedra and then wreak an equal justice upon the magnates."

"I promise nothing so wide as this," said Etzwane. "Fair restitution, yes. Cessation of abuses, yes. Revenge—no."

"The past cannot be erased," said Finnerack woodenly.

Etzwane pressed the matter no further. For better or worse, he must make do with Finnerack, at least for the present. The future?... If necessary, he would be merciless. He reached into his pocket. "I now give you the instrument I took from the Benevolence Garstang. This is how to encode a torc." Etzwane demonstrated. "Mind! here is the critical operation! First you must press 'Gray' to disarm the self-destruction cell. 'Red' is 'seek'; 'Yellow' is 'kill'."

Finnerack examined the box. "I am to keep this?"

"Until I require its return."

Finnerack turned his twisted grin upon Etzwane. "What if I craved power? I need only set the code to your color, and press 'Yellow'. Then Jerd Finnerack would be Anome."

Etzwane shrugged. "I trust in your loyalty." He saw no point in explaining that his torc, in the place of dexax, carried a warning vibrator.

Finnerack scowled down at the pulse-emitter. "By accepting this, I bind myself to your schemes."

"This is the case."

"For the moment," said Finnerack, "our lives go in the same direction."

Etzwane realized that he could expect nothing better. "The man I most distrust," he said, "is the Chief Discriminator; he alone knew of my interest in Camp Three."

"What of the balloon-way officials? They would also know."

"Unlikely," said Etzwane. "The Discriminators must often make such inquiries in the course of routine. Why should the balloon-way distinguish Jerd Finnerack from any other? Only Aun Sharah could connect me with you. Tomorrow I will reduce his scope... Finally, here is Frolitz."

Frolitz saw them at once, and came swaggering over to the table. "You have had a change of heart; my words are wisdom after all."

"I want no more of Sershan Palace," said Etzwane. "We think alike, in this regard."

"Wise! And here comes the troupe, straggling in like dock coolies. Etzwane, to the stand."

Etzwane automatically rose to the familiar command, then sank back into his chair. "My hands are stiff as sticks. I cannot play."

"Come, come," blustered Frolitz. "I know better. Oil your joints with the guizol; Cune will use tringolet; I will play khitan."

"For a fact I have no heart for music," said Etzwane. "Not tonight."

Frolitz turned away in disgust. "Listen then! During this last month I have altered several passages; pay heed."

Etzwane sat back. From the stand came the beloved sounds of instruments being tuned, then Frolitz's instructions, one or two muttered replies. Frolitz gave a nod, a jerk of the elbow, and once again the familiar miracle: from chaos, music.

CHAPTER 7

Etzwane and Finnerack took breakfast at a cafe to the side of the Corporation Plaza. Finnerack had accepted funds from Etzwane and immediately had purchased new garments: black boots, a smart black cape with a stiff round collar in the ancient fashion. Etzwane wondered if Finnerack's crisp new appearance signified a change in his attitudes, or whether the appearance merely certified a previous condition... Etzwane brought his mind back to the problems of the present. "Today we have much to do. First: we visit Aun Sharah, whose office overlooks the square. He will be deep in thought; he will have evolved many plans and discarded them all, or so I hope. He will know of our presence in Garwiy; he probably knows that we sit here now at breakfast. He might even put a bold face on the matter, and come forth to meet us."

They scanned the square but saw no sign of Aun Sharah.

Etzwane said, "Set your emitter to this code." He recited the colors of Aun Sharah's torc. "Touch 'Gray' first, never forget... Good. Now we are armed."

They crossed the square, entered the Jurisdictionary, mounted the steps to the Offices of the Discriminators.

As before, Aun Sharah came forth to greet Etzwane. Today he wore a trim suit of dark ultramarine, with cloth shoes of the same color, and a star sapphire dangled from his left ear by a short silver chain. He spoke with easy cordiality. "I have been expecting you. This I would assume to be Jerd Finnerack."

They entered Aun Sharah's office. Etzwane asked, "How long have you been back?"

"Five days." Aun Sharah reported

the events of his journey; he had encountered every condition between sullen apathy and earnest effort.

"My experiences were much the same," said Etzwane. "All is about as we expected. One episode in Canton Glaiy however puzzles me. When I arrived at Camp Three the superintendent, a certain Shirge Hillen, had anticipated my arrival and displayed considerable hostility. What could explain such behavior?"

Aun Sharah gazed reflectively across the square. "The inquiries I made at the balloon-way offices conceivably sent alarms all the way to Camp Three. They are defensive in regard to their labor policies."

"There seems no other explanation," said Etzwane, glancing at Finnerack, who maintained a stony silence. Etzwane leaned back in his seat. "The Anome feels that he must now undertake drastic changes. He can govern a peaceful Shant; the energies of a Shant at war exceed his control; some of his authority must be delegated. He feels that a man of your competence is wasted in a position as limited as this."

Aun Sharah made a smiling gesture. "I am a limited man in a limited position; this is my niche; I have no soaring ambitions."

Etzwane shook his head. "Never underestimate yourself; be certain that the Anome does not."

Rather curtly Aun Sharah asked, "What precisely do you plan?"

Etzwane reflected a moment. "I want you to administer the material resources of Shant: the metals, fibers, glass, wood. This is obviously a complicated business; and I would like you to take time—three or four days, even a week—to learn something about your new job."

Aun Sharah raised his eyebrows into quizzical arches. "You want me to leave here?"

"Exactly correct. As of now, you are no longer Chief Discriminator, but rather High Supervisor of Shant for Materials and Procurement. Go home, think about your new job. Study the cantons of Shant and their products, learn what substances are in short supply and which are not. Meanwhile, I'll occupy your office; I have none of my own."

Aun Sharah asked in delicate disbelief: "You want me to leave—now?"

"Yes. Why not?"

Aun Sharah shrugged and smiled and went to the door, where he paused. "The changes you are making: are they the Anome's concepts or your own?"

"They stem from the new Anome. Sajarano of Sershan is dead."

Aun Sharah gave a short laugh. "I hardly expected him to survive."

"He died by means mysterious to me and to the new Anome as well," said Etzwane evenly. "The Shant of today is a strange place."

Aun Sharah became thoughtful. He opened his mouth to speak, then closed it again. With a sudden jerk he turned away and departed the office.

Etzwane and Finnerack immediately set about exploring the

cupboards and shelves. They examined the roster and puzzled over the cryptic marks which Aun Sharah had posted beside many of the names. They found large-scale maps for each canton of Shant and for the cities Garwiy, Maschein, Brassei, Ilwiy, Carbado, Whearn, Ferghez, Oswiy. A set of indexes listed important men of each canton, with references to a master file and more of Aun Sharah's symbols; there were likewise detailed studies of the Aesthetes of Garwiy, again with a variety of cryptic references.

"No great matter," said Etzwane. "Aun Sharah's notes will be obsolete in a year. They relate to Old Shant; we have no interest in secrets and scandals. In any event I want to reorganize the Discriminators."

"How so?"

"They are now civil and cantonal police; they also gather information elsewhere in Shant. I want to detach this last function and establish a new Shant-wide agency, to provide the Anome detailed intelligence regarding all of Shant."

"It is an interesting idea. I would be glad to control such an agency."

Etzwane laughed to himself with a straight face. Finnerack was sometimes wonderfully transparent. "Our first problem is the identity of the man who followed us yesterday evening. I would like you to organize this matter, at least. Acquaint yourself with the Discriminators; call a meeting of the personnel. Stress that Aun Sharah is no longer Chief Discriminator, that all orders must now derive from me. As soon as possible, I want to look over all the operatives, all the trackers, official and unofficial. If I see the man, I will recognize him."

Finnerack hesitated. "All very well, but how should I proceed?"

Etzwane considered a moment. To the side of Aun Sharah's desk was a bank of buttons. Etzwane pressed the top button. At once a clerk entered the room, a man plump and anxious, no older than Etzwane himself.

Etzwane said, "The former Chief Discriminator is no longer in authority, by order of the Anome. Henceforth you will take orders only from me and from Jerd Finnerack, here beside me; do you understand?"

"I do."

"What is your name?"

"I am Thiruble Archenway, with the status of Clerk Lieutenant."

"This top button summons yourself. What of these other buttons?"

Archenway explained the function of each button, while Etzwane took notes. "I have several tasks to be accomplished at once," said Etzwane. "First, I want you to introduce Jerd Finnerack throughout the office. He will be making certain arrangements. I want you then to summon three men to me here, by authority of the Anome, as quickly as is convenient. First: Ferulfio the Master Electrician. Second: the technist Doneis. Third: Mialambre: Octagon,Arbiter of Wale."

"As quickly as possible." Thiruble

Archenway bowed to Finnerack. "Sir, please step this way. . ."

"One moment," said Etzwane.

Archenway swung about. "Yes?"

"What are your ordinary duties?"

"Errands much like those you have just put to me. I customarily adjust the Chief Discriminator's calendar, arrange appointments, screen mail, deliver messages."

"I remind you that Aun Sharah is no longer associated with the Discriminators. I want absolutely no leakage of information, gossip, hints or implications leaving this office, through you or anyone else. Perhaps you had better circulate a bulletin to this effect."

"I will do as you require."

Ferulfio the Master Electrician was a man thin and pale, with quicksilver eyes. "Ferulfio," said Etzwane, "by repute you are a man as silent as a fanshank and twice as discreet."

"That I am."

"You and I will now go to Sershan Palace; I will admit you to a room housing the former Anome's radio system. You will transfer the equipment to this office, and arrange it along yonder wall."

"As you say."

Etzwane, disliking Aun Sharah's desk, ordered it removed. He brought in two green leather divans, two chairs of purple-stained woad-wood upholstered in plum-colored leather; a long table upon which a pert and pretty girl file clerk, watching Etzwane sidelong, placed a bouquet of irutiane and amaryls.

Archenway came into the room. He looked this way and that. "Very pleasant, a nice change. You also need a new rug. Let me think. . ." He paced back and forth. "A floral, perhaps the Fourth Legend, in violet and coral? Somewhat too definite, too limiting; after all, you wish to establish your own moods. Better one of the Aubrey Concentrics, which are frequently delightful. The connoisseurs think them ill-proportioned, but I find this very distortion quaint and amusing. . . Perhaps after all a Burazhesq would be best, in dark gray, thracide* umber."

"I am agreeable," said Etzwane. "Order in such a rug. We all should work in pleasant surroundings."

"My precise philosophy!" declared Archenway. "I am sorry to say that my own office leaves something to be desired. I could work more efficiently in a situation on the front elevation, somewhat larger and lighter than my present cubbyhole."

"Are any such offices vacant?"

"Not at the moment," admitted Archenway. "I can readily recommend changes. In fact, if you will allow me, I will at this instant prepare a schedule of long overdue adjustments."

"In due course," said Etzwane. "We can't do everything at once."

"I trust that you will keep the matter in mind," said Archenway. "I am now half stifled in gloom; the

*Thracide: a sour intense carmine.

door strikes my leg everytime someone opens it, and the colors, in spite of my best efforts, are stupid and depressing... Meanwhile, the technist Doneis awaits your convenience."

Etzwane swung around in astonishment. "You keep Doneis waiting while you chatter of rugs and your inclinations in offices? You'll be lucky to end up tonight with any office whatever."

In consternation Archenway hurried from the room, to return with the tall bone-thin Doneis. Etzwane ushered the technist to a divan and seated himself opposite. "You have submitted no report," said Etzwane. "I am anxious to learn what has been accomplished."

Doneis refused to relax; he sat bolt upright on the divan. "I have submitted no report because we have achieved no reportable results. You need not remind me of the need for haste; I understand this from high to low. We do the best we can."

"Do you have nothing whatever to tell me?" demanded Etzwane. "What are your problems? Do you need money? Additional personnel? Are there problems of morale? Do you lack authority?"

Doneis raised his sparse eyebrows. "We need neither money nor further personnel, unless you can supply five dozen intensively trained persons of superlative intelligence. Problems of discipline arose at first; we are not accustomed to working together. Matters are now somewhat better. We pursue what may be a promising line of inquiry. Are you interested in the details?"

"Of course!"

"There is a long-known class of materials," said Doneis, "which emerges from the retort as an extremely dense white material of waxy and somewhat fibrous texture. We call these materials the halcoids. They show a most curious propensity. When a surge of electricity passes through them, they alter to a translucent crystalline solid, with an appreciable increment in size. In the case of Halcoid Four, this increment is almost one-sixth. Not a great deal, one might think, but the change occurs instantly, and with irresistible force; indeed, if Halcoid Four is not altered under pressure, it accelerates its surface to such an extent that in effect it explodes. One of our number has recently produced Halcoid Four with its fibers parallel, and this we call Halcoid Four-One. Upon an electrical impulse Four-One expands longitudinally only, the terminal surfaces moving at a remarkable speed, which at midpoint we reckon to be about one-quarter light velocity. It has been proposed that projectiles be formed of Halcoid Four-One. We are now performing tests, but I can announce not even presumptive results."

Etzwane was impressed by the exposition. "What other lines do you pursue?"

"We produce arrows with dexax heads, exploded by contact; these are complicated and uncertain. We are striving to perfect this weapon, as it

would prove effective at middle ranges. I can give you little more news; we have essentially only settled ourselves to our work. The ancients projected light strong enough to burn away vision, but these skills are lost; our power pods, while durable, provide only small surges."

Etzwane displayed the energy-pistol which he had obtained from Ifness. "Here is a weapon from Earth. Can you learn anything useful from it?"

Doneis scrutinized the weapon. "The workmanship is beyond our capabilities. I doubt if we could learn more than the fact of our own deterioration. Of course, we have no metals of rare and various kinds, though we do fine things with our glasses and crystals." He somewhat reluctantly returned the pistol to Etzwane. "As to another matter: military communication. Here there is no lack of capability; we are skilled in the controlled pulsing of electrical currents; we manufacture coded torcs by the thousands. But the problems are still critical. To manufacture military equipment we must comandeer the facilities and skilled workmen currently manufacturing torcs. If we simply skim the torc factories of their best, then we risk producing faulty torcs, with possibly tragic consequence."

"Is there sufficiency of torcs in storage?"

"Never; this is impractical. We use the codes of recent fatalities in the new torcs, to minimize the complexity of the code. If we did not do this, the codes might extend to nine, ten or even eleven colors: a great and obvious nuisance."

Etzwane puzzled over the problem. "Is there no other less urgent industry from which workers might be diverted?"

"None whatever."

"We have a single recourse," said Etzwane. "Torcs are of no value to dead people. Produce the radios. The young people must wait for their torcs until the Roguskhoi are destroyed."

"This is my own reading of the matter," agreed Doneis.

"One last matter," said Etzwane. "Aun Sharah has become Chief of Material Procurement for all Shant. Whatever your needs, you must now consult him."

Doneis had departed. Etzwane leaned back on the divan to think. Suppose the war lasted ten years; suppose for ten years pubescent children were denied their torcs. They would then be almost his own age before they encountered adult responsibilities. Would they willingly give over their unbridled freedom? Or would a whole generation of hooligans be loosed upon the complicated structure of Shant?...

Etzwane pressed the button to summon Thiruble Archenway... He pressed again. Into the room came the girl who had prepared the bouquet. "Where is Archenway?"

"He has stepped out for his afternoon wine. He will shortly return. Incidentally," she added in a

demure voice, "a distinguished gentleman sits in the hall, and it might be that he has come to speak to the Chief Discriminator. Archenway left no instructions."

"Be good enough to show him in. Your name is what?"

"I am Dashan of the house of Szandales, a clerk in Archenway's office."

"How long have you worked in this capacity?"

"Only three months."

"Hereafter, when I press the bell, you will answer. Thiruble Archenway is insufficiently alert."

"I will do my best to help your Lordship, in every possible way."

As she left the room, she turned a quick backward glance over her shoulder, from which much or little might be assumed, depending upon the mood of the person who looked.

Dashan of Szandales tapped at the door, then looked demurely through. "The gentleman Mialambre:Octagon, High Arbiter of Wale."

Etzwane jumped to his feet; into the room came Mialambre: a man short and sturdy, in an austere gown of gray and white. His lordly head supported a stiff brush of white hair; his gaze was intense and somewhat minatory; he did not seem a man of easy congeniality.

Dashan of Szandales waited expectantly in the doorway. Etzwane said, "Bring us refreshment, if you please." To Mialambre:Octagon he said, "Please sit down; I did not expect you so soon; I am sorry to have kept you waiting."

"You are the Chief Discriminator?" Mialambre's voice was low and harsh; his gaze probed every aspect of Etzwane's appearance.

"At the moment there is no Chief Discriminator. I am Gastel Etzwane, executive assistant to the Anome. When you talk to me, you are, in effect, face to face with the Anome."

Mialambre's gaze, if anything, became more intense. Perhaps from juridical habit, he made no effort to ease the conversation, but silently awaited Etzwane's remarks.

"Yesterday the Anome read your observations in the *Spectrum*," said Etzwane. "He was much impressed by the scope and clarity of your viewpoints."

The door opened; Dashan wheeled in a table with a pot of tea, crisp cakes, candied sea fruit, a pale-green flower in a blue vase. She spoke over her shoulder to Etzwane in a confiding voice: "Archenway is pale with rage."

"I'll speak to him later. Serve our distinguished visitor his needs, if you will."

Dashan poured tea and quickly left the office.

"I will be candid," said Etzwane. "A new Anome has assumed control of Shant."

Mialambre gave a grim nod, as if certain speculations of his own had been validated. "How was the event brought about?"

"To be candid once again, coercion was used. A group of persons became alarmed by the passive policy of the old Anome. A

change was made; we now undertake to defend the land."

"Not an instant too soon. What do you want of me?"

"Advice, counsel and cooperation."

Mialambre:Octagon compressed his lips. "I would wish to learn your doctrines before committing myself to such an association."

"We have no particular point of view," said Etzwane. "The war must bring changes and we want them to occur in the right direction. Conditions in Shker, Burazhesq, Dithibel, Cape might well be altered for the better."

"There you tread on uncertain ground," declared Mialambre. "The traditional basis of Shant is looseness of association. To enforce a central doctrine must alter this situation, and not necessarily for the better."

"I understand this," said Etzwane. "Problems are sure to arise; we need capable men to solve them."

"Hmmf, how many such men have you recruited?"

Etzwane sipped his tea. "They do not yet outnumber the problems."

Mialambre gave a grudging nod. "I can render a conditional acceptance. The work is challenging."

"I am pleased to hear this," said Etzwane. "My temporary headquarters is Fontenay's Inn. I would like you to join me there, and we will confer at greater length."

"Fontenay's Inn?" Mialambre's voice was more puzzled than disapproving. "Is that not a tavern by the riverbank?"

"It is."

"As you wish." Mialambre frowned. "I must now bring up a practical matter. In Wale my family, consisting of seven persons, subsists upon a jurist's income, which is not high. To lay the subject bare, I need money to pay my debts, lest the sheriff put me into a state of indenture."

"Your salary will be adequate," said Etzwane. "We will discuss this tonight as well."

Etzwane found Finnerack seated at a table in the central document chamber, listening to two Discriminators of high rank. Each vied for his ear; each indicated a separate array of documents. Finnerack listened with grim patience and, upon seeing Etzwane, dismissed the two with a jerk of his hand; they departed with what dignity they could muster. Finnerack said, "Aun Sharah seems to have been flexible and undemanding. These two were his second and third in command. I will use them in the Department of Urban Discrimination."

Etzwane raised his eyebrows in surprise. Finnerack apparently had taken to himself the task of reorganizing the department, an activity which would seem to exceed his instructions. Finnerack went on to detail other of his evaluations. Etzwane listened with more interest for the working of Finnerack's judgments than for the subject matter itself. Finnerack's methods were direct to the point of naivete and, as such, must work awe upon

the subtle folk of Garwiy, who could only interpret simplicity as majesty, silence as craft. Etzwane became amused. The Discriminators were a typical Garwiy institution: complicated, subtle, arbitrary, a situation which Finnerack appeared to regard as a personal affront. Etzwane, a musician, almost envied Finnerack his brutal power.

Finnerack concluded his exposition. "Next, you wanted to look over the roster."

"Yes," said Etzwane. "If I recognize someone, Aun Sharah's candor becomes suspect."

"It becomes worse than that," said Finnerack. He picked up one of his lists. "If you like we can start now."

None of the Discriminators presently at hand resembled the hawk-faced man Etzwane had glimpsed through the window of the diligence.

The suns had rolled low down the sky. Etzwane and Finnerack wandered across the Corporation Plaza to a cafe, where they drank verbena tea and watched the folk of Garwiy idle past; and none who saw these two young men—one slight, saturnine and dark, the other gaunt, with sun-scorched blond hair and eyes like polished turquoise—could know that the destiny of Shant lay between the two. Etzwane picked up the *Spectrum* from a nearby chair. An ocher-bordered panel caught his eye. He read with a heavy sensation:

> From Marestiy by radio comes a report of an engagement between the newly organized militia and a band of Roguskhoi. The savage intruders, having wreaked an awful damage upon Canton Shkoriy, sent a foraging party north. At Gasmal Town on the border a troop of men denied them passage and ordered their retreat. The red brutes ignored the lawful injunction, and a battle ensued. The Marestiy defenders discharged arrows and slung stones, many of which caused discomfort to the enemy, and infuriated them into what one observer described as "a stampede of furious red beasts." Such intemperate conduct will never prevail against the mighty weapons being forged by the Anome; sensible of this, the Marestiy militia adopted a flexible tactic. Final events and outcome are not yet known.

"The creatures are moving," said Etzwane. "Even those who have fled toward the sea are not safe."

(To be concluded next month)

JAMES BLISH

BOOKS

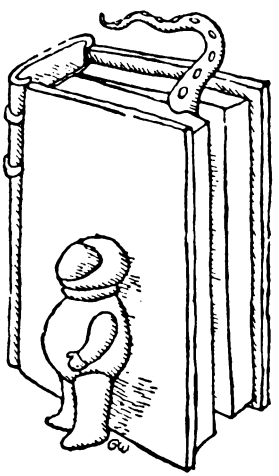
PSTALEMATE, Lester del Rey, Putnam, $4.95
THE THIRD EAR, Curt Siodmak, Putnam, $5.95
HELL HOUSE, Richard Matheson, Viking, $6.50
THE LATHE OF HEAVEN, Ursula K. LeGuin, Scribners, $4.95
PEREGRINE: PRIMUS, Avram Davidson, Walker, $5.95
GROUP FEAST, Josephine Saxton, Doubleday, $4.95

THE DOMINANT SUBJECT IN this month's batch of books is ESP, against which I have a prejudice of long standing, but the treatments are varied enough to show, once more, that in sf as in other forms of fiction the idea is of less importance than what the author does with it.

One of the books is important in another way, too: PSTALEMATE is Lester del Rey's first adult novel since 1962. I approached it with high expectations, including a quite specific one: I was sure del Rey would not tackle the subject—unlike virtually every other writer in the field who has—without having worked out a convincing physical theory of how ESP might work, a theory which took into account all the contradictory facts (if that is what they are) which have been reported about it.

I was not disappointed; the theory is there, and worked out far enough so that laboratory tests of it should be possible—given the discovery of a crucial kind of detector which del Rey can't tell us how to make (and it may be that the only possible such detector is the brain itself).

The story starts with what has become a standard gambit for this kind of yarn, the gradual discovery by a rather



ordinary, skeptical young man that he has psi powers, and that they have serious drawbacks. Some of these drawbacks, it gradually appears, can be nullified if he can learn to understand and master the powers involved, which is no small order in itself But there appears to be no way of escape from the major one: every other adult telepath he is able to trace has gone mad, and precognition tells him that his own insanity is not far in the future. As if this were not enough, on the other side of madness something is waiting for him which seems totally alien, and about which he can learn nothing except that he fears it even more than he does insanity.

As a novel, it's also as well put together as I expected, with all the puzzles falling into place unpredictably but satisfyingly in the penultimate chapter. (The final one is a brief coda, offering a hint of an interesting future but with no direct bearing on the main story.) It's also well populated with believable characters, and in a way unusual for a commercial category novel: it has no villains, though some of its people seem villainous until their motives and limitations become known. This kind of sympathy, though it has always been characteristic of del Rey, has only recently been showing up elsewhere in the field, after a long period in which our pulp origins remained nowhere more obvious than in our dependence upon stock malignity to keep the hero supplied with obstacles.

Stock malignity is very much in evidence in Siodmak's third novel, in the form of a supranational industrial coalition of conspirators who want to monopolize controlled telepathy ostensibly in the interests of peace and justice, but actually, of course, for their own selfish benefit. The first-person hero, who has discovered how to induce telepathic powers in anybody, is naive, withdrawn, unimaginative and so devoid of ordinary human emotions that he understands nobody; it's difficult to understand how he ever managed to grow up at all, for once he does manage to make himself telepathic, most of what he discovers by reading his associates' minds would for most of us already have been plain on their faces and in their actions.

The influence of the movies seems to be responsible for this approach. There have been very few films about telepathy, and, within my limited experience, no good ones, probably because the subject is dramatically almost entirely interior and

hence hard to visualize. Siodmak has made his hero the perfect patsy, and thus subject to all the exterior spying, betrayals, attempted murders, abductions, dramatic confrontations and other machineries (including the international background centered upon West Germany) which go into pictures like *The Spy Who Came in from the Cold.* Even the secret is an object, a chemical formula which can be stolen like any other piece of paper. The only thing which saves the hero is that he has never written it down—and the only thing that saves the world from the horrors of total telepathy is the killing off of everybody scientifically capable of following up the clues the hero drops like cuff-buttons every time he opens his silly mouth.

There are some fairly stiff doses of chemistry at points, as the hero isolates and identifies his telepathy-enhancing compound and tries to figure out how to synthesize it; no mechanism for telepathy itself is advanced, however. The action, of which there is plenty, is mildly entertaining, but it's difficult to keep the actors sorted out, for with one exception (the girl) they have even less character than the narrator.

Wait for the picture.

Malignancy is not only present in the Matheson novel, but its subject, for the Hell House of the title is haunted by its dead owner, an entirely evil man who had used the place during his lifetime as a Hell Fire Club. The leading character, a physicist who thinks all parapsychological phenomena are essentially electromagnetic (this appears to be Matheson's theory too, though there is massive evidence against it), has been hired to spend a week in the house by a millionaire who is hoping for evidence that there is an afterlife. Other members of the party are the physicist's wife, a Spiritualist medium, and a man who is the sole survivor of a previous nine-man investigating team.

Subsequent events are suitably spooky, not to say bloody, and fatal to two of the four. This is a Gothic novel in the old-fashioned, *Castle of Ortranto* sense, in which terror is piled upon marvel upon terror until the reader, depending upon his degree of susceptibility to such goings-on, is either paralyzed with fright or bursts out laughing. I found myself suspended somewhere in the middle: I didn't believe a word of it, but the story is in its way quite as well crafted as del Rey's, and has imbedded it in an intellectual puzzle of considerable complexity, the well-concealed answer to which

simultaneously solves several other major mysteries. The characters don't run very deep, but in this kind of story there's no special reason why they need to, and at least they're all clear-cut individuals. Even the ghosts have an interesting psychological twist.

I strongly suspect that this one will be turned into a movie too, but such a film would inevitably have to be simplified, and the book's complexity is one of its merits. If you like this kind of yarn at all, then I think this one is worth its rather stiff price.

A modern Hell Fire Club is also the setting of John Brunner's ambitious 1970 novel THE DEVIL'S WORK, though in this case no fantasy is involved; the terror, which is very real, is all psychological. This book was whipped out of print by Norton with a speed which must set some sort of record even in these days when publishers seem to exist chiefly to destroy books, which is why I haven't listed it formally at the head of this column. If you can find a remainder copy, it's well worth owning, and no paperback edition had been signed for as of Jan. 19. I repeat, it is not fantasy; but it invokes the same kind of fright as does the Matheson, and does it masterfully.

It has gradually become apparent that many of the works of the redoubtable Ursula K. LeGuin have a common background and (future) history, but in THE LATHE OF HEAVEN she has stepped out of it. This novel has no background or history even in common with itself; its very essence is historical breakage. It's a remarkable performance. I've never read anything else like it.

What she has done is to invent an entirely new parapsychological power, called effective dreaming. What this means is that what the leading character, George Orr, dreams about when he is under stress is history on the following morning; only he remembers that things have not always been this way.

Understandably terrified, he takes drugs to suppress the dreams, quickly uses up his legal allotment and then some, is caught and committed for obligatory therapy. There he falls into the hands of an electronically oriented psychiatrist who himself has a severe case of galloping idealism, and who, once he accepts that Orr's power is real, moves purposefully to use it to change the world for the better.

What follows is a series of object-lessons in the perils of omnipotence, however benevo-

lent in intent. Orr's guided dreams do change the world, repeatedly, and each time in the direction the psychiatrist wants it to go—but so direcly and drastically that the side-effects of the cure turn out to be worse than the disease.

The political, social and physical variations on this theme are admirably ingenious, and unusual in themselves, and the moral, which in itself is simple and unoriginal, is on the surface for everyone to see; Mrs. LeGuin is constructing an allegory and wants you to know that. But the novel is more than a *Pilgrm's Progress*, in which all the characters are nothing more than personified labels. It is also a true novel. The people breathe and feel; and informing every word of it is the perception that history and psychology are allied processes, that every "I" is in large part—though not entirely—an accretion of what has happened to it, good and bad alike; to undo history is to undo man. Though George Orr can change history, with every such change he undoes part of himself, and the poignancy of what he remembers having lost—including those parts of it that seemed to be nothing but senseless pain before he made them unhappen—is the thread of tenderness and pity which turns the book from a parade of ingenuity into an act of love. We all have the strength to bear reality, Mrs. Le Guin says; it is unreality which unmans us. Her case is strong, but it will take courage to face it. She thinks we have it. I hope she is right.

I had hoped that the Davidson novel would be the next installment of the major work so nobly begun with THE PHOENIX AND THE MIRROR, but instead it is the beginning of another trilogy, set in approximately the same period, and attempting the same difficult task: portraying the Dark Ages as the Middle Ages saw them—complete with dragons and magicians—in a modern style.

But Peregrine, the hero, has no purpose to give shape to his adventures, as Virgil Magus had. As the bastard son of a minor king he has to be exiled in order not to foul up the line of succession to the throne, and cheerfully accepting this as normal, sets forth to see the world, about which he knows next to nothing. He is accompanied by a thrall who seldom has anything on his mind beyond the next woman, and a charming philosopher-magician-bard named Appledore who is considerably more useful.

Quite early on, he has the briefest of encounters with a mysterious noblewoman, and

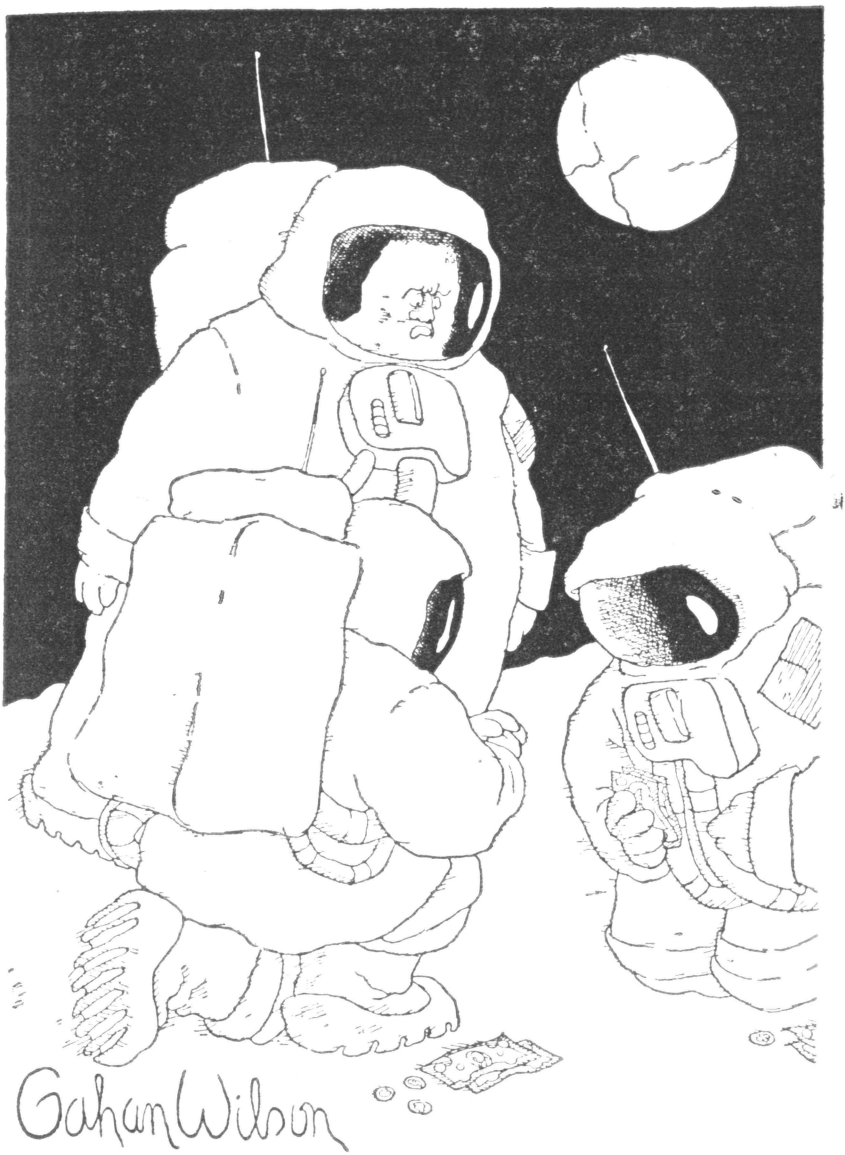
then comes into possession of a crown (and later, a broken sword related to the crown). These plants never do come to anything much in the present volume; we shall have to wait for its successors to see what they mean. Somewhat more is made of a mysterious, apparently demonolatric cult which turns up several times; finally, Peregrine is captured by them, apparently for use as a sacrifice, and escapes inexplicably by turning into the bird after which he is named—and that's the end of the story thus far. In the intervening pages, he has developed no purpose more definite than that of finding a brother who had preceded him into exile.

The fun along the way is splendid—Davidson has no superior in our field as a comic novelist—but the book as a whole has no shape. Incident after incident is laid in carefully as the beginning of one sub-plot after another, but how they will pay off doth not yet appear. The result is that this first volume is entertaining but very unsatisfying.

I suggest that you buy it anyhow. The reception of THE PHOENIX AND THE MIRROR was so unjustly indifferent (another example of a worthy book withdrawn by the publisher with indecent haste) that it may never have the successor it deserves. The sales of PEREGRINE PRIMUS may similarly determine whether we shall ever find out where the whole thing is going—which I badly want to see, and so, I think, will you.

From time to time I have complained that some of the best work in our field has been published without being labelled as sf, or even with flap copy declaring that it is not; I'm convinced that this tendency to skim off the cream can do us nothing but harm. Here, on the other hand, is Josephine Saxton's GROUP FEAST, a good book plainly marked "Doubleday Science Fiction," and there's not a trace of science fiction in it. It is the necessarily feverish but otherwise perfectly straightforward account of an enormous party given by an enormously rich woman, and her descent into madness as she realizes that not a single person present—relatives, former lovers, ex-husbands, supposedly devoted servants—give a damn about her. Her disintegration, and possible redemption, are tellingly symbolized by the events of the party proper, as are the many mansions of her mind and past by the complexity of her monstrous house. It's a compelling story, all right, with overtones of doom which run through it almost from the

(Continued on p. 117)



"Being the first astronaut to play golf on the Moon is one thing, men; being the first to shoot crap is quite another!"

F&SF's science editor—fellow named Asimov—had just finished an article on holography for Smithsonian Magazine and was explaining the subject to us at lunch the other day. "It's like magic," he said enthusiastically, and we nodded sagely and drifted back to the office. Where, lo and behold, the first story on our desk turned out to be about holography. Dr. Tushnet had apparently been similarly intrigued by the subject, and he's turned it into a story which is darned good fun.

A Practical Invention

by LEONARD TUSHNET

I'M A PRACTICAL MAN, which is something my sons (let them live and be well!) aren't, in spite of their brains. Brains they've got. If they weren't twins and all their brains were in one head, that head would know more than all the scientists in all the world put together. But as it is, they're very smart boys, brilliant engineers, highly regarded where they work in top jobs for a big photographic film company. I don't mention the name because the boys wouldn't like it. I know how they feel. I should know. I raised them myself, which wasn't easy with their mother dying when they were eight years old and I never remarried and trying to run a business and supervise housekeepers at the same time. But the boys were always good, God bless them!

Larry has this hobby of his with lasers. That's a way of projecting light. I don't know the details of how it works because I didn't have their advantages and didn't go to college. And Leo's an amateur magician. Very good at it, too, I must say. The boys collaborate a lot in making very ingenious tricks and illusions. The basement is filled with their equipment. That's what this is about.

Larry set up an apparatus to make an optical illusion for Leo. You know, like you see something that isn't there. It's

all done with mirrors. Larry used lasers and made what he called holograms, which are like pictures, only they're not. The negative looks like a mixed up bunch of dots and squiggles, but when you project it on a screen, it looks like you could walk around it. Three-dimensional. You wouldn't believe it if you didn't see it. An ordinary picture is flat, a picture, and it looks the same from every angle, but a hologram picture looks like the real thing, and if you go to the right or the left, you get a different view than from in front.

So—like I said, Larry made Leo a hologram illusion. He projected the picture in plain air, not on a screen. With mirrors. They showed it to me. Unbelievable! A real box floating in air, a bowl of fruit, a vase full of flowers, anything at all. Even a pile of pennies. The pennies gave me the idea.

"They're so real looking," I said, "it's a shame you can't preserve that illusion permanently. Like spraying it with clear plastic, the same as you preserve flowers." I meant like the novelties you see in stores, the dimes or the Kennedy half dollars in clear cubes like in glass.

The boys laughed. "Dad," they said together—they always spoke together—"that's only an illusion. It's not really there."

"Real. What's real? I can see it, you can see it," I answered. "We could be witnesses in court and swear to it that we saw a pile of pennies floating in thin air. Seeing's believing, right?" Then, for a joke—not entirely, because a hobby's a hobby, and fun's fun, but when you see a chance to make a buck, why not?—I said, "You boys are so smart, why don't you think up some way to keep that illusion going even when the laser's turned off? Even with pennies you'd have a lot of money "

Well, they started to explain to me about light waves not having any mass and a lot of other things I couldn't make head or tail of, but one thing I seized on. "It seems to me that if light waves, which are intangible, like you say, make something look like it's there, then all you have to do to make it really there is to coat it with something, maybe more light waves of a different kind to protect it from something that might disturb the picture. And if what isn't there could be coated like that, then it must be there, right?"

They both laughed, but I could see they were impressed with my reasoning. "Dad, you should have been a philosopher," Leo said. "You'd have beaten Bishop Berkeley at his own game." (Later I looked up the bishop in the encyclopedia.

He was a smart man, all right, and those fellows who tried to show he was wrong had a hard time of it.)

Then they started to argue with each other about the necessity for the coating to be of a specific wavelength and other stuff which was out of my field, so I left them.

A few weeks later the boys invited me to see what they'd done. To the original equipment they'd added a Rube Goldberg apparatus that they used to make a fog around the hologram picture of the object, in this case a quarter, as soon as it appeared. They switched something and the fog cleared and, believe it or not, that picture of the quarter began to drift towards the floor, very slowly, it's true, but drift it did.

"See, Dad?" Leo said. "The hologram has weight!"

"Very interesting," I said, not knowing what else to say. The picture of the quarter all of a sudden disappeared and a glob of plastic-like model airplane glue fell on the floor. "So now what?" I asked. "What did you accomplish?"

"We've solved one problem only to get into another," the boys said simultaneously. "We have to find a way to harden the coating before the hologram falls away. If we could do that, we'd have a casting of the original."

I'm a practical man, like I said. I told them, "So as soon as the fog clears and the picture begins to drop, let it fall into a liquid plastic that'll harden in less than a second. That would be a good trick, to be able to hold in your hand a casting of an optical illusion."

Well, that started them off again about how the hologram only exists in the beam of light and so forth, and then they both suddenly slowed down and looked at each other and nodded. I could see they'd thought of something.

Every once in a while after that I'd ask them how the new illusion was working out, and they kept putting me off. About six months later, when I'd almost forgotten about the whole thing, they invited me to see their working model.

In one corner of the basement were a couple of barrels. While I was putting on the goggles they made me wear, I peeked into the barrels. They looked like they were filled with coins, with quarters.

Their apparatus was different from the first time. They had a crystal-clear glass tube shaped like an X. The tube was closed except at the crosspiece of the X. There it was open at the bottom. Under it was an old mattress with what looked like lots of cigarette burns on it. Leo projected the hologram of

the quarter in one side of the tube and moved it up until it was in the exact center of the X. From the other side of the room Larry activated a different piece of apparatus, and there was a picture of a fog in the other part of the tube in a long thin band. Larry adjusted his equipment, and the picture of the fog began to move slowly until it met the hologram of the quarter in the center. "Now!" Leo said. Then they both did something, and it was like a strobe light at the center of the X. At the same time the mattress on the floor began to move back and forth and sideways. I couldn't believe my eyes. Quarters began to fall from the open part of the tube onto the mattress in nice even rows. When the mattress was covered with quarters, they stopped.

The boys laughed at my open mouth. "Pick them up, Dad," Leo said. I did. They were quarters all right, but covered with a very thin clear hard film, and very light. Not bright, but light in weight, almost like nothing.

"You gave us the idea, Dad," Larry said, "but we improved on it. You can't coat a collection of light waves with anything material, but we figured out that we should take a holographic picture of an aerosol suspension of a rapidly hardening clear plastic resin and superimpose it on the hologram of the quarter." He explained that light was not only a wave but a particle, so theoretically a coating should take place. He told me the process in detail, which I didn't pretend to understand. "And there you are! Project the negative of one on the negative of the other, and you get a positive. It's not just mathematically so, it's really philosophical. The negation of the negation, Hegel would say, but the new positive is on a higher plane than the original. It's the dialectic spiral," and more high-class talk like that.

I looked at the new quarters. Except for the shining film they were regular quarters. "And what will you use them for?" I asked.

The boys looked at each other. "We hadn't thought of using them for anything," they said. "It was just an interesting problem to solve." They must have seen the funny expression on my face, because in a flash both of them said, "We could use them for souvenirs, Dad, at the end of a performance." They both smiled, looking for my approval for being so practical.

That gives you an idea of how practical my sons are. They invent such a duplicating device, and all they can think of

for it is for amateur magic tricks!

I shook my head. "No. I have a better idea. Since these cost almost nothing, just the price of the film and the electricity, you can make a lot of things out of them." They knew what I meant, costume jewelry being my line. "Like Indian style bangles or Gypsy earrings."

"Can't be done, Dad," they said. Larry said, "Watch this." He picked up a quarter and threw it at the wall. There was like the briefest flash of rainbow color, and iridescence, and then nothing, nothing at all. The quarter was gone. "See?" Leo asked. "Once the structure is broken, you're back with light waves traveling at 186,000 miles a second."

He was right. I took up a small drill from the workbench and tried to drill a hole in a quarter. Poof! No quarter, not even a plastic film. Larry said, "They're good only for souvenirs, Dad. A giveaway novelty."

Impractical, both of them. "So make them heavier, now that they're here. Put them in a thin layer of Lucite. There's always a market for things like that—foreign coins, a little flower, even a fly."

Well, that they tried and it didn't work. The coins materialized all right, but as soon as the warm plastic hit the surface, they disappeared. The boys showed me.

If I had their education, I'd be a millionaire, I said to myself. The simplest things they can't figure out. "So, boys, in your original negative, before you take the picture, just weld on a tiny circle of metal at the top of the coin. Then you can thread silk or wire or anything through the hole." I could tell they were sore at themselves for not thinking of that. I wanted to encourage them. It's not nice for a father to put down his sons. So I said, "Look, boys, I'll tell you what I'll do. I'll get a twenty-dollar gold piece and have a jeweler attach a small circle, like I said, at the top. You make me enough duplicates and I'll put Tony (that's my designer) to work and he'll come up with ideas. And I'll split the profits with you."

That's what we did. I got a barrel full of twenty-dollar gold pieces (the solidified images, of course). They weighed almost nothing. Tony made up necklaces, chokers, earrings, headbands, and I sold them as fast as my help could put them together. I sold them to big stores in New York City and Dallas, Texas, and to fancy boutiques on Madison Avenue and on Wilshire Boulevard in Los Angeles. They were a hit.

They looked like the real thing, and after all they were the real thing in a way, but gold jewelry like that would have weighed a ton around the neck or on the arms. These were light as a feather. It was a great fad for a while, and we made a lot of money.

Why not? Electricity's cheap, the laser apparatus and the holographic equipment was already set up, and a twenty-dollar gold piece cost only seventy-two dollars in the coin store. You can see what a fantastic markup there was. We made a lot of money, like I said.

But a fad's a fad, and after the society ladies gave it up and the bargain market was saturated, I had the boys use the apparatus for something else.

I made an investment. I bought an eight-carat rose-cut flawless white diamond and had it mounted in a platinum setting like an open network. That allowed for greater freedom in designing, you see. With a barrel full of them, I really had something. The sparkle wasn't quite as good as the original because of the film, but it was still plenty, believe you me. One barrel full, that's all I made, so I could keep it as a luxury item. I had enough for tiaras, pendants, chandelier earrings, and a special job—a dress embroidered with them for the wife of an oil tycoon for her daughter's wedding. Of course, I didn't say they were diamonds, no more than I said the gold pieces were gold. They were costume jewelry, but costume jewelry of a special type. My firm got a reputation like it was Tiffany's. Our line was the leader in the industry, even for Austrian crystal and marcasite, where there's lots of competition.

There was no limit, I figured, to what we could do with solid holograms of all kinds. I told the boys we should stop until they'd patented the process. They agreed. Nice kids, but up in the air. They were getting bored. Making a fortune wasn't enough for them.

I was busy with the Christmas sales, so it was after the new year before I asked them about the patent. They looked at each other and then at me. They sighed simultaneously. "We're not patenting it, Dad."

Aha! I thought. Altruists. They'll publish in some scientific journal and give the process to humanity, and then some guy wiser than them will come along and make a little improvement, and then he'd get the patent. "Why not?" I asked, patient-like.

"It's too dangerous," they said together. Leo started with the conservation of energy and

Larry with the atom bomb, and they both talked so fast my head ached with their E equals MC squared and the reverberating effects of super-imposed waves in a harmonic series.

I stopped them. "Never mind the science. Tell me in plain English."

Leo said, "There's no easy way to explain it." Larry said, "We'll show you."

We'd just had a heavy snow, and the plows had made a big pile in the street. Larry went down to the basement and came up with a bag of quarters out of one of the barrels they'd had left over, also a BB gun. He took a quarter and put it on top of a snow pile. He put another on top of it. He took a little stone and dropped it on the coins. There was the usual iridescence when the stone hit the coins and they disappeared.

"So what?" I asked. "We know the stuff's very fragile. I don't sell it under false pretenses that it'll last."

"Look, Dad," Leo said. He showed me the space where the quarters had been. The snow was gone for about two inches around and two-three inches deep. I didn't know what he was driving at.

The boys took me around to the back of the house. We have a sloping roof, and at one point on the north side the snow slides off there and makes a pile that seems to last all winter. It was pretty big now. Leo took ten quarters and put one on top of another, gently pressing them in the snow facing us. He made us all go back to the hedge about six feet away, and he shot the BB gun at the top quarter. There was like a blizzard for a moment, and when all was clear again, that big pile of snow was gone and a smell like after an electric storm was in the air.

I got excited. I grabbed Leo's arm and hollered, "The greatest invention of all! Who needs costume jewelry? Just think! You could clear every road and highway in an hour!"

The boys shook their heads. "No, Dad. You're a peaceful man and you've raised us to be peaceful, too. Don't you see what could happen?" Leo talked, Larry talked, and I kept quiet. "This could become a weapon of destruction even more dangerous than the hydrogen bomb. Ten quarters do this. Imagine what would happen if somebody took thirty and detonated them by breaking them! With nothing more than a BB gun! Or fifty? Or a hundred? One broken replica just disappears, returning to the general photoelectromagnetic field, with physical effects too small to be measured. Two caused a disturbance, you saw, giving off heat. Ten caused a

greater disturbance and more heat plus ionization of the oxygen in the atmosphere. That's what you smelled—the ozone. We've figured out the equations up to a hundred. We were afraid to go any higher. With each tenfold increase, in addition to the explosive effects and the heat, the secondary side effects become more intensive and extensive."

We went back into the house and sat for half an hour without saying a word. I was thinking. The boys were absolutely right. Trouble enough there's in the world without us adding to it. I told them that I agreed with them. They both jumped up and kissed me, grown men and they kissed their father. Leo's eyes were like electric lights and Larry's face shown like the golden sun. "Oh, Dad, you're the greatest!" and then they quieted down, like they were sorry for me, seeing my dreams of a fortune fly away in the wind.

"Don't worry, boys," I told them. "I got enough I got you. I'll never have to worry about my old age." And we all started to cry—from happiness, not from sadness.

No patent, of course. And the apparatus was dismantled. We never talk about the invention except when there's a heavy snow. Then they just smile and I smile back when the neighbors are envious of my clear walks and driveway and they never see me shoveling. We figured out two quarters wasn't enough and ten was too much but three would be just about right for more than five inches of snowfall. I put the quarters down at regular intervals. I learned to shoot the BB gun pretty good. What's the use of an invention if nothing comes of it, I ask you? You got to be practical.

Coming next month

Featured next month will be a new story by Harlan Ellison, "Basilisk." It is about patriotism and war, but it goes far beyond the "war is hell" or "war is unhealthy for children and other living things" sort of thing. It is a strong and moving and inventive story, and you will not want to miss it.

Also featured, of course, will be the conclusion to Jack Vance's novel, plus other goodies too numerous and unplanned to mention. The August issue is on sale June 29. If you want your copy earlier, send us the coupon on page 142.

This story is about a couple of topical issues that have been half-buried under tons of print (and film—see Baird Searles' review of Z. P. G.), and it is a remarkable little story in that it manages to be fresh, quiet and ultimately very moving. Miss Berman, a graduate student in English literature and part-time teacher writes: "This is the first or second sf story I've sold (depending on how you define science fiction), although I've had fantasy (or maybe sf) published elsewhere and have had poems using sf motifs in the *Saturday Review.*"

3-OK

by RUTH BERMAN

HE STOOD FOR SEVERAL seconds staring at the little container tucked in the corner of the medicine cabinet before he took it out. It looked very small: a circle of cardboard a few inches across, covered by clear plastic with 13 little mounds, 10 of them still filled. On the back, she had neatly filled in the dates when her periods began and when she took the pills. The first three mounds had both dates inscribed, and she had filled in the day's date that morning beside the fourth mound. In three days it would be her time to take that month's pill.

There was no real chance of her coming back just then and seeing him, but he needed to take such precautions as he could to ward off his fear of discovery. So he entered her workspace stealthily, drawing aside the heavy pseudovelour curtains as if stumbling and catching hold of them and so falling through. The real danger was that she might finish the weekly grocerying early and return before he was through. And while she wouldn't call the fuzz on him for conspiring for an illegal birth—that was sheer movies-stuff—she would certainly stop him.

There was no other workspace in the apartment. The dinner table could not be taken out of the wall without disarranging the pyramided chairs, and she would ask what he'd been doing if she found them out of order, and he would stammer in lying, and she would be puzzled and eventually suspicious; and in any case, if he sat on the floor to work or pulled out the counter in the cooking area and worked standing at it, he would be caught in the open if she came back early; whereas inside the curtains marking off her workspace he would have a few moments to conceal the work if he could. The workspace was best. That not-to-be-dismantled area was a fearful waste of space, but he began at last to feel some liking for it.

He examined the workspace carefully, so as to find room for his own task without disturbing her materials. After all, it was not immediately urgent, even though it was hard for a man with a regular job sound-engineering to find time alone in an apartment shared by an artist-wife, who worked at home, not to speak of her two daughters. She had remarked that morning that her period had begun, and there was the confirmation written on the container itself. So he had three days. And there was, of course, the possibility of trying again in succeeding months. He must not take unnecessary risks. So he examined the workspace carefully.

He was in luck. There was only one bubblesculp in progress on the table. Half a dozen finished ones stood on the ceiling shelf, each under its protective plastic bell, but most of the table was clear. He inspected the one cluttered area. The sculp consisted of three opaque grey towers—or, it occurred to him, three gray phallic symbols, depending on your critical preferences—connected by an elaborately fragile tracery of transparent greyed blues. The colors were dreary and depressed him. He wondered why she was making it. It didn't look likely to sell She had run out of the blue, apparently. The can lay on the table, a brush still attached to its tubing, but with the pump neatly shut off and locked, and the bristles sheathed He wondered if it would be possible to bubblesculp a fake pill, but then he reflected that, even if he had known how to operate the equipment, the pressure of a thumb and forefinger might well crush it.

He shrugged, kicked the hassock standing by the cluttered side of the table over to the clear side, and sat down. He put the cardboard container on the table and pulled his little hoard

of candies and assorted materials out of his pockets and heaped them up beside it. He sorted over the candies, quickly discarding the ones which were the wrong color, and then turned to comparing shapes. Some were too circular, some too oval, some too flat, and some too humped. For a moment he thought a yellow sugar-coated chocolate bit would be just the thing, if he trimmed the sides down, but when he sliced it with a knife, the chocolate showed through the slice. He muttered, "Stupid, stupid," at himself and went back to the lemon drops. They were certainly too big, and the shade of yellow was a little off, but it seemed to be the best he had to work with.

He tried slicing one, but the blade slipped and gouged his thumb. He yelped and stuck the injured thumb in his mouth. He sat still, waiting for the bleeding to stop, and thinking. He curled his fingers around his nose, feeling an odd contentment in the childish pose, When his thumb stopped hurting, he went out and got himself a spoon and a glass of hot water. He soaked the lemon drop in the water, carefully dissolving it down until its size matched that of the pills. When he spooned it out of the glass for the last time, he found he had a really quite convincing replica, if you discounted the lemony scent, which didn't matter, because he had bought a small can of clear (Quick-Drying! Guaranteed Non-Toxic!) glue to spray it with. He scraped delicately away at the surface with the point of the knife until he had gouged out a forgery of the drug manufacturer's stamp. He set the fake pill on the table, gazed at it solemnly, and nodded. Then he picked it up, balanced it on one finger, and sprayed glue over it. He counted 10, turned it over, and sprayed the other side. He counted 10 again, and held it up to his nose. There was no scent.

He wished he dared do more than one, but he thought it would be tempting discovery. He licked the blade of the knife clean, popped the spoilt candy in his mouth, and then picked up the container and slit the backing of the fourth mound. He squeezed the pill out, squeezed the lemon drop in, and moistened the cardboard so that the fibers on each side of the slit loosened a little and partly merged. He looked at it anxiously. A close inspection could catch either the slit in the cardboard or the slightly too-yellow color of the pill. He wondered if he could throw the blame onto either of her daughters if she spotted the substitution. They were at an

age to think such a prank funny. But they were truthful children, and she would believe their denials. No, he would have to take the blame, if worst came to worst, and say it must have been something he did when drunk. It was a good thing they were having her father to dinner tomorrow. He must remember to take a couple of extra drinks to provide himself with an excuse, just in case.

He picked up the hassock and moved it back to where it had been. He put the glue in his pocket, to throw away in the morning, at work. He cleared his things off the table and went with them to the cooking area. He spilled out the water, dried the glass, and put it back on the shelf. He rotated the shelves until the wheel brought the shelf with the utensils in his reach. He replaced the knife and spoon, turned the shelves again until he came to the one with the snack jar, and dropped the candies in. He took the little container and the solitary pill to the shower room. He put the container away in the medicine cabinet and flushed the pill down the toilet.

He was just in time. She came home at that moment, and he came popping out of the shower room so hastily that she laughed at him. He laughed, too, and hid his face by taking the market basket away from her and carrying it the few steps for her to the cooking area. "Did you get a newspaper?" he asked.

"Yes," she said, "it's right on top there. Read it fast, will you? I want to make soup stock tonight."

"Oh. All right," he said, without enthusiasm. Edible paper was a great scientific advance, he supposed, but he did not really like the taste of the algae base.

"I've got a new recipe. I think you'll like it better this way," she added.

"Okay. But what about the girls?"

"Oh—save out the funnies for them. Their father's taking them out to dinner, and they won't be back till late. They're not interested in the news, anyway."

"Okay." He took the top chair off the pyramid and sat down with the news, delighting in the ordinariness of his actions. He felt himself growing tranquil, almost forgetful. The rattle of newspaper as he turned the pages and the creak of shelves turning as she put away the groceries seemed to him to spread out and shut the preceding hour away behind curtains.

It was four and a half weeks before she finished the bubble-

sculp. She came bursting out of the workspace when he returned from the station, almost colliding with him, and commanded, "Shut your eyes!"

He shut his eyes. He heard a soft rustling as she ducked back behind the curtains and came out again. The sound made him uneasy.

"Open!"

She was holding a plastic display bell, and inside was the new sculp. The towers with their tracery were now surrounded by an opaque, black spiral. It started wide at the base, then narrowed sharply as it soared up and around, reaching a point high above the towers and exploding in a shower of transparent grey drops, of a shade a little lighter than the grey of the towers. The drops fell to the base and became a white froth about the lowest ring of the spiral. He turned the bell slowly, staring between the lines of the spiral at the towers and the blue lacework inside. His eyes felt hot. He blinked rapidly. "It's beautiful," he said at last. "But it's gloomy, don't you think?"

"Yes," she admitted. "But it seemed to come out that way. What do you think I should call it? I was going to call it 'Waterfall,' but the gallery might like it better with something more patron-grabbing. Like 'The Three Queers.' "

"Agh." He made a grimace of mock-distaste and looked into the bell again. "So they *are* phalluses?"

"Well, actually, they were rocks under the falls. Do you think 'Waterfall' would do for a title?"

He shrugged. "Dunno. It's not *my* baby, you know."

"Don't *say* things like that!" She looked hurt and ducked back into the workspace to set the bell down.

"I'm sorry. I didn't mean it the way it sounded," he called. At least, he didn't think he did. He wondered if he could use the opening to get the information he longed for. He weighed the words in his head, testing for a suitable lightness of tone, and said aloud, "Hey, you're kind of touchy today. Period started?"

"No," she said, coming out from the curtains, "but it will in a couple days. It's a bit late." She looked at him uneasily. "You're not going to give me the please-skip-it-this-month-honey argument, are you?"

"No."

"Because," she said, answering the argument, anyway, "maybe you wouldn't mind losing your job and getting stuck on welfare, but I would."

"It's not *that* bad," he said reasonably. "I was an illegal third, myself, and we all grew up okay."

"Yeah, but welfs can't afford bubblepaint."

"If you gave your stuff to the gallery and arranged for a kickback, we'd have a fair income even so."

"Now, look—" she started.

"Sorry." He put his arms around her and caressed her buttocks, nuzzling against her affectionately. After a moment she returned the embrace, and he sighed with relief. They had gone over the same ground often enough before. The financial part of it, he hoped, was now relevant, although she would not know that it was for some days or even weeks. But he did not want to continue into the next stage, an icy "if you have to prove your manhood, why don't we get divorced and you can find yourself a nice little virgin and have babies," to be followed by screaming. He didn't feel up to it. She took the sigh for desire and pulled him closer yet. In the end they pulled down the bedroom curtains, but did not bother with the bed, and made love on the floor.

In the days that followed, he waited hopefully for the announcement and took to buying morning papers as well as evening. He liked the new way she had of cooking the pages, he said, and it was an economical way of cutting down on groceries. In actuality, he was hoping for an announcement that conception of thirds was legal for the next months. Everyone said that dates were not counted closely in such cases, and the last 3-OKing had been some years back—just before their marriage, in fact. With an election coming up, it was quite reasonable to hope for the government to make some such bid for popularity.

And, just under two weeks later, late in the afternoon, it did. The news came in on the station teletype while he was at work, and the jockey signaled him frantically to cut off the sound. The ingenue looked notably silly, wordlessly emoting her passion for the current villain, but this was one "we interrupt this program to announce" which would not result in a switchboard flooded with complaint calls. Inevitably, a few calls came, anyway. He took two, and the jockey took one, and he started to take a third, but it hung up on him as the announcement ended and the ingenue's impassioned voice came back on again. "Buncha old maids," he said to the jockey, griping without anger. And the jockey nodded, settling into his chair and shuffling through his cue cards for the upcoming pause for identification.

His relief arrived five minutes early, and he fled the studio, heading not for the nearest news-vending machine, but for a magazine store where they sold material printed on real wood pulp as well as the regular algae print. This was one article they would want to clip and save in the years to come.

The headline towered over the whole top of the front page, with the solidity of permanent ink on real pulp: "POP DROP OFFICIAL!" and underneath, "2 MOS. 3-OK SAYS PRES."

He ran the two blocks to the monorail and sat with an idiot grin, staring at the headline, all the way home. He burst in the door, shouting, "Have you heard the—" and then stopped short. The newspaper fell out of his hand, but he did not heed it.

The bed was down. The bedroom curtains had stuck halfway, and he could see her, lying sprawled on the bed, her face pale. She must have had trouble lowering the bed, too, for it had knocked against the pyramid, and chairs lay all over the floor, sprawling like so many caricatures of her. Some had crashed into the workspace, knocking its curtains askew. He could see a bell inside on the floor, and former "Waterfall" crumpled underneath.

"Are you all right?"

"Yes. I mean. . .I will be. Glass of water?"

"Sure." He brought her water and helped her sit up to drink it. "What happened?"

"Try not to be angry," she said, touching her hand to his.

"About what?"

She leaned her head on his shoulder. "You know I was worried about my period being late?"

He did not answer.

"Well, I went to the doctor. I was pregnant. The pills are 99 percent effective, they say, but, you know, when you come right down to it, that's not good enough. Not really. So I got dee-n-ceed and tied off, and came home. The doctor said I could go in the hospital for a day or so, if I wanted, but he didn't think it was necessary, so I had it done in out-patient. And came home."

He did not speak.

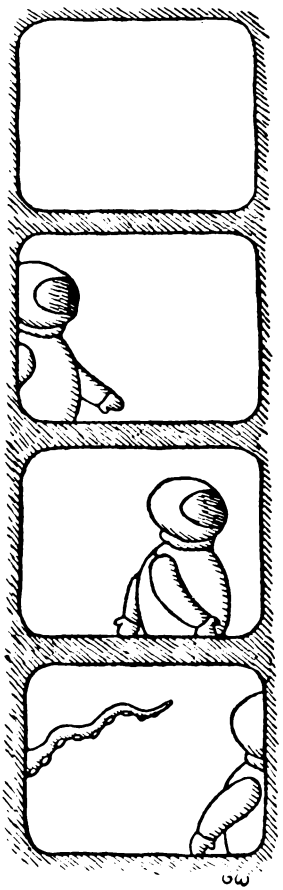
She tried to turn to see his face. "I know it's hard for you when you wanted—" She broke off. She could see the paper on the floor. Even from that distance the headline was legible.

She pushed away from him. He dropped her back onto the pillow. He tried to keep the words back, but they came out anyway. "You could have had it. You could have had it. The teletype said. . . ." The words trailed off, and he sat beside her on the bed without touching her.

She looked around the apartment and put one hand out to touch the wall where it jutted out at them, making room for their next-door neighbor's cooking area. "Like hell I could," she said. The wall was smooth and warm to the skin. She rested her arm against it and turned her head to watch the shadows of the curtains and the ceiling shelves.

BAIRD SEARLES

FILMS



Z.P.G.—P.U.

APOLOGIES FOR THE RATHER inelegant title of this month's piece, but it's exactly they way I felt about a new science fiction film unimaginatively (and inaccurately) titled **Z.P.G.** (Paramount). There are films that one feels anger about simply because of the waste of time and money that could have been spent on something worthwhile, and then there are films that really make you angry because they are so damned inept that they reduce matters that one feels strongly about to total idiocy. The latter sort usually are about "serious" subjects, and that's the problem with *Z.P.G.* The subjects in question here are science fiction and motherhood (an odd combination, despite Judith Merril).

A brief rendering of the plot (or what's left of the plot after an editing job probably done by a passing axe murderer) should give an idea. Early in the 21st Century, a law is passed forbidding procreation for 30 years. It is my impression that Zero Population Growth meant simply no *additional* population, but apparently the writers felt that this would confuse people. In any case, this is shown to be unpopular with the populace, but necessary since what one sees of the world is

choked in a gray fog of pollution (simple production values—don't simulate the future; just set up a dirty fog machine). Despite the fact that this measure is shown to be unpopular and people want to have children to the extent of booming the market in life-like toy babies (that look like Mattell rejects), everyone seems all too ready to point out trangressors, who are punished by the quaint method of dropping a lucite dome over them in the public square, then spraying it red. This is not as arbitrary as it sounds, since it's absolutely necessary for plot purposes, as you'll see.

I think you can see the plot coming already. Yep, our heroine (Geraldine Chaplin) bravely breeds in the face of being domed to death. And yes, her husband (Oliver Reed) bravely supports her, and yes, they're turned in by their neighbors who want a baby, and yes, they're domed but hubby has dug out under the public square so when they're sprayed red they just dig a bit more and escape by sewer to a pollution free seashore that seems to be just across the bay from Smog City. Z-z-z-z-z.

If this all sounds even more familiar than usual, there was a made-for-TV-movie early in the season that had almost the same plot. But this is the kind of science fiction that feeds the "I don't see what you see in that nonsense" crowd, who are right in this case because it *is* nonsense, and it's what the general public sees most of. As for the other issue, I happen to feel quite strongly about the population problem and the idiotic overbreeding of the human race. One of the things I like about this magazine that I write for is that you don't get a save-the-world editorial in every issue, so I won't go on about this as much as I am tempted to. Suffice to say that I had hoped Philip Wylie had laid Mom to rest forever, but the recent issues of women's lib and population growth have revealed her cult as strong as ever, and films like *Z.P.G.*, with their glorification of motherhood and the broodsow instinct, play right into the hands of those who would populate us all to perdition.*

Late, late show department...(Pop corn division). A local TV station, which specializes in week-long, late-night "festivals," recently had a

*My attention has been drawn to a worthy group calling itself Zero Population Growth, based in California, which at this writing has a suit filed against Paramount to prevent use of their name on the film. They are sincerely anxious that it be made clear that they have no connection with the film, and that it presents an erroneous conception of the term ZPG.

"monsters you know and love" week. I was enchanted by the promo they showed for it, clips of the monsters (Godzilla & Co.) in action underscored with a soupy 30's rendition of "You ought to be in pictures." I was also pleased at seeing the films they had chosen in a week's span; I think what is endearing about the Japanese monster films is the total taking for granted of the most unlikely events ("Oh, here comes Mothra again. Alert Tokyo for destruction."). *Monster Zero*, which I had not seen before, involves two astronauts with a planet "behind Jupiter" whose Overseer informs them that the surface of the planet is being ravaged by a three headed monster. He then straightfacedly remarks, "We need an exterminator." Pause. "Can we borrow Godzilla and Rodan?"

Horror film buffs are taking notice of the Mexican examples that turn up on TV at odd hours of the night. Crudely dubbed and melodramatically acted, the scripts attempt some far out effects that sometime succeed, aided by sets which are by Caligari out of Spanish Baroque. One I saw lately *Curse of the Crying Woman*, had one moment that scared hell out of me; I haven't been so startled since the hands came through the window in *Night of the Living Dead*. The story itself had some interesting concepts handled differently from the American/English/Italian examples we're used to, which made up for the excruciating performances (perhaps an unfair judgement because the dubbing is so rotten). Keep an eye on your TV listings. The Mexican taste for the macabre may make that nation's films in this genre a force to be reckoned with.

Lit'ry department. . .THE GHOULS (Pocket Books), edited by Peter Haining, is an interesting anthology of stories that provided the basis for many of the classic horror films. Some of the stories are not all that well known, and the prize of the lot is a section dropped from *Dracula* that became the source of *Dracula's Daughter*. . . Another book that should intrigue fans of the horror film is a novel, of all things. Brock Browers' THE LATE, GREAT CREATURE (Atheneum) is about a classic star of such movies dating back to German Expressionist days. It is both moving and funny, and the factual touches are myriad and apt: the hero has aspects of both Lugosi and Lorre, he is reduced at one point to making a film with Abbott and Costello, and there is a thinly veiled portrait of Vincent Price that is viciously hilarious.

Yes, in case you were wondering, it *is* the longest title we've ever published edging the Sheckley-Ellison "I See A Man Sitting On A Chair and the Chair Is Bitin His Leg" by one word. That is, unless you count verse—there was something b Brian Aldiss back in 1964. . . Well, we'll leave the subject for others to pi up if they wish and say only that, while we are generally not in favor long titles, this is an unusual story—an interesting and success change of pace for Mr. Wilson—and it more than fulfils its unusual titl

For A While There, Herbert Marcuse, I Thought You Were Maybe Right About Alienation and Eros

by ROBIN SCOTT WILSON

HARLEY JACOBS BECAME A veteran of Chicago when he hitchhiked to that toddlin' town in late July, 1968, out of a profound sense of personal alienation and because he was bored waiting for his draft board to summon him; because Senator McCarthy had stimulated his activist's itch, his desire to hook into a cause; because he was curious—with a small town resident's naivete—about Hippies and Yippies; and because—whatever the fortunes of McCarthy, the Democratic Convention, the Youth International Party, and the National Mobilization Committee—it looked like there might be a good supply of poontang in the balmy summer evenings in Grant Park.

Now this is not to imply that most of those brave souls at Chicago were, like Harley, about equally interested in politics and poontang. Such was clearly not the case. And unlike most Chicago veterans, because of his dual motivation, Harley found his experience in the Windy City painfully dichotomous: it seemed that whenever he began to establish himself with a young lady—in a bush, under a park bench, back of the statue of General Jonathan Logan—someone shouted: "Here comes the fuzz!" or "Let's go! Let's go" and Harley's consummation remained only to be desired, however devoutly. Likewise, no sooner did Harley begin to pelt cops with baggies full of excrement, join in a Japanese-style snake dance, or march up Michigan Avenue, than his attention was captured by a flash of thigh or the gleam

of black-lined eyes, and he found himself out of the action, off hunting for a bush, a park bench, or the back of a statue.

Frustrated by this alternation of events, torn by opposing motivations, Harley's net alienation increased. Once, in an elevated language gleaned from *The Pocket Guide to Freud*, he appealed his dilemma to those he milled with in front of the Hilton. "How," he asked, eyes streaming piteously from tear gas, "how does a person overcome his personal estrangements without at the same time compromising his commitments to principles of social significance?"

"What you talkin' about, man?" asked a bearded young man who might have sat for a cheap two-color litho of Christ.

"I mean, as soon as I begin to establish a satisfactory interpersonal relationship, events compel me to. . ."

"He means," translated another beard, "he ain't gettin' any."

"Well, hell," said the first youth, wiping his eyes, "who is?"

"But," protested Harley, "the requirements of the whole man, of total reconciliation. . ."

"Look, man. When you protestin', protest. When you ballin', ball. You mix 'em up and your head's gonna get all fucked up."

Harley shook his head. No one seemed to understand the importance of a simultaneous, broad-spectrum cure for alienation. But he persevered. He was about to press for a better answer when he suffered what many in Chicago suffered during that turbulent week: a policeman whacked him in the groin with a very large night stick.

After the whack, Harley rapidly lost interest in both poontang and the politics of dissent. He returned to Reading, Pennsylvania, feeling greatly depersonalized, politically impotent, totally alienated, and sore. And, after a week of recovery from his wounds—spiritual and corporeal—in the best tradition of American pragmatism, he decided the answer to his and the nation's problems must lie in education, that panacea of progressivism. Perhaps, he thought, he could find a cure for his own difficulties by relating to the vast overworld of learning. Perhaps he could begin his reform of this world he had never made, his own odyssey out of alienation, by going to college. And anyway, it would placate the draft board for a while.

But it did not take Harley long to discover that colleges, too, are depersonalizing institutions, that they are exceedingly

fine-grinding mills dedicated to statistical definitions of the good life which are only accidentally and occasionally congruent with the needs of individual inmates. Thus, as a faceless number in numbered courses taught by professors whose numbers, not names, appeared on the IBM card that served as his class schedule, Harley spent his first semester at Bangsville State College, Bangsville, Pa., one of those instant colleges that had sprung up in the sixties in the rich humus of federal money; a college of raw, cheap buildings, classrooms crowded with students named Al or Karen, an indifferent and poorly paid faculty, and a computerized records system employing hardware rivaled only by the First Air Defense Command in expense and complexity. Such were educational priorities in 1968.

"It was depersonalizing," said Harley one night, speaking of his Chicago experience during a rare dormitory bull session. "I mean, like you were just a thing and not a person. And here it's even worse. Here you aren't even a thing any more. Just a number. I guess I'd rather be a thing than a number."

"Indeeed," said a world-weary upperclassman, a sociology major named Group Al. "It is the inevitable result of the post-industrial society."

"Yes," said Red Al, a neo-Marxist who enjoyed great repute among campus radicals for having visited Havana, Cuba, although he did not let it be known that the visit had resulted from the hijacking of an Eastern Airlines jet on which he had been bound for a week with his parents at their Miami Beach estate. "It is the inevitable result of colonialist oppression by the fascist pigs in the Pentagon."

"Horseshit," said Dirty Al, the dormitory's resident dealer. "When that cop busted you in the jewels, Jacobs, you weren't a bit depersonalized. No way. I mean, that has got to be considered a act of intimacy."

Harley, who was an honest and open-minded sort, had not considered it that way before, and he gave the proposition some thought, the group silent for a moment, awaiting his reaction. He was much respected as a Chicago veteran. "Perhaps you are right, Dirty Al," he said after a bit, with some gravity. "At least I was not ignored the way we all are here."

"Right, Harley. Right!" said Pretty Al, the resident fag, eager to ingratiate himself with the younger man. "However painfully, you managed to establish a meaningful relation-

ship with the big policeman while in the very act of achieving communion with a situation of social significance. It is these meaningful relationships that count! You must be able to relate personally with—ah—someone!"

Harley nodded. He was flattered by the attention, grateful for the advice from older and wiser heads. "Maybe it is like this professor I got for 2722 says. . ."

"Which one?"

"403 or maybe 405. I forget. Anyway, he says you got to overcome alienation by relating to everything you can. . ."

"Indeed! Indeed!" said Group Al. "The Learyan doctrine of dropping out has been thoroughly discredited by social psychologists. You must seek to penetrate the institutional infrastructure of society, accommodate to the personal-societal interface!"

"Uh?"

"But at the same time you dare not compromise with the forces of imperialist reaction," said Red Al.

"Uh?"

"While remembering the primal value of interpersonal relations—ah—relation*ships*," said Pretty Al.

"Uh?"

"And it don't hurt to turn on now and then," said Dirty Al.

Harley rose to stride among the chromium and vinyl chairs and stained coffee cups and intertwined students in the shabby cinder-block lounge. It was good of the older men in the dormitory to take an interest in him, to help him in his search. He would take their advice, or as much of it as he could. "All right," he said, chin up, arms outflung like a young Lenin at the Finland Station. "You are all right. I will find a girl who is active in some socially significant endeavor directed against the establishment, and perhaps I can relate to her and the endeavor simultaneously and thus cease to be alienated."

All but Pretty Al nodded their approval.

The socially significant endeavor directed against the establishment—a violent demonstration in support of a separate department of studies in bracero folklore—was very much a success. So was the girl, at least at first. But Harley quickly discovered it was Chicago all over again. No sooner did the girl begin to simmer nicely than Harley found their nights consumed with group planning, mixing Fels Naptha soap flakes with gasoline, and debating the details of Che Guevara's instructions for making a grenade launcher out of a .410 shotgun

and a broomstick. Then, during the demonstration, it was another night stick in the groin; and after the campus had quieted down, after Harley and the girl had been bailed out by the Student Activities Fund, after he was once again able to move the girl back to the front burner of his amatory range, he suffered from a physiological disability—the result of the night stick—which he could only hope would prove temporary.

Fortunately it did. Harley recovered satisfactorily over Christmas vacation, that season of peace, and by the end of the semester he found he had succeeded finally in establishing a fully satisfactory interpersonal relationship with the girl. Of course, at the same time, his alienation in other areas was nearly total: he found he had also established a failing record in his classes, a permanent estrangement with the family back in Reading, a threat of 1-A classification by his draft board, a hide-and-seek relationship with the man who was trying to repossess his 1964 Mustang, and a running skirmish with the Dean of Students who wanted to know why he no longer occupied the dormitory room assigned to him.

Now it is the beginning of Harley's second semester at Bangsville State, and he ponders the establishment of further relationships, the diminution of his estrangement from all the world external to the girl. He has yet to try Group Al's notion of "accommodating to the personal-societal interface" mostly because he does not understand what Group Al was talking about. But standing in the long registration line snaking down the hall of the administration building, he conceives an interesting variation of that notion in the course of an idle conversation which incidentally displays his rapid mastery of the language of student discourse.

"Jeez," he says to Sally Grundig, the girl with whom he has established the viable interpersonal relationship and with whom he has come to share a plywood room above the Kollege Korner Waffle and Do-Nut Shop, "this registration's a drag."

"Yeah," says Sally, a Bryn Mawr reject despite her Main Line accent. "Definitely messed up."

"I mean, here we are, you and me, with a fine viable interpersonal relationship all established and everything. How come I can't establish a good relationship with all this other shit?" He waves an arm around to include the line of students, the tables of profes-

sors and clerks, the multicolored pillars of stacked IBM cards.

They shuffle past a table of cards and take one each of white, green, yellow, and blue, as a sign directs. "I mean," continues Harley, "you feel just like another IBM card. Nobody *looks* at you. Just at your cards. I'd rather be a thing or a number than a *card*, for chrissake."

Sally shrugs. Her mind is largely elsewhere.

"It is a strongly dichotomous situation."

"Di-*what*omous?"

"It's a word I learned in 2345. Means all split in two."

"Oh."

"I mean, no matter what I do, I can't seem to relate to everything at once. One side of things is all fixed up. No alienation there, hey babe? But the other side of things is all screwed up. I can't relate to all this administrative Mickey Mouse."

Sally sighs and shifts her swollen ankles, which have begun to bother her a good deal of late. "Yeah," she says with some resignation. "But maybe you and I could use a little more alienation ourselves. And maybe a little less relations."

Harley is too busy pondering the paradox of private felicity and public alienation to listen. He holds up an IBM card at arm's length and looks at a fluorescent ceiling fixture through its holes. He draws the card back until it touches his nose and sights, one eye closed, through a hole, swinging his head around until Sally's round face and long dark hair are framed in a fuzzy square. Sally sticks out her tongue and waggles her fingers at her ears. Startled, Harley removes the card. "You looked good that way," he says. "Until you stuck out your tongue. Like a picture on a wall, only brighter."

They pass a table where a bored professor takes the yellow and green cards and replaces them with puce and red. He does not look up at Harley or Sally or at the long line of students in which they are linked in impersonal lock step. Harley recognizes him as 226, the man he had the past semester for 1471.

"Life through an IBM card hole," says Harley, sighting again, this time at his own reflection in a glass door. "It is simpler. Everything has square edges."

Sally says, "Harley, I think I'm going to get sick."

Harley removes the card from his face. "But it's after two. I thought you were only supposed to get sick in the mornings."

"I think I better go home. I think I'm going to barf." She

has this worried look that Harley has come to associate with pregnancy. Harley peers at her through the IBM card, tilting his head to bring her slightly swollen abdomen into view. "Okay," he says. "Gimme your cards and I'll get you registered."

Sally leaves and Harley shuffles on. The line is not perceptibly diminished by her departure, would not be perceptibly increased by her return. It has a viperine existence of its own, many times greater than the sum of its parts.

Everything Harley looks at through his IBM card takes on a new clarity and freshness, a simplicity and purity of line and color. He experiments with different holes. After a bit he decides that his favorite is really two holes punched very close together whose dividing strip of cardboard almost disappears close to his eye. He no longer looks where he is going, but peers at professors, walls, lights, fire extinguishers, and the sinuous line in front of and behind him which can be made—flat and linear—to curve sensuously from corner to corner of the square of his vision.

The line conveys him past the registration stations. He holds his and Sally's cards out in his left hand, and he is dimly aware that from time to time cards are removed and replaced with others.

After a timeless time, he grows aware that someone is addressing him. A voice repeats: "Your blue fee card, please. Your blue fee card." He removes the card from his eye. It is blue. He does not wish to surrender it; it contains his favorite pair of holes. A large grey lady in rimless spectacles is looking up at him from her seat behind a table full of blue cards. It is the first time anybody has looked at him since Sally left. "Your blue fee card, please. In your hand. Yes, that one." Wordlessly, confused, Harley shakes his head. He smiles pleadingly. "Uh—you see—I can't. . ."

"Come on, young man!" There is exasperation in the large grey lady's voice. Reflected light bobs up at him from her spectacles. "You can't complete your registration until your blue fee card is stamped and sent to the Bursar!"

Harley makes a strangled sound deep in his throat, clutches the blue card tightly, and turns out of the line to flee down the corridor. He does not yet quite understand why he must flee. He knows only that there is the inkling of a broad-spectrum cure for his alienation, and whatever it is, it involves the IBM card.

Out in the cold midafternoon gloom of the campus, Harley briefly halts his flight. He debates returning to the grey lady and surrendering his card, behaving rationally. But now the idea of giving up the card is unthinkable, or thinkable to him only in the way that such theoretical propositions as love and death and good and bad are thinkable. He is very confused. The card, suddenly so dear to him, is the obvious symbol of the depersonalization he has sought to overcome, and yet—and yet—the view, the fuzzy, square view, the rectilinear organization of everything seen through the card, is oddly comforting, suggests possibilities for new relations. . .

As solace to his confusion, he peers through the double holes of the card at the ugly campus, at the winter-torn trees, at the shrubbery bright with candy wrappers and browning copies of the *BS Daily Bulletin*, at the water tower high up on McNamarra Hill whose elevation requires him to turn the card to the horizontal so that the long way of the holes will be vertical.

How clean and bright and logical everything looks! How simple and positive and *understandable!*

And peering thus, Harley permits his mind to dash back through the tangled, steaming, implausible jungles of memory, and then upward in time again to that point in the registration line when he has been captured by simplicity. And he seizes on a splendid new notion: that there is no real distinction between the conglomerate of illusions, passions, lusts, hopes, tumescences, headaches, infidelities, and gastric upsets that are Harley Jacobs and the clean, sharp-edged, slope-cornered, geometrically holed, purely colored perfection of the IBM cards that are also Harley Jacobs. Only, thinks Harley, the cards-Harley—despite the disclaimers they bear—can far better withstand being bent, spindled, folded, shuffled, and —yes—*duplicated* than can the flesh-Harley. Perhaps, he thinks, perhaps he has found—eureka! —the personal-societal interface, Perhaps, having found it, he can now accommodate himself to it. Perhaps it is the end of alienation. It is worth some thought.

The campus full of ugly new buildings and the plywood room over the waffle shop are the loci of Harley's life, the pressure points at which the tourniquet of his alienation is applied. Ultimately, all his troubles come home to roost in the plywood room. And there too is pregnant Sally and the

laundry to be taken to the Wash-O-Mat and the letters from parents and notices from his draft board and notes from his landlady and reminders from GMAC and duns from the doctor and that other IBM card bearing the dismal record of his first semester grades.

While Sally is busy in the bathroom throwing up supper, Harley ponders the contrast between cards-Harley and flesh-Harley. He likes Sally, he likes the plywood room, he likes going to college, he even likes the idea of the duplicate Harley Sally is working on with such assiduity. What he doesn't like are grades and being broke and getting drafted and leaving the comfortable, ugly little campus and the snug, warm, syrup-smelling plywood room.

Like, ever.

And apart from the draft, he does not want someday to graduate and become an Accountant, Advertising Man, Airlines Representative, Chemist, Comptroller (with or without the voiced "p"), Designer, Engineer, Insurance Agent, Management Trainee, Personnel Man, Salesman, Spy, Teacher, Technician, Writer, or Zoologist, and work forty hours a week doing one thing in one place and buy bonds through the Payroll Savings Plan and stand in line to screw the Comptometer Operator (no silent "p") at Christmas parties and grow old and retire with a gold watch that says "Forty Years Service Award."

And so Harley sits at his packing-crate desk, Dionne Warwick bitching about her and some man out of the radio, the sound of Sally busy at her pregnancy in the bathroom, and decides the nature of the current division of labor and responsibility between IBM card-Harley and flesh-Harley is not really in his best interests, that if the cards will just take on that part of Harley so vulnerable to, so alienated from, parents, banks, credit companies, landladies, draft boards, and college administrators, the other part will be happy to handle all the remaining business, will be quite content and fully related to the uggly little campus and the sweet plywood room above the waffle shop.

At midnight, Harley is outside the administration building, picking the lock with a paper clip and the flattened tube of a BiC ball-point pen. It is an art he learned from the older brother of one of his colleagues in Boy Scout Troop 502, which met sporadically in the basement of the First Lutheran Church of Reading, Pa., for sessions of military drill, knot tying, and grab-ass

during Harley's junior high school years.

Inside, Harley checks to make sure there are no janitors about and goes to work on the Registrar's files. He spends most of the night studying the system: green card for Curriculum file, pink card for Housing, white card for Master Machine Room Control file, yellow card for Cumulative Grade Record, blue card for Fees, red card for Student Deferment file, purple card for Financial Aids, puce card for Student Employment Payroll, mauve card for Personal History index, and brown card for Student Identification ("affix picture in upper right-hand corner; do not use staples or other metal fasteners"). Just before dawn, he finishes his study and skulks across campus to home, watchful for campus rent-a-cops.

The next night he returns and begins his work in earnest. He registers himself for a heavy twenty-one-hour load; stamps his fee card PAID and signs it with an illegible scrawl very like the Bursar's; alters his first semester grade record to a flattering mixture of A's and B's and makes a Xerox copy of it to enclose in a letter ostensibly from the Dean of Instruction addressed to "Local Board No. 47, Reading, Pa.," which explains that earlier reports on Jacobs, Harley, were in error; grants himself permission to occupy off-campus housing; establishes himself as the recipient of a $2000 annual scholarship; puts himself on the payroll as a student assistant in "Department 145," wondering as he does so what department that can be; and files a power-of-attorney directing that both scholarship and payroll checks be sent automatically by the computer to his bank for deposit. Again it is nearly dawn when he has finished, and he returns home to sleep through the day.

On the third night, he is busy with his paper clip and ball-point pen all over campus. It is necessary that he insert the cards in the proper files, that appropriate aspects of the new card-Harley be properly distributed among the Bursar, Registrar, Dean of Instruction, Dean of Students, Dean of Liberal Arts, the Housing Office, and the Office of Student Aids. And of course, most important of all, the white Master Machine Room Control card, the very informing spirit of the new Harley, must be carefully inserted in the long skinny file cabinets that surround the clicking, light-blinking, machine-oil-smelling god in the basement of Hubris Hall.

As each card nestles in its appropriate file, Harley feels a

progressive lightening of his spirits, a burgeoning sense of communion with the once-hostile world. He has rewritten, tailored, shaped the vulnerable, external, IBM card-Harley into something fine and brave and solvent, something immune to the thrusts of night sticks; and he has filed its manifold presences into the manifold file drawers in which it belongs as surely as cell belongs to flesh, neuron to thought, passion to spirit. For the next semester at least, the Harley-cards will operate in intimate electromechanical harmony with one another, with the draft board, with the bank, and with the college administration. And the flesh-Harley will be free to enjoy the ugly little campus and the sweet plywood room.

And freely enjoy he does, at first. Initially, he is fully satisfied with the results of the nonaggression pact he has so slyly negotiated with the harsher realities of life, the public sources of his alienation. He attends his classes, and because he is now unconcerned about grades, he learns a great deal. He pays his back rent and resumes his monthly remittances to the finance company. The draft board restores his 2-S classification, and he finds himself honorably mentioned on the Dean's list, which brings an illiterate but enthusiastic letter from home enclosing a modest check. For the first time, Harley finds the whole man integrated harmoniously with all aspects of its existence; no jarring alienation from anything; peace, comfort, pleasure everywhere; every hole in the siren flute of desire is stopped.

He tries to explain his satisfaction, his accomplishment, to Sally. He wants her to know of his remarkable achievement. But she is totally intent on her own thing, and only nods sweetly, a little vacantly, and says, "That's real nice, baby." When she thinks of Harley at all, it is of a future Harley, a father-Harley. She is not much interested in IBM card-Harley and finds flesh-Harley comfortably less importunate in bed, which she mistakenly ascribes to her altered figure and which she confidently foresees will end; she has no doubt that an ardent Harley and a flat belly will return with the simultaneity and necessity of apple blossoms and bees.

The disinterestedness of a preoccupied Sally triggers—does not originate—an odd new dissatisfaction in Harley. The necessarily secret nature of his treaty with society has rendered him an unperson as surely as any secret East European purge; he dare not participate in

campus political activities lest he draw on himself investigation; his classroom accomplishments, such as they are, are transcended by the cards in the files. And of course the clever treaty itself must remain secret, at least from the college administration.

In quiet but growing discontent, Harley visits his old dormitory to flirt with the revelation of his scheme, to display his calm mastery of his own fate in front of *some*one.

"I kind of took your advice, Group Al," he says ingratiatingly to the sociology major. "And it worked out great."

"Advice? What advice?"

"You know. About accommodating to the personal-societal interface, or whatever. It works."

"How about that," says Group Al, fingering his new beard. "Tell me about it."

"Well, I can't say too much, but what I did was. . ."

"I advised you to accommodate to the personal-societal interface, huh?"

". . .Yes, and what I did was. . ."

"That's very interesting and I'm glad it worked for you. The thing is, there's a lot of new evidence about the validity of personal integration. . ."

". . .But let me *tell* you! You see what I did was. . ."

"The thing is, sociometrists have determined to *my* satisfaction that the real intellectual in American society has been forced into internal emigration. Only shallow thinkers and cultural Philistines can find identity in a society based upon psychic and material domination. Now you take your problem. . ."

"But I don't *have* any problem now. I've got it whipped. . ."

". . .You'll find the solution, as I have, in group therapy. There's a bunch of us meet in the basement of the Methodist Church, and you'll be welcome if you want to come along tonight."

"Well—ah—thanks. I guess not tonight." Harley is deeply disappointed in Group Al.

"Okay, Jacobs. But anytime you want to. . ." He leaves a beatific smile flashing here and there around the lounge.

To the neo-Marxist, Harley says, "I took your advice, Red Al. I think I've found a way to exploit the exploiters."

"Did I advise you to do that?"

"Yes, and I figured out a way. You see, what I did was analyze the fascist-imperialist establishment like you said and develop a system to beat. . ."

"Good, Harley. Great! You're obviously on the right track. Like this stuff here. You know what it is?"

"No. But let me tell you about. . ."

"It is a prep sheet for the Foreign Service Entrance Examination. I'm going to take it tomorrow."

"Fine. But what I want to tell you is. . ."

"It's a tough exam, but professor 321 thinks I stand a good chance because of my knowledge of the Cuban situation."

"Gee, Al, good. I hope you do okay on it. But there's this thing with the computer. . ."

"Thanks, Harley. If I make it, I'll put in a good word for you in Washington. You'll be a senior in a couple of years, and you might want to kind of aim for the Foreign Service. Great bunch of people there." Red Al returns to his prep sheet.

Again disappointed, Harley says, "One last thing, Red Al. Is Pretty Al still around?

Red Al looks up from his papers. "Why, no, Harley. The lucky stiff passed the exam last month. He's already in Washington."

To the pot man, Harley says, resignation in his voice, "Gimme a nickel bag, will you Dirty Al?"

As the spring semester and Sally ripen toward their respective commencement exercises, Harley sinks into a kind of lethargy. He finds it almost impossible to communicate with his fellow students, who are interested, after all, in grades, administrative repression, jobs, and girls, none of which effect Harley in the least. He feels a new boredom, a satiation with peace. He spends more and more time in bed peering through the holes in his blue IBM card, now worn and fuzzy. But even the card ceases to give him much solace. There is nothing he can put his finger on, at first. He remains convinced that he has discovered the best of all possible worlds, and he wonders if his dis-ease may not stem from something amiss in his diet. It does not yet occur to him that he has eaten too much lotus.

And then June comes. Harley makes a midnight trip to the Registrar's office to enter his spring semester grades. A few days later Sally brings forth Harley, Jr., in pain and triumph.

And then July comes and Sally's belly flattens and she lies at night, expectant (in a new sense of the word), but there is little or no Harley.

It is not now a matter of damage from a night stick.

Sally questions. Harley questions, as baffled as she. After much soul-searching and a great deal of peering through the IBM card, Harley begins to suspect the truth: that he has delegated

too much, that his frightening disability is psychological a part of the miasma of boredom and nullity in which he finds himself

By August he is near despair; Sally is morose and uncommunicative. Can it be, he wonders, that he has purchased peace at too dear a rate? Are the two sides of his nature, the public card-Harley and the private flesh-Harley now themselves alienated one from the other? Must he now, upon retiring, ask himself: "Will the real Harley Jacobs please stand up?"

Harley cannot be sure. He thinks back to Chicago, to his chaotic first semester at Bangsville S. C. "There must," he says to Sally one night after a particularly disappointing experience, "there must be a lesson to be learned in all this."

Sally, deflated in belly and libido, says in her best Main Line, "Okay, Clyde. You find it, or me and the baby haul ass."

And thus is the terrible dichotomy of his times revealed to Harley. The lesson is there. The exhortation and the threat are clear. In matters of alienation, Harley comes to realize, there are no permanent broad-spectrum cures, no magical molds and miraculous molecules that can simultaneously zap the virus of isolation, the bacillus of loneliness, the fungal flowers of love. The best he can hope for, he comes to realize, is to choose the disorder that will get him in the end.

It is no small boon.

Slowly, not without considerable pain, sitting at his packing-crate desk, Harley pushes a Venus No. 2 pencil through his favorite pair of IBM card holes. What was square and simple becomes roughly round, enlarged, bordered with irregular torn blue fibers. Thus spindled and violated, subsequently folded and mutilated, the card drops to the plywood floor, and Harley goes out into the night.

It takes only a little while with the paper clip and the BiC. He does not wish to go too far. He leaves his grades alone: even though they have not been assigned him by his professors, he believes he has earned them, the ABRACADABRA of IBMery, minus the C's, D's, and R's. But the paper employment in Department 145 goes. So does the scholarship. So does the twenty-one-hour course load: with professors to please and a living to get, he will need more time.

Later that night, after a splendid exhibition of the stimulating powers of alienation, Harley lies smoking a cigarette and tries to understand.

"It will mean that man from GMAC will be around bugging us. And the landlady."

"Um," says Sally.

"It will mean that I'll be uptight a lot of the time."

"Um."

"It means that I am incapable of achieving meaningful relationships with society as a whole and with you at the same time."

"Um."

"It means that I will be full of ups and downs. I will be hard on you. I may sometimes beat little Harley. I may beat you. I will be a mess of contradictions. I will be forever more or less hung up, and when I am not hung up I will be disgustingly straight and conformist and square, and I will probably always be alienated to everything but you and little Harley and the plywood room, wherever we wind up having our plywood room."

"Um," says Sally. "*Mais il faut que nous cultiver notre jardin.*"

"What?"

"It's French. Number 6904. Professor 175. It means 'never mind, baby, let's us cultivate the old garden again.'"

Here is an ingenious fantasy that poses one sticky problem about the matter of time travel.

A Sense Of The Future

by STEPHEN BARR

The New York Times; Brooklyn, N.Y., February 5, 1970:
King's County Hospital for the Insane;
At 2:30 this morning, in his sleep, the one-time well-known author...

Damn! I thought, I must have passed out!

When you come to and cannot recognize anything or anybody, then you have passed out. The man sitting opposite me looked neither solicitous nor disapproving; he merely looked as though he was waiting for my next remark.

"Well..." I said.

"Yes?" he said, quite politely, but noncommittally.

There was a long silence during which I attempted to get my bearings. This was interrupted by the man opposite me—he was sitting in a red leather chair, and he rested his hand on a long table which had newspapers and magazines on it. "You, as a new member, would of course be surprised at that. But you were going to say?"

What's going on here? I thought. What have we been talking about? The fog was beginning to lift, and I saw that we were sitting in a club. I also saw that the man opposite me was youngish, but very definitely dressed like an old one. An actor? I thought.

"Can I send for a little brandy?" he said, and I suddenly sat up straight, for I was looking at the newspaper

next to me on the table. It was, of all things, the *Manchester Guardian*, and the dateline said, January 12, 1909. At that moment a young man came into the room. He had long hair, almost to his shoulders, but the Hippie look was vitiated by his Edwardian costume. Then it dawned that this was England, though not why or how I was there, and his appearance rang a bell—his getup suggested the hangover from the Oscar Wilde fashion rather than the Eddies of the early 50's.

"I say—d'you mind? I'm awfully sorry, but you look quite ill," said the man opposite me. I had just realized that the newspaper next to me was fresh and new-looking, and the *London Daily Mail* next to it had the same date. The young man's costume was explained—my trip had been more than across the Atlantic. . .

"Look," I said, "I know it sounds perfectly ridiculous, but I've come from another—I mean, I was until recently. . ."

"My dear fellow, I can understand perfectly. You actors are under a strain, and—"

"What on earth makes you think I'm an actor?" I said.

"Well, you know, your clothes. . .sort of. . . I mean. . ." He floundered, and for some reason it cleared away the last of my personal fog—I was in London, and I was back in time sixty-one years—about the time of my father's birth. The man was standing up now and looking at me with a strange expression—almost as if he were making an inventory.

"You know, I can't quite make you out," he said. "You appeared here in the smoking room so suddenly, and of course you're a new face, you know. . ."

I couldn't answer, I had too much to ask—but it was he who asked the next question, and he was not cold nor distant. There was almost a look of fear in his face.

"D'you mind, but who *are* you?"

My mind was terribly clear; I seemed to be able to think like all the great chess players and tacticians in history. This was incredible, but it was happening to me, and so I stood up and I didn't shake, for here was my chance.

"Sir," I said, "I want to attempt to convince you of the impossible." It must have sounded rather pompous and silly, for he looked at me very straight for a moment and then appeared to change his mind.

"Shall we sit down?" he said, and banged one of those bells that have to be banged on the top.

"Look," I said, "I am from the future."

He didn't seem to hear me at first, but then he looked up at me. "My dear fellow!"

"No, damn it, I am!" I said.

"Well, don't let the other members hear you."

A waiter appeared, and I noticed that men's clothes hardly change with the passing of the years, and club servants' least of all. Nonetheless this one's had a cut that looked as clearly out-of-date as the photographs of an Easter Parade in the early part of the century. But this *is* the early part of the century, I suddenly remembered.

"A double brandy and some port," said the man opposite me, and he smiled a curiously nervous and sensitive smile at me. "Now, tell me."

"I am from the future," I said, and it sounded ridiculous. He frowned slightly and reached for his cigarette case. "Yes, so you said." Now that I knew when this was, I could see he was dressed in the conservative fashion of the years we call Edwardian, and wore the black tie that had been universally adopted at the death of Queen Victoria. "D'you mind coming over to the light for a minute?" He stood up, and so did I and followed him to a large French window that looked out on a park. Here he turned with his back to the light and looked at my eyes very intently.

"You see, you're not *drunk*, and there must be some. . ." His voice trailed away, and I felt as though I could not keep my knees straight. "I'd better introduce myself," he went on. "My name is Brangdon, er. . . Doctor Brangdon, and you're not drunk, and you're apparently not mad, and I don't know what the devil you're talking about. Here, drink your brandy," and he marched me back to our chairs.

I must watch out, I thought, and go slow, or I'll get myself in a jam. I made a terrific effort to marshal my thoughts. "There is only one thing to do," I began, "and that is to convince you that I'm telling the truth. I obviously can't do this by merely reiterating what I said before. To begin with, my name is Winton, and I am not a member of this club."

"The Saville," he murmured. "No, I rather fancied not, but go on."

"Well, the one thing a man who goes back into the past can do that nobody else can is prophesy the future." He looked a little startled.

"Yes, true enough! I'm bound to admit that if you can do that you've proved your point." He chuckled and reached for a pink-colored paper on the table, which he spread on his knees. "This, as you may or may not know, is

the *London Sporting and Dramatic Times*, otherwise known as the Pink'un. It gives a list of the horses running in the Tewksbury tomorrow, and if you can prophesy the winner, I shall not only be impressed but extremely grateful."

"No, of course I can't!" I said. "How in the devil do you expect me to remember that after sixty years?" Remember? I thought. Why, I wasn't alive then—or rather I was about two years old. . .no, my *father* had been. . .

"True enough. However there must be some things you can remember; you know, great events, wars, and so on."

"Certainly!" I said hotly. "The Two World Wars, the—"

"*Two?* Well, I suppose you mean between us and Germany, probably involving France and Russia."

"Well, yes. . ." I said with the wind gone from my sails. "Anyway, the first will start in 1914—"

"*Der Tag*," he said drily, "has been set for that date, I am given to understand on the best authority, for some years. But go on."

"Anyway it will be August the third. . .or fourth." I wasn't quite sure which. Or was it the first?

He shrugged. "They will, of course, wait until after the summer harvest is in. Everyone in the War Office knows that." He sipped his port. "Anything besides war?"

"Well, there will soon be a thing called an aeroplane—"

"My dear chap! The Wright brothers, six years ago, at Kitty Hawk in Carolina—"

"North Carolina," I said. These English! They never get anything right about America.

"However," he continued, "I don't think they'll amount to much. . ."

"That's where you're wrong!" I began in triumph, but he raised a hand.

"Please!" he said. "I was going to say *until* they have been used in warfare and thoroughly tested and experimented with. You could read that in Wells, you know. I say, have some brandy?"

"No, thanks," I said. Then I changed my mind and said I would after all. "Might as well get a bit tight—it may make me think of something you don't already know."

"I say, old man, I don't want to appear unsympathetic and all that, but I can see you really believe what you're saying, and I think the best way to rid your mind of this. . .this idea of yours, is for us to think of something you can really prophesy." Two men walked into the room at this moment. "Damn! No, wait a moment, I've got an awfully good

idea—you see those two chaps? Well, the older one is Sir Austen Jenks, president of the Royal Historical Society, and the one with the intense look is an awfully brilliant physicist named Eddington. Another double, John," he added to the waiter who had arrived at the same time.

"Hold on," I said. "I know Eddington," I began.

"Oh, you do, do you? Well, come and talk to him."

"I don't mean I know him personally, I mean he's still... that is, he will have become, next to Einstein, one of the most famous figures in science."

Brangdon frowned. "Yes, yes, of course, that's what we all predict. But who is this Einstein fellow?" Then he leaned over and whispered. "My idea that I mentioned is that we can bring them into this test of what you say; tell them that we have a bet about what's going to happen in the next sixty years, and they can help." He turned around. "I say, would you two come over here and join us? We have something afoot." Then he turned to me. "Tell them about the Einstein man!" My brain was racing like a fan motor when the belt comes loose, and I could only mumble when we were introduced.

"Ha! Jolly funny coincidence!" Jenks said when Brangdon had explained the presumable subject of our conversation. "We were just talking with Wells at luncheon, and he said the most ridiculous . . ."

"Now, please, Jenks!" interrupted Brangdon. "If you don't mind. This is awfully interesting, really. Winton, here, has already said some most amazing things, and (he winked at me) he doesn't know how he does it. Now, I thought you two. . ."

"Oh, sort of psychical stuff, eh?" said Jenks.

"No, no! Not at all." He turned to me. "Tell about Einstein."

Eddington, who had been listening with a look of amused anticipation, brightened up. "What about Einstein?" he asked. "Have you been following his work? You're a mathematician, of course."

"No," I said, "I'm a writer, but everyone knows. . ." (A warning glance from Brangdon) "Well, *I* believe he will invent the Theory of Relativity." God, how lame it sounded.

Eddington looked quite puzzled. "Yes, I know what you mean, of course, but you say you're not a mathematician? A distinguished amateur perhaps? You've read the Zurich paper on. . ."

"No, I have read nothing of his, or any other scientist,

except those books written for the layman. Such as your book on astronomy."

There was a silence.

"*My* book on astronomy?" asked Eddington. "I have never written anything on astronomy for the lay reader. Perhaps you're thinking of Ball?" I noticed that Brangdon was listening with frozen attention. Then Eddington laughed in a very charming way and said, "How silly of me! Of course, I forgot what this was all about; it's a game, isn't it? Well, now, let me see, you prophesy that I will write a book on popular astronomy—a very good idea. You furthermore state that Albert Einstein will become famous because of his theory of relativity, and in saying that, you make me feel that you must have talked to mathematicians, or you really are one, in spite of your modesty." He looked at Brangdon with a sly and quizzical expression. The room seemed to be getting foggy again. Brangdon came to my assistance.

"Jenks, Eddy, this is not entirely a game. The point is that Winton really believes he can prophesy, and I am sufficiently convinced of his sanity and sobriety to want you two to either help prove it, or else help lay the ghost."

"It's *not* a ghost," I screamed. Then, flooded with sweat, I sat down. Apparently I had jumped to my feet. Three kindly English faces showed concern and a little alarm.

"I'm sorry," I said. "I'm in a spot here. I am from the future, as I told Brangdon, and I thought I could prove it by prophesying, and so I can." I took a deep breath. Outside it had got dark, and I could hear the sound of horses' hooves and the occasional cry of a newsboy. Here's where I must be Jeremiah and Mother Shipton rolled into one, I thought. I must be quite calm and I must not try to prophesy things that I didn't really know about, nor things that they did. But what were they? The club seemed very still, and I could hear a clock ticking outside in the hallway, and I wondered what time it was. How funny to be able to tell the date and yet not know the time—but that was the way it usually was. . . My eyes were closed and I was leaning back in the comfortable leather chair.

"To begin with," I said, "all the recent events I know about, that is to say much about, are very recent. Recent, of course, from my point of view, but too far ahead to be admitted as immediate proof." Sir Austen had been silent, now he coughed.

"Yes, of course, my dear sir. Now, what you must do—"

"Shut up, Austen!" said Eddington.

"For instance," I continued, "after the Versailles Treaty—"

"The what?" said Jenks.

"The .treaty after the First World War." Jenks and Brangdon nodded, but Eddington was still frowning. "At the conclusion," I continued, my teeth clenched, "so great a wrong will have been done to the Central Powers" (Jenks smiled agreement), "that after a few years a man called Hitler will come to power, and he and his party will. . .er, well, they will start a thing called Fascism. I mean Nazism. Nazism is, that is to say, will be an oppressive form of government that crushes the people and the trade unions, and helps the. . ." I could think of nothing more to say. Sir Austen Jenks smiled.

"But, my dear boy," he said, "that is a very able analysis!" He turned to the others. "I remember the other day I was talking to Blanchard and Coats, and we were discussing the effects of any large-scale war on the fiscal picture. Now, of course, when Mr.—er—Winton here speaks of Hitler, that is a name I don't know, but as to his other conclusions, why—"

"Goddamn you all, shut up!" I said, and I said it without raising my voice, but with enough venom to get an instant hearing, and an instant silence. Other people seemed to be hearing, too. There were several members standing, newspapers in hand, in the two big doorways. I noticed, with a faint sense of surprise, that the servant Brangdon had summoned was still waiting for his orders. I also noticed that I was standing up again. What was the matter with these guys?

"There will be bombs dropped on this—this London. Perhaps this very club! America will enter the war in 1917!" I looked for Sir Austen's approval, but he was talking hurriedly to one of the club servants. Brangdon had a fixed smile on his face. The bedside manner, I thought, and laughed. If they only knew! Ah! But Eddington would know, and he wouldn't let me down like Brangdon, but where was Brangdon? He was here a moment ago; yes, there he is, smiling as usual, with that smug expression, as though he knew all the answers. Only give me a few years, oh God, just a few years, and I can prove—

"I don't know your Derby winners," I said, "and I don't know as much as you do about your wars and history, but I know this. . ." Quick! I thought—what do I know?

I turned to Eddington for inspiration, but all I saw was two men in white uniforms coming toward me.

THE TRAGEDY OF THE MOON

ISAAC ASIMOV

SCIENCE

THERE WAS A FULL MOON in the sky this morning. I was awake when the dawn had lightened the sky to a slate blue (as is my wont, for I am an early riser), and, looking out of the westward window, I saw it. It was a fat, yellow circle in an even slate-blue background, hanging motionless over a city that was still dreaming in the dawn.

Ordinarily, I am not easily moved by visual stimuli, as I am relatively insensitive to what goes on outside the interior of my skull. This scene penetrated, though.

I found myself marvelling at Earth's good fortune in having a Moon so large and so beautiful. Suppose, I thought, the Moon circled Earth's twin sister, Venus; suppose that it was Earth, rather than Venus, that lacked a satellite. How much beauty we would have missed! And how useless it would be to have it wasted on Venus, whose cloud cover would forever hide the Moon even if there were intelligent beings on the planet who could appreciate it.

But then, over breakfast, I continued to think—

Beauty, after all, isn't everything. Suppose Earth lacked a Moon. What would happen?

To begin with, Earth would have only solar tides, considerably smaller than the present ones. It would have a shorter day because tidal friction would not have slowed it so much. It might have formed, during the birth-pangs of the Solar system, in a somewhat different fashion, in the absence of a secondary nucleus forming at the same time (if that was what happened). Or else, life might have evolved differently without the capture of a large Moon six hundred thousand years ago (if that was what happened).

But let's ignore that. Let's suppose that Earth formed as it did; that life evolved as it did; that the day remains what it is; that the smaller tides are of no crucial importance. And now let us suppose that early man (twenty-five thousand years ago?) raised his questioning eyes to the sky—

And found no Moon!

What would have happened?

I am going to advance the thesis now, that had he found no Moon, mankind's history would have been altered far, far for the better—especially if it were circling Venus. It was because Earth *did* have a Moon, and Venus did not, that mankind may well be approaching the end of its days as a technological society.

I'm not kidding. Bear with me—

Let's leave the Moon where it is for now, and try to imagine what primitive man decided the objects in the sky must be doing.

To begin with, he must have been aware of the Sun rising, moving across the sky, setting—then rising again the next morning and repeating the process indefinitely. The only possible rational explanation of what he saw was to suppose the Sun revolved around the Earth once each day.

At night, the stars came out, and observation made it clear that they, too, revolved about the Earth once each day, while maintaining their relative positions fixedly.

It might have been possible for men to argue that the sky stood still, and that the Earth rotated on its axis, but why should they have done so? The hypothesis of the Earth's rotation would not *in any way* have explained the observations any better. Instead the hypothesis would merely have raised the question of why the Earth should seem to be motionless if it were, in fact, moving—a question no prehistoric man could possibly have answered.*

** It wasn't till 1851 that the rotation of the Earth was directly demonstrated. Till then, it had to be accepted by indirect reasoning.*

The next step was to note that, in actual fact, the Sun does not move around the Earth in exact step to the stars. The Sun takes four minutes longer, each day, to complete the circle. That means that the Sun drifts west-to-east against the background of the stars, from day to day, and makes a complete circle around the sky in 365 ¼ days.

If you ignored the daily rotation of the sky and considered the stars as a kind of fixed background (which was mathematically equivalent to supposing the Earth to be rotating), you could say that the Sun revolved around the Earth in 365 ¼ days.

Actually, you could explain the motion of the Sun against the stars just as well by supposing the Earth revolved about the Sun in 365¼ days—just as well, that is, *but no better.* And again, you would have to explain why the Earth should seem motionless if it were, in fact, revolving about the Sun.

And where does the Moon come in? It is almost as obvious an object for observation as the Sun is. It, too, rises and sets daily; and it, too, lags behind the stars. In fact, it lags behind far more than the Sun does. It makes a complete circle against the starry background in merely 27 1/3 days.

Again, the motion of the Moon can be described just as well, *but no better*, if you imagine the Earth to be revolving about the Moon in 27 1/3 days.

Now forget about the implausibility of the Earth's moving without anyone being aware of it. Let us suppose it could happen (as in fact, it can) and ask merely this: If we imagine the Earth revolving about the Sun to explain the Sun's movements, and revolving about the Moon to explain the Moon's movements—which is it really doing? It can't do both, can it?

But then suppose some primitive madman, with the imagination of a science fiction writer, had suggested that the Moon revolved about the Earth in 27 1/3 days, while Earth and Moon together, the latter still circling steadily, revolved about the Sun in 365¼ days. That would neatly explain the apparent motion and the phases of the Moon, and the apparent motion of the Sun, too.

Do you suppose, though, that any of his listeners would accept so complicated a system on the basis of what was known in prehistoric times? Why should there be two centers in the Universe? Why should some objects circle the Earth and other objects circle the Sun?

It was possible to explain the motion and phases of the Moon,

and the motion of the Sun as well, by supposing Moon and Sun to be moving independently, at different speeds, about a common center, the Earth. This could not easily be done if the Earth and Moon were pictured as moving in independent orbits about the Sun; or if Earth and the Sun were pictured as moving in independent orbits about the Moon.

Only the Earth could easily serve as a common center for both other bodies and that, combined with the obvious motionlessness of the Earth, must have fixed the geocentric ("Earth-centered") notion in the mind of any primitive astronomer capable of reasoning out such things. To the ordinary observer, the obvious motionlessness of the Earth was enough.

Long after the motions of the Sun and Moon, relative to the stars, were carefully studied*, the motions of the planets, Mercury, Venus, Mars, Jupiter and Saturn, were studied and analyzed. That may not have been done in detail until the time of the first high civilization (one based on writing), the Sumerian.

The planets, it was found, moved against the stars in a far more complicated fashion than the Sun and Moon do.

Consider Mars, Jupiter, and Saturn. Each makes a complete circuit of the sky, but more slowly than the Sun does. Mars takes a little less than two years to make the circuit, Jupiter a little less than twelve years, and Saturn a little less than thirty years.

But instead of drifting slowly across the starry sky in a steady west-to-east manner as the Sun and Moon do, each of the three planets periodically changes direction and moves east-to-west against the background of the stars, for a comparatively brief period. These "retrograde" movements come at roughly yearly intervals for each planet.

The Sumerians and their successors in Babylonia apparently were content to work out the motions without explaining them. The Greeks, however, when they grew interested in astronomy in the 5th Century B.C., could not let the matter rest there. They knocked themselves out trying to work out systems that would allow Mars, Jupiter, and Saturn to revolve about the Earth, while allowing also for the periodic change in direction. More and more elaborate schemes were built up, climaxing with that of Ptolemy in the 2nd Century A.D.

** The primitive stone structure at Stonehenge has been described as intended to follow the movements of Sun and Moon in an elaborate and rather sophisticated way, indicating perhaps thousands of years of previous development and elaboration.*

Here at last was a case where the hypothesis that the Earth and the other planets revolved about the Sun would have made a difference. A moving Earth would explain the retrograde motions of Mars, Jupiter, and Saturn far more simply and logically than a stationary Earth could possibly explain it. If Earth and Jupiter, for instance, were both revolving about the Sun, the Earth would have to make one circle in one year while Jupiter made one circle in twelve years. Earth would move more rapidly. Whenever Earth was on the same side of the Sun as Jupiter was, Earth would overtake Jupiter. Jupiter would then seem to be moving backward in the heavens.

Unfortunately, if you assume that the planets are each revolving about the Sun in independent orbits, *that does not take care of the Moon.* The Moon has to be revolving about the Earth, and that would require two centers to the Universe. The planets could all, *except* for the Moon, circle the Sun in independent orbits. The planets could all, *including* the Moon, circle the Earth in independent orbits. If I were a Greek, then, I would have voted for a geocentric universe rather than a "heliocentric" ("Sun-centered") one. The geocentric one would have seemed simpler.

I don't know whether this line of argument involving the Moon actually swayed the Greeks. I have never seen such an argument described. Still, I'm convinced that the argument about the Moon must have had its effect.*

If only there were some object in the sky that was clearly revolving about another object in the sky as the Moon revolved about the Earth. Then, perhaps, men would accept, perforce, the notion of two or more centers to the Universe and see nothing wrong in supposing a heliocentric Universe in which the Moon remains geocentric.

Actually there is such an object; two, in fact. The planets, Venus and Mercury never leave the vicinity of the Sun. In this, they offer a sharp contrast to the other planets.

The Moon, Mars, Jupiter and Saturn all circle the stars in such a way that they can, at one time or another, be at any given distance from the Sun, even in a spot in the sky exactly opposite to the position of the Sun. (This is true of the Moon, for instance, at every full phase, as when I saw it this morning.)

Not so Venus and Mercury. Venus, for instance, moves farther

* *And, of course, it's no mystery why the Moon spoils the heliocentric view of the Universe. The Moon really does revolve about the Earth.*

and farther from the Sun, till it is separated by 47° (half the distance from horizon to zenith) but that is all. Having reached that 47° separation, it begins to move closer and closer to the Sun again. Eventually, it merges with the blaze of the sun and then, after a few weeks, can be seen on the other side of the Sun. Again, it moves farther and farther to a maximum separation of 47° and begins moving back. It does this over and over.

When Venus is on one side of the Sun, it is the evening star. Because it is never more than 47° from the Sun, it never shines later than three hours after Sunset. By then, or earlier, it has set. On the other side of the Sun, it is the morning star, never rising earlier than three hours before Sunrise.

As for Mercury, it stays even closer to the Sun, never moving more than half as far away as Venus does, never setting later than 1½ hours after the Sun, when it is an evening star; never rising earlier than 1½ hours before the Sun, when it is a morning star.

It would be quite logical to suppose that both Venus and Mercury are revolving about the Sun, since this would at once, and without difficulty, explain their motions in every detail.

Easier said than done! In the first place, it was not easy to identify Venus the evening star with Venus the morning star. It took a pretty advanced astronomer to see that one was only present in the sky when the other was absent and that the two objects were therefore the same planet. Again, Venus and the Sun were never visible at the same time, for when the Sun was in the sky, Venus could not be seen (or just barely seen, at times, if you knew exactly where to look). The connection between Venus and the Sun was therefore not an obvious, at a glance, one. Again, it took a sophisticated level of astronomy to see it—and the condition with respect to Mercury was even worse.

Nevertheless, about 350 B.C., the Greek astronomer Heracleides Ponticus did indeed suggest that Venus and Mercury revolved about the Sun. And if two of the planets revolved about the Sun, why not all the rest, including Earth as well? In fact, about 280 B.C., the Greek astronomer Aristarchus of Samos took this step and suggested a heliocentric Universe.

But by this time, geocentricity had fossilized itself into Greek thought. What's more, Aristarchus could not deny that the Moon, at least, had to remain in orbit about the Earth. So the geocentric notion was not abandoned, and Greek astronomers worked out ingenious schemes for allowing Venus and Mercury to circle the Earth and yet never move far away from the Sun.

You might ask yourself if, after all, it matters to ordinary human beings, and to history, whether philosophers decide in favor of geocentrism or heliocentrism. Who cares whether Earth goes around the Sun or vice versa?

Unfortunately, it makes all the difference in the world. To the average person in early history (and now, too!) the sky and all it contains is of minor importance (except perhaps for the Sun). It is the Earth that counts and only the Earth. And on Earth, only mankind counts. And of men, only one's country, one's city, one's tribe, one's family, one's self counts. The average person is geocentric, anthropocentric, ethnocentric, and egocentric (that is, earth-, man-, tribe-, and self-centered).

If the intellectual leadership of the world—those who think, speak, write, and teach—agree that the Universe is indeed geocentric, then all the other centrisms tend to follow that much more naturally.

If all the Universe revolves about the Earth, who is then to doubt that Earth is the most important part of creation, and the object for which the rest of the Universe was made? And if it is Earth that is of central importance, must that not be for the sake of man, who is visibly the ruler of Earth? And if mankind is the ruler of all creation, the object for which all creation was formed, then why should it accept any bars or qualifications to its actions. Mankind is king, its wish is law, and it can do no wrong.

Those religions which are Earth-centered and man-centered make more intellectual sense, too, in that case.

Because pagan philosophy and Christianity were alike geocentric and, therefore, anthropocentric, it was easier for the Roman Empire to become Christian. There was mutual reinforcement in this particular all-important respect, and Christianity, which made geocentricity and anthropocentricity a central dogma, called Aristotle, Ptolemy, and similar Greek thinkers to its aid, to impress those intellectuals who would not be satisfied by the word of the Bible alone.

And because geocentricity is not, in fact, an accurate picture of the Universe, all scientific inquiry became dangerous. Any investigation that would try to go beyond Aristotle and Ptolemy and find a non-geocentric picture of the Universe that might explain it better, became dangerous to revealed religion.

Even though the Ptolemaic system had become so top-heavy as to be embarrassing in its deficiencies, it was not till the 16th Century that the Polish astronomer Nicholas Copernicus dared

present a heliocentric theory once more, and even he preferred not to publish till 1543, when he was sure he was going to die soon anyway. Then it took another full century before the intellectual world of western Europe accepted heliocentrism fully in the face of religious resistance. Bruno had to burn and Galileo had to recant before geocentricity vanished.

Even then, victory was not really won. Old habits die with exceeding slowness, and whatever the science courses in school teach us, most of the population of the "advanced" nations of the world, still believe that man is the measure of all things, the ruler of creation, and can do as he pleases.

As a result, here we are in the waning decades of the 20th Century, still destroying the plant and animal kingdoms, still ravaging the inanimate environment—all at our careless whim and for the pleasure and comfort of the moment. The clear indication that this will kill mankind, who cannot live without a functioning ecology, seems to bounce off the blank wall of those minds who see a Universe built only for the sake of mankind and for no other reason.

To my way of thinking, then, this all goes back to a geocentricity which has riveted on the minds of man by the glowing intellect of the Greek philosophers who were influenced by a number of things including the fact that the Moon *does* revolve about the Earth.

But suppose that the Moon did not revolve about the Earth, but that it revolved about Venus instead; and that it was Earth, not Venus, that was moonless.

Let us suppose that it is our Moon, the same size, the same characteristics, and the same distance from Venus's center that it is, in actual fact, from ours. And to avoid confusion, let us call the Moon, while it is Venus's faithful companion, Cupid.

Cupid's period about Venus would be a trifle longer than its period about Earth, since Venus is slightly less massive than Earth and has a slightly less intense gravitational field in consequence. Without laboring the point, let's say it will revolve about Venus in 30 days.

Let's not worry—at least not here—on the effect this would have on Venus. Let's ask only how this would affect Earth's sky.

In the first place, Earth's sky would be perpetually moonless, so that viewing would be considerably better. There would never be a glaring Moon, washing out the dimmer stars in the neighborhood.

In the second place, Venus itself would be the brightest object in the sky, next to the Sun itself, and certainly the brightest object, by a good bit, in the night sky. Beautiful and noticeable as Venus is in our present sky, it would be nonpareil in an eternally moonless one. It would be studied with an admiration no other object in the sky could possibly attract.

In the third place, and most important, Cupid, as it circles Venus, *would be visible to us.* Its brightness would depend upon its position relative to the Sun and to the Earth, as does the brightness of Venus itself, Cupid would, at all times (assuming it has the size and characteristics of the Moon), be almost exactly 1/100 the brightness of Venus.

This means that in its brightest, Cupid would shine in our sky with a magnitude of +0.7. It would be a first-magnitude object, roughly as bright as the planet, Saturn, or the star, Arcturus.

Would Cupid be so close to Venus as to be drowned in the latter's glare? It would depend on where Cupid was located in its orbit about Venus. When it is at its farthest from Venus, it would be separated from it by 0.6° which is slightly more than the width of the Sun. We would have no trouble seeing Cupid when it was that far from Venus, and even when it was rather closer—especially if we knew it was there and looked for it.

This brings us to the crucial point. Without a Moon in our sky, there would be no object whose motions could be explained *only* by supposing it to revolve about us.

Instead, we would see in Venus and Cupid, something that would be easily and, even, inevitably interpreted as a double planet. Cupid would spend 15 days on one side of Venus and 15 days on the other, in alternation. During a single stretch of nights in which Venus remains an evening star, we would see Cupid go through eight complete cycles.

There could be no mistake. No one could reasonably doubt that Cupid was revolving about Venus.

The next step would be to note that the bright morning star present in the sky before dawn would also be accompanied by a companion that behaved like Cupid. With Cupid as attendant in both cases, the identity of evening star and morning star would be obvious from the start. There could not be two different objects so spectacularly alike in detail.

That means that from the very start of sky-watching, primitive man would clearly see that Venus went from one side of the Sun to the other and back, precisely as Cupid went from one side of

Venus to the other and back. With morning and evening stars recognized as one object, and with Venus and Cupid showing the way, it would be impossible to fail to see that Venus, *carrying Cupid with it*, revolved about the Sun.

Furthermore, when they noticed Mercury also serving as an evening star and a morning star with a shorter period than Venus's, they would have to conclude that Mercury also revolved about the Sun, and in an orbit closer to the Sun than Venus's was.

With Mercury and Venus both circling the Sun, it would be easy to speculate that the other planets were doing the same, Earth included. There would be no Moon to confuse matters, and even if there were, the case of Cupid would be convincing evidence that a Moon could circle Earth, and yet move along with Earth around the Sun as well.

The Greek astronomers, and possibly the Sumerian astronomers before them, would have seen that the assumption that the Earth was revolving about the Sun would easily explain the otherwise-irritating retrograde motions of Mars, Jupiter, and Saturn. That, combined with visibly heliocentric motions of Mercury and of Venus-Cupid would surely have overcome the difficulty of the apparent motionlessness of Earth, as it eventually did with Copernicus.

It follows that the heliocentric theory would have been established possibly as early as 2000 B.C., and by no conceivable stretch of the imagination any later than 300 B.C.

What's more, the revolution of Cupid about Venus and of Venus about the Sun would make it relatively easy to catch the concept of *universal* gravitation. Objects did not merely fall to Earth—everything exerted an attraction. The Sun and Venus would be doing so visibly and, if so, why not everything else as well?

It seems to me that Aristotle would have been perfectly capable of doing Newton's work, unless he had been anticipated by a still earlier thinker.

The heliocentric nature of the Universe as seen by the astronomers, and by any layman, in fact, who watched Venus, Cupid and the Sun with any reasonable degree of intelligence, would make it plain that the Earth was only one world among many and that it could not be the center and crown of creation. Mankind's world, and therefore mankind itself was only a small part of creation, and in no way occupied a particularly important part.

While religious systems might still be formed which centered on man and Earth, they would not have had a chance of capturing the scholarly part of society, unless they were modified to allow the plurality of worlds, and to accept man as but a small part of a much greater whole.

Since both science and religion would then be on the right track, there would be no fundamental hostility between them. There would, instead, be mutual reinforcement.

Religion would be progressive, eager to learn more of the Universe as it is, certain that there could be no conflict between the material and the spiritual. Science, on the other hand, would more easily accept the moral necessities. It would recognize the need for understanding man's small niche, both in the astronomical Universe and on the biological Earth.

Ecology would have been the queen of sciences; the one embracing all the rest from the start. The integration of human population and economic activity safely into the ecology would have been the prime aim of science.

Experimental science and technology would be perhaps two to four thousand years farther advanced than it is now; and a healthy Earth might today be establishing the beginnings of a Galactic Empire or, perhaps, pushing tendrils toward other intelligences elsewhere.

But instead, our own lifetime may be the last that will be lived out in a technological society at all—thanks to the tragedy of the Moon, to the chance that placed it in our sky, and not Cupid in Venus's.

So now I'll never again be able to look at the beautiful full Moon hanging in the western sky at dawn, without a pang. It *is* beautiful, but, oh, the price—

(Books, from p. 64)

beginning, and there's a slight touch of fantasy in a brief, late appearance (obviously a hallucination) of the ghost of the heroine's father; but the label—through no fault of the authoress, who has done thoroughly what she set out to do—is a lie.

In our May issue we reported on the widespread campus interest in science fiction; here's one concrete and positive result of that interest. Wayne Bongianni is a student at an sf writing workshop at the University of California. The workshop is taught by F&SF contributor Bruce McAllister, who brought Mr. Bongianni's work to our attention, and we were much impressed with this low-key but affecting story about quite a different kind of transplant operation.

A New and Happy Woman

by WAYNE BONGIANNI

AT THE REGISTRATION area, where Lea signed in, there was a sign saying: BEAUTY IS OUR BUSINESS. Lea did not seem to notice it. But *he* did and somehow it upset him. The words were to recur in his mind minutes later when Lea introduced him to Josephine Striker. Tall and severe in a white lab coat, his wife's surgeon was not a pretty woman.

"I am glad to meet you," she greeted him. Her hand was smooth and cool, making him think of polished marble. Lea took his arm and pressed it close. Lea had always enjoyed introducing him to strangers, and normally he appreciated her impulsiveness; yet this time it irritated him. He shook his arm free, and Lea looked up with embarrassment. For a few seconds the three of them stood in silence.

"Have you ever watched a surgery, Mr. Howard?" the doctor asked.

"Yes, once. In a college operating theater," he replied.

"Oh. That must have been some time ago. I believe most of the universities use eyes now." She was interrupted by a nurse, who took Lea away.

He would have left then, too; except for the presence of the doctor. Some sense of chivalry made him wait respectfully with a woman he did not like. She turned and looked at him as if aware of his thoughts. "Tell me, Mr. Howard," she said, "would you like to see how a modern surgery is performed?"

"Yes," he found himself replying. "Yes, I would."

The room she took him to was really nothing more than a softly carpeted office. A desk and medical library made it

seem austere; a room for contemplation only. Yet to one side stood a teletype terminal and a video display. The doctor sat at the teletype and keyed it. Immediately a complex picture in sharply focused color appeared.

"I'm looking through an eye right now?" he asked.

"We call a medical television camera an eye. The surgeon has about eight hundred eyes. You are looking through one of them." Dr. Josephine Striker reached down to the keyboard and typed in a code. Immediately the view disappeared, to be replaced by another three-dimensional video display. The epidermal layer, grotesquely bloated by high magnification, gave the skin the appearance of a textured plane of pink jello. Where the microretractor touched, the skin yielded like a water-filled sac.

"Of course," Dr. Striker continued, "you are not viewing in real time. A surgeon performs much too quickly for that. You are seeing part of its memory played back at a slower rate. The memory is stored and referred to when transplantation is being performed or when a human surgeon, such as myself, wishes to review the operation."

He did not understand all of the instruments in the field of view, but the scalpels were easily identified. As he watched, the edge of one suddenly became a blur, its blade vibrating ultrasonically. It moved into position, and then, with a stroke like a caress, slit the skin. The retractors followed in neat precision and spread an opening, exposing the tissue beneath.

"When the skin is rejoined, it will take a microscope to find the scar," Dr. Striker said. "Watch carefully now."

The scalpel seemed hung in doubt. Suddenly, in sculptured motions, it exposed the thread of a nerve and then. . . .

"A vein."

"No, the magnification has made it appear larger than it really is. It's a capillary."

Free of surrounding tissue, the capillary throbbed with life. Then an unseen laser beam split it and cauterized the ends in a brief flash. The entire process was performed without the loss of a single drop of blood.

"We like to minimize the amount of damage, Mr. Howard, even though most of it is reversible. Surgery was once quite a messy process." Steven nodded abstractly, as he watched an equally intricate process performed on the nerve.

"And this is all part of something human?" Steven asked.

"Of course." Again she

reached down to the keyboard. The field of view shrank as though he were in a helicopter climbing higher and higher. Below was a mountain around whose base was arrayed a silver army.

"It's a nose."

"Yes. In real time removal takes about fifteen minutes."

"Then what happens?"

"Usually it is stored in a bank until a machine similar to the 1068 decides on the basis of demand, to mold it into some desired shape. In this case, I would imagine a DeKronski or a James. Although I'm afraid it's a little too big for a James."

"And what about the woman?"

"She receives a transplant immediately. Usually it's based on her skin and blood type. And on the overall design of her esthetician, of course."

"Incredible. The research to produce this must have—"

"No. There was not as much as you might expect. All of it is based on the original organ transplant work. Once they solved the rejection problem, it only needed cybernetics to bring the cost down. And then, the demand in plastic surgery was always there."

"And the other—?"

"All the same. Ears, cheeks, eyebrows, chin lines, foreheads —you name it. If we allowed a continuous operation, we could totally change a woman's face in a few hours."

"And rejections?"

"Negligible. I've seen only two verified cases, and both were successful on the second attempt."

Sitting at the screen, Steve Howard felt drained. It was all true—the whole incredible process was true. Intellectually, he had known it was; but watching it happen—having this cold sterile voice telling him so—that was something else.

"Can I tell you what you're thinking, Mr. Howard?" the voice asked.

"Sure. Go ahead."

"You're wondering where your wife's nose will go. You remember how you kissed it and maybe bit it and now whose nose will you kiss."

"Am I so transparent?" he asked.

The woman was silent.

After watching a while, he nodded. Dr. Striker reached across and flipped off the console. The room lights returned slowly, bringing the rest of the surgeon's office back into light.

"You realize, of course, that there is nothing to worry about."

"Of course," he agreed.

"Try to see it as it is. A simple effort in the pursuit of beauty. That is all. A very human pursuit, surely."

In the light, he could see the woman's face plainly. It was a strong face, with stark, uncompromising planes. He wondered if the white smock she wore was only for appearances. It was apparent, that as a modern surgeon, she seldom needed to leave her office.

"I know you have questions. Please ask them."

"Whatever made you decide that this is what you wanted to do?"

"I think beauty is important, and I work to achieve it. That is all. In this sense I don't think I'm different from an artist."

"But beauty is an abstraction. . . ."

"Is it, Mr. Howard?" she interrupted. Her gray eyes probed him with a fixed intensity. Then, as though she had made up her mind, she turned to the console and tapped in a code. The screen lit up with a Holocolor still. The picture was monstrous. He took several seconds to identify it as a human baby. His stomach gave a lurch, and he turned his head quickly away.

"The mother gave birth in a condition of tertiary syphilis. Horrible, isn't she? There is something in the human mind that wants to deny her existence, to deny her humanity, as it were, to destroy her completely. Not too long ago, the attending physician would have watched her die with gratitude. Now. . . ." She tapped in another code, and the screen lit up with a still of a girl about four. "Pretty isn't she? As all girls should be."

She flipped off the console again, leaving him with the image of a girl with pigtails.

"Let me give you a bit of advice. Come back. You will want to. Don't suppress your curiosity. It may seem to you now like morbid curiosity, but it is natural. You want to understand what is happening to your wife; that is natural."

"It's all natural, isn't it, Dr. Striker?"

"Yes. Of course, it is. Now do you have any more questions?"

"Only one. Why haven't you tried the process yourself?"

When he got home, he found the visaphone buzzing softly. Pressing the accept button, he watched the screen light up with the face of an attractive young woman.

"Hello, Mother," he said.

"Well, how did everything go?"

"Fine. Lea had no preadmission reactions. They probably started today."

"That's a good sign. Who is her surgeon?"

"A woman named Striker."

"I don't know her. At least so it's not Ross. The man is an

absolute butcher. But that's not important. Who is her esthetician?"

"Eliot. She said he was a Classicist."

"That's good. I've never met a woman who was satisfied with the New Look. Is she going to try the Dominic chin, as I recommended?"

"Oh, God! How should I know."

His mother seemed suddenly aware of him. Her eyes searched his face in a way that uncomfortably reminded him of Josephine Striker's.

"You don't approve of all of this, do you?" she finally asked.

"She is only thirty-two."

"So. . .we went shopping last Saturday, and a salesgirl, in effect, called her my older sister."

"It was a mistake."

"What makes you think it was a mistake?"

"Then whose fault is that?"

"You mean it's mine, don't you? How old do I look? Twenty-five, maybe a little older. But I shouldn't look like this, should I? Well," she demanded, "should I?"

"I don't know. Look any way you want."

"Thanks. Look, Steve, that incident Saturday isn't as trivial as it sounds. It's the way the world is to a woman now. Maybe a woman's vanity supports the economy. Maybe that is all it means in the end. Anyway, who cares? What's wrong with wanting to be new and young and different? It's nice to be needed, but what a woman needs is to be *wanted.*"

Looking at her suddenly serious face, he realized what she meant. He had the feeling that there was something important he should say, but he didn't know what. He said nothing, allowing a silence to stretch out in which they each stared at the other's image.

"Thank God for visaphone," he finally said.

Her sudden laughter was young and warm. Would it sound different if she looked old, he found himself wondering.

"Look, Steve. We are having a party the weekend after next. You'll be feeling lonely and self-pitying by then. I know. So why don't you come? Lea would want you to."

"I don't know, Mom."

His mother's face moved aside to make way for his father.

"Hey, Steve," his father said with a grin. "C'mon. It's a whole new crowd. You won't know anybody. I don't know where we will put them all. But bring a date anyway—or pick one up here."

After they had hung up, accepting a noncommittal commitment, he sat remembering

his mother's words. He tried visualizing her face as if he had never seen her before. He recalled his father's greying face next to hers. If it was all due to a woman's vanity, what of his father's? To have a woman that looked like a daughter, to know that others would be watching him with her. Was it really all a woman's vanity? And his mother. Did she have lovers? Were they young? Did they ask of her age? Did they care?

The days that followed were aimless, merging into one another like watercolors on a child's painting. He ignored his encounter sessions and called no one. His disassociation seemed complete. Yet on the night of the party he found himself neatly dressed outside his parent's apartment.

"Steven," his mother cried, holding out her arms. "Come in, come in." She was dressed chicly in a starburst of flame and gold. The delicate leaves of material, mutually repelling each other electrostatically, embraced her like petals of a flower. She pivoted before him; the petals collapsed to their equator, exposing thighs and the pinkly rouged nipples of her breasts.

"Do you like it?" she asked.

"Yes. It's lovely."

She embraced him briefly and released him with words he had heard all his life. "Run along now, Steve. Have a good time."

The whole of the extensive apartment was filled with color and sound. He strolled through its rooms absorbing the music and people's voices. He stopped to watch a crowd of dancers in one room. The dance was a curious thing; together the dancers drifted like a school of fish near the ocean floor, to and fro, in gently hypnotic repetition.

Standing to one side, in a simple black dress, was Josephine Striker.

"Are you enjoying the party, Doctor?"

"Very much. Are all of your mother's parties like this?" She turned to indicate the dancers and the others beyond.

"It is her avocation." He shrugged. "Look at the women, Doctor. Find me an ugly one. This party is her tribute to your profession."

"They *are* beautiful. Surely you find them so."

"Certainly. Like a garden of perfect roses." The women swirled about them, laughing with their partners. Women of classic beauty, others living cameos. Josephine Striker looked at them, but if she saw them with more than professional concern, he could not tell.

"Once they hid themselves in dresses. Long sleeves hid fat

arms; patterns detracted from figures. A whole fashion industry played a game of self-deception. And you have changed all that."

She turned to look at him, her eyes fixing his in embarrassing concentration.

"You have given them perfect bodies," he went on, "flawlessly crafted. Dress is now an ornament to be done away with. Look around you, not one of them needs the slightest decoration, except. . . ." And he stopped.

"Except me." She finished for him.

Why he returned to the institute, he could not have said. Perhaps as an apology for his behavior. Yet nothing in her manner had indicated the need of apology.

She met him each day with a warmth he was unprepared for, to show him another part of her world. Following her in his visitor's smock, they explored the labs and wards, the operating theaters, and the data banks of the institute. In the muscle tissue ward, they strolled among the plastic tanks without even the curious glance of a technician.

"They look like placentas," he said. She laughed at that, and he was surprised to think that it was the first time he had ever heard her laugh.

"You are hopeless," she said with a smile. "A complete romantic. Look." She stopped before a tank and pointed at the floating figure within. "Remember the dance?" she asked. And he nodded, remembering. "It's an isotonic solution, not unlike placental fluid," she admitted. "It carries off the wastes and protects the newly forming tissue. "There. Look at her legs." He bent to get a better view. The skin of the legs had been delicately pulled back to expose the simplicity of bone and muscle. There was a continuous blur of motion along the muscle, like the blur of a hummingbird's wing.

"Sometime toward the end of the seventeenth century, a physicist named Alessandro Volta applied an electric impulse to a frog's leg and made it twitch. That supposedly proved something, though I don't remember what."

Alongside the tank was an equipment rack; a monitoring oscilloscope had a continuous string of pulses painted on its face.

"This equipment is driving her gastrocnemious muscle to expand and contract at the rate of two thousand times per second. In a few days the muscle will be developed to a point that would have taken years of exercise to reach. When

finished, she will have the rounded calf of a ballerina."

She stood for a while in thoughtful silence, and then sighed. "Then she will sit under canasta tables and refuse to walk further than the nearest car. The muscle will atrophy from disuse. In a few years she will be back."

This last was so unlike her that he was forced to look at her as if at a stranger. To his surprise, he saw that the top buttons of her lab coat were undone, exposing part of a pale-violet blouse. On each ear was a small earring. He smiled at her and asked, "Who did you say is the romantic?" She blushed, and he realized that she had a pretty face.

He watched her profile against a night-tinged window. With his finger he traced the bridge of her nose. "Is it a DeKronski or a James? No, it's too big for a James."

"Don't," she said turning toward him. *Her eyes are grey*, he found himself thinking inanely, *but at night all eyes are grey.*

"What is the matter, Steve?"

"I don't know. Will you tell me?"

"You are a little boy, Steve, and you want someone big and gentle to hold you. To tell you it is all right."

"And what about you?"

"I'm the same way. I'm just the same."

"Sure."

She turned her head away, facing the dark ceiling. "When I was a little girl, I was wretched. Tall and thin with bones sticking out. I wasn't very cute. But I had my own version of the ugly duckling. One day a prince would come and find me. He would turn me about just so, and show me that I was beautiful all along. And I really would be beautiful." In the silence, he reached across and held her. He could think of nothing to say; he did not want to lie.

The affair ended as gently as it began. An appointment missed, a visaphone not answered—these were the accepted procedures of an overcrowded world. Out of a sense of duty, he stopped at her office on the date of Lea's release and was relieved when her secretary said she was not in. As he turned to go, the secretary called, "Oh, Mr. Howard. She asked me to give you this if you stopped by. It's for your wife." He accepted the small gift-wrapped package and asked directions to the outpatient ward.

The ward was empty except for Lea standing at the end of it. She was wearing a soft summer dress that swirled as she turned to him. The

treatment had been quite successful. She was any of a million beautiful strangers.

"How do I look," she asked.

"Beautiful," he said as he hugged her. "Just beautiful."

"Oh, a present," she said grabbing up the package. "From a secret admirer, maybe," and she unwrapped it without tearing the paper. Inside was a single perfect rose, but when she lifted it to her face, its petals crumpled and fell to her feet in a cloud.

"It was wilted, Steve," she said. "Isn't that strange." She stooped and picked up the petals one by one. "What good is a wilted flower?"

"I don't know," he said. "I don't know."

Fred Pohl is back again this month with an ironic tale of one Jeremy Shaffery, an inept and melancholy astronomer who dreamed wild dreams of a discovery that would make his name famous and who, one day, quite by accident, succeeded . . .

Shaffery Among The Immortals

by FREDERIK POHL

JEREMY SHAFFERY HAD A mind a little bit like Einstein's, although maybe not in the ways that mattered most. When Einstein first realized that light carried mass, he sat down to write a friend about it and described the thought as "amusing and infectious." Shaffery would have thought that, too, although of course he would not likely have seen the implications of the Maxwell equations in the first place.

Shaffery looked a little bit like Einstein. He encouraged the resemblance, especially in the hair, until his hair began to run out. Since Einstein loved sailing, he kept a sixteen-foot trimaran tied up at the observatory dock. Seasickness kept him from using it much. Among the things he envied Einstein for was the mirror-smooth Swiss lakes, so much nicer than the lower Caribbean in that respect. But after a day of poring over pairs of star photographs with a blink comparator or trying to discover previously unknown chemical compounds in interstellar space in a radio trace, he sometimes floated around the cove in his little yellow rubber raft. It was relaxing, and his wife never followed him there. To Shaffery that was important. She was a difficult woman, chronically p.o.'d because his career was so

persistently pointed in the wrong direction. If she had ever been a proper helpmeet, she wasn't any more. Shaffery doubted she ever had, remembering that it was her unpleasant comments that had caused him to give up that other hallmark of the master, the violin.

At the stage in Shaffery's career at which he had become Director of the Carmine J. Nuccio Observatory in the Lesser Antilles, he had begun to look less like Einstein and more like Edgar Kennedy. Nights when the seeing was good he remorselessly scanned the heavens through the 22-inch reflector, hoping against hope for glory. Days when he was not sleeping he wandered through the dome like a ghost, running his finger over desks for dust, filching preserved mushrooms from Mr. Nuccio's home-canned hoard, trying to persuade his two local assistants to remember to close the dome slit when it rained. They paid little attention. They knew where the muscle was, and that it wasn't with Shaffery. He had few friends. Most of the white residents couldn't stand his wife; some of them couldn't stand Shaffery very well, either. There was a nice old-lady drunk out from England in a tidy white house down the beach, a sort of hippie commune on the far side of the island, and a New York television talk-show operator who just flew down for weekends. When they were respectively sober, unstoned, and present, Shaffery sometimes talked to them. That wasn't often. The only one he really wanted to see much was the tv man, but there were obstacles. The big obstacle was that the tv man spent most of his waking time skin diving. The other obstacle was that Shaffery had discovered that the tv man occasionally laid Mrs. Shaffery. It wasn't the morality of the thing that bothered him; it was the feeling of doubt it raised in Shaffery's mind about the other's sanity. He never spoke to the tv man about it, partly because he wasn't sure what to say and partly because the man had halfway promised to have Shaffery on his show. Sometime or other.

One must be fair to Shaffery and say that he wasn't a bad man. Like Frank Morgan, his problem was that he wasn't a good wizard. The big score always evaded him.

The Einstein method, which he had studied assiduously over many years, was to make a pretty theory and then see if, by any chance, observations of events in the real world seemed to confirm it. Shaffery greatly approved of that method. It just didn't seem to work out for

him. At the Triple A-S meeting in Dallas he read an hour-long paper on his new Principle of Relevance Theory. That was a typical Einstein idea, he flattered himself. He had even worked out simple explanations for the lay public, like Einstein with his sitting on a hot stove or holding hands with a pretty girl. "Relevance Theory," he practiced smiling to the little wavelets of the cove, "only means that observations that don't *relate* to anything don't *exist*. I'll spare you the mathematics because—" self-deprecatory laugh here— "I can't even fill out my income tax without making a mistake." Well, he had worked out the mathematics, inventing signs and operators of his own, just like Einstein. But he seemed to have made a mistake. Before the AAAS audience, fidgeting and whispering to each other behind their hands, he staked his scientific reputation on the prediction that the spectrum of Mars at its next opposition would show a slight but detectable displacement of some 150 angstroms toward the violet. The son of a bitch didn't do anything of the kind. One of the audience was a graduate student at Princeton, hard up for a doctoral thesis subject, and he took a chance on Shaffery and made the observations, and with angry satisfaction sent him the proof that Mars had remained obstinately red.

The next year the International Astrophysical Union's referees, after some discussion, finally allowed him twenty minutes for a Brief Introduction into the General Consideration of Certain Electromagnetic Anomalies. He offered thirty-one pages of calculations leading to the prediction that the next lunar eclipse would be forty-two seconds late. It wasn't. It was right on time. At the meeting of the World Space Science Symposium they told him with great regret that overcommitments of space and time had made it impossible for them to schedule his no doubt valuable contribution, and by the time of the next round of conferences they weren't even sending him invitations any more.

Meanwhile all those other fellows were doing great. Shaffery followed the careers of his contemporaries with rue. There was Hoyle, still making a good thing out of the Steady State Hypothesis and Gamow's name, still reverenced for the Big Bang, and new people like Dyson and Ehricke and Enzmann coming along with all sorts of ideas that, if you looked at them objectively, weren't any cleverer than his, Shaffery thought, except for

the detail that somehow or other they seemed lucky enough to find supporting evidence from time to time. It did not strike him as fair. Was he not a Mensa member? Was he not as well educated as the successful ones, as honored with degrees, as photogenic in the newsmagazines and as colorfully entertaining on the talk shows? (Assuming Larry Nesbit ever gave him the chance on his show.) Why did they make out and he fall flat? His wife's theory he considered and rejected. "Your trouble, Jeremy," she would say to him, "is you're a horse's ass." But he knew that wasn't it. Who was to say Isaac Newton wasn't a horse's ass, too, if you looked closely enough at his freaky theology and his nervous breakdowns? And look where he got.

So Shaffery kept looking for the thing that would make him great. He looked all over. Sometimes he checked Kepler's analysis of the orbit of Mars with an adding machine, looking for mistakes in arithmetic. (He found half a dozen, but the damn things all canceled each other out, which proves how hard it is to go wrong when your luck is in.) Sometimes he offered five-dollar prizes to the local kids for finding new stars that might turn out to be Shaffery's Nova, or anyway Shaffery's Comet. No luck. An ambitious scheme to describe stellar ballistics in terms of analogy with free-radical activity in the enzyme molecules fell apart when none of the biochemists he wrote to even answered his letters.

The file of failures grew. One whole drawer of a cabinet was filled with reappraisals of the great exploded theories of the past—*A New Look at Phlogiston*, incomplete because there didn't seem really to be anything to look at when you came down to it; a manuscript called *The Flat Earth Reexamined*, which no one would publish; three hundred sheets of drawings of increasingly tinier and increasingly quirkier circles to see if the Copernican epicycles could not somehow account for what the planet Mercury did that Einstein had considered a proof of relativity. From time to time he was drawn again to attempting to find a scientific basis for astrology and chiromancy, or predicting the paths of charged particles in a cloud chamber by means of yarrow stalks. It all came to nothing. When he was really despairing, he sometimes considered making his mark in industry rather than pure science, wherefore the sheaf of sketches for a nuclear-fueled car, the experiments on smellovision that had permanently

destroyed the nerves of his left nostril, the attempt to preserve some of Mr. Nuccio's mushrooms by irradiation in his local dentist's X-ray room. He knew that that sort of thing was not really worthy of a man with all those graduate degrees, but in any event he did no better there than anywhere else. Sometimes he dreamed of what it would be like to run Mount Palomar or Jodrell Bank, with fifty trained assistants to nail down his inspirations with evidence. He was not that fortunate. He had only Cyril and James.

It was not all bad, however, because he didn't have much interference to worry about. The observatory where he was employed, last and least of the string of eleven that had given him a position since his final doctoral degree, didn't seem to mind what he did, as long as he did it without bothering them. On the other hand, they didn't give him much support, either.

Probably they just didn't know how. The observatory was owned by something called the Lesser Antilles Vending Machine Entertainment Co., Ltd., and, so Shaffery had been told by the one old classmate who still kept up a sort of friendship with him, was actually some sort of tax-evasion scheme maintained by a Las Vegas gambling syndicate. Shaffery didn't mind this, particularly, although from time to time he got tired of being told that the only two astronomers who mattered were Giovanni Schiaparelli and Galileo Galilei. That was only a minor annoyance. The big cancerous agony was that every year he got a year older and fame would not come.

At his periodic low spots of despondency (he had even tried linking them with the oppositions of Jupiter, meteor showers, and his wife's periods, but those didn't come to anything either) he toyed with the notion of dropping it all and going into some easier profession. Banking. Business. Law. "President Shaffery" had the right kind of sound, if he entered politics. But then he would drag his raft to the water, prop two six-packs of Danish beer on his abdomen and float away, and by the end of the first pack his courage would come flowing back, and on the second he would be well into a scheme for detecting gravity waves by statistical analysis of 40,000 acute gout sufferers, telephoning the state of their twinges into a central computer facility.

On such a night he carried his little rubber raft to the shore of the cove, slipped off his sandals, rolled up his bell-bottoms and launched him-

self. It was the beginning of the year, as close to winter as it ever got on the island, which meant mostly that the dark came earlier. It was a bad time of the year for him, because it was the night before the annual Board Meeting. The first year or two he had looked forward to the meetings as opportunities. He was no longer so hopeful. His objective for the present meeting was only to survive it, and there was some question of a nephew by marriage, an astronomy major at U.C.L.A., to darken even that hope.

Shaffery's vessel wasn't really a proper raft, only the sort of kid's toy that drowns a dozen or so nine-year-olds at the world's bathing beaches every year. It was less than five feet long. When he got himself twisted and wriggled into it, his back against the ribbed bottom, his head pillowed against one inflated end, and his feet dangling into the water at the other, it was quite like floating in a still sea without the annoyance of getting wet. He opened the first beer and began to relax. The little waves rocked and turned him; the faint breeze competed with the tiny island tide, and the two of them combined to take him erratically away from the beach at the rate of maybe ten feet a minute. It didn't matter. He was still inside the cove, with islets, or low sandbanks, beaded across the mouth of it. If by any sudden meteorological miracle a storm should spring from that bright-lamped sky, the wind could take him nowhere but back to shore or near an island. And of course there would be no storm. He could paddle back whenever he chose, as easily as he could push his soap dish around his bathtub, as he routinely did while bathing, which in turn he did at least once a day, and when his wife was particularly difficult as often as six times. The bathroom was his other refuge. His wife never followed him there, being too well brought up to run the chance of inadvertently seeing him doing something filthy.

Up on the low hills he could see the corroded copper dome of the observatory. A crescent of light showed that his assistant had opened the dome, but the light showed that he was not using it for any astronomical purpose. That was easy to unriddle. Cyril had turned the lights on so that the cleaning woman could get the place spotless for the Board Meeting and had opened the dome because that proved the telescope was being used. Shaffery bent the empty beer can into a V, tucked it neatly beside him in the raft, and opened another. He was not yet

tranquil, but he was not actively hurting anywhere. At least Cyril would not be using the telescope to study the windows of the Bon Repos Hotel across the cove, since the last time he'd done it he had jammed the elevating gears and it could no longer traverse anywhere near the horizon. Shaffery put aside an unwanted, fugitive vision of Idris, the senior and smartest cleaning lady, polishing the telescope mirror with Bon Ami, sipped his beer, thought nostalgically of Relevance Theory and how close he had come with the epicycles, and freed his mind for constructive thought.

The sun was wholly gone, except for a faint luminous purpling of the sky in the general direction of Venezuela. Almost directly overhead hung the three bright stars of Orion's Belt, slowly turning like the traffic signals on a railroad line, with Sirius and Procyon orbiting headlight bright around them. As his eyes dark-adapted he could make out the stars in Orion's sword, even the faint patch of light that was the great gas cloud. He was far enough from the shore so that sound could not carry, and he softly called out the great four-pointed pattern of first-magnitude stars that surrounded the constellation: "Hey there, Betelguese. Hi, Bellatrix. What's new, Rigel? Nice to see you again, Saiph." He glanced past red Aldebaran to the close-knit stars of the Pleiades, returned to Orion and, showing off now, called off the stars of the Belt: "Hey, Alnitak! Yo, Alnilam! How goes it, Mintaka?"

The problem with drinking beer in the rubber raft was that your head was bent down toward your chest and it was difficult to burp; but Shaffery arched his body up a little, getting in some water in the process but not caring, got rid of the burp, opened another beer, and gazed complacently at Orion. It was a satisfying constellation. It was satisfying that he knew so much about it. He thought briefly of the fact that the Arabs had called the Belt Stars by the name Jauzah, meaning the Golden Nuts; that the Chinese thought they looked like a weighing beam, and that Greenlanders called them Siktut, The Seal Hunters Lost at Sea. As he was going on to remember what the Australian aborigines had thought of them (they thought they resembled three young men dancing a corroboree), his mind flickered back to the lost seal hunters. Um, he thought. He raised his head and looked toward the shore.

It was now more than a hundred yards away. That was farther than he really wanted to

be, and so he kicked the raft around, oriented himself by the stars and began to paddle back. It was easy and pleasant to do. He used a sort of splashy upside-down breast stroke of the old-fashioned angel's wing kind, but as all his weight was supported by the raft, he moved quickly across the water. He was rather enjoying the exercise, toes and fingers moving comfortably in the tepid sea, little ghosts of luminescence glowing where he splashed, until quite without warning the fingertips of one hand struck sharply and definitely against something that was resistantly massive and solid where there should have been only water, something that moved stubbornly, something that rasped them like a file. Oh, my God, thought Shaffery. What a lousy thing to happen. They so seldom came in this close to shore. He didn't even think about them. What a shame for a man who might have been Einstein to wind up, incomplete and unfulfilled, as shark shit.

He really was not a bad man, and it was the loss to science that was first on his mind, only a little later what it must feel like to be chopped and gulped.

Shaffery pulled his hands in and folded them on his chest, crossed his feet at the ankles, and rested them on the end of the boat, knees spread on the sides. There was now nothing trailing in the water that might strike a shark as bait. There was, on the other hand, no good way for him to get back to shore. He could yell, but the wind was the wrong way. He could wait till he drifted near one of the islets. But if he missed them, he would be out in the deep ocean before he knew it.

Shaffery was almost sure that sharks seldom attacked a boat, even a rubber one. Of course, he went on analytically, the available evidence didn't signify. They could flip a raft like this over easily enough. If this particular shark ate him off this particular half-shell, there would be no one to report it.

Still, there were some encouraging considerations. Say it was a shark. Say it was capable of tipping the boat or eating him boat and all. They were dull-witted creatures, and what was to keep one hanging around in the absence of blood, splashing, noise, trailing objects or any of the other things sharks were known to take an interest in? It might be a quarter mile away already. But it wasn't, because at that moment he heard the splash of some large object breaking the surface a foot from his head.

Shaffery could have turned to look, but he didn't; he

remained quite motionless, listening to the gentle water noises, until they were punctuated by a sort of sucking sound and then a voice. A human voice. It said, "Scared the piss out of you, didn't I? What do you say, Shaffery? Want a tow back to shore?"

It was not the first time Shaffery had encountered Larry Nesbit diving in the cove; it was only the first time it had happened at night. Shaffery twisted about in the raft and gazed at Nesbit's grinning face and its frame of wet strands of nape-length hair. It took a little time to make the transition in his mind from eighteen-foot shark to five-foot-eight TV star. "Come on," Nesbit went on, "what do you say? Tell you what. I'll tow you in, and you give me some of old Nuccio's Scotch, and I'll listen to how you're going to invent antigravity while we get pissed."

That Nesbit, he had a way with him. The upshot of it all was that Shaffery had a terrible hangover the next day; not the headache but the whole works, with trotting to the toilet and being able to tolerate only small sips of ginger ale and wishing, or almost wishing, he was dead. (Not, to be sure, before he did the one immortalizing thing. Whatever it was going to be.)

It was not altogether a disaster, the hangover. The next morning was very busy, and it was just as well that he was out of the way. When the Board of Directors convened to discuss the astronomical events of the year, or whatever it is they did discuss in the afternoon session to which Shaffery was definitely not invited, it was always a busy time. They arrived separately, each director with his pair of associates. One after another 40-foot cabin cruisers with fishing tops came up to the landing and gave up cargoes of plump little men wearing crew cuts and aloha shirts. The observatory car, not ever used by any of the observatory personnel, was polished, fueled and used for round trips from the landing strip at Jubila, across the island, to Comray Hill and the observatory. Shaffery laid low in his private retreat. He had never told his wife that he was not allowed in the observatory for the board meetings; so she didn't look for him. He spent the morning in the tar-paper shack where photographic material had once been kept, until he discovered that the damp peeled the emulsion away from the backing. Now it was his home away from home. He had fitted it with a desk, chair, icebox, coffeepot and bed.

Shaffery paid no attention to the activity outside, not even

when the directors' assistants, methodically searching the bushes and banana groves all around the observatory, came to his shack, opened the door without knocking, and peered in at him. They knew him from previous meetings, but they studied him silently for a moment before the two in the doorway nodded to each other and left him again. They were not well-mannered men, Shaffery thought, but no doubt they were good at their jobs, whatever those jobs were. He resolutely did not think about the Board Meeting, or about the frightening, calumnious things Larry Nesbit had said to him the night before, drinking the Board Chairman's Scotch and eating his food, in that half-jocular, shafting, probing way he had. Shaffery thought a little bit about the queasy state of his lower abdomen, because he couldn't help it, but what he mostly thought about was Fermat's Last Theorem.

A sort of picayune, derivative immortality was waiting there for someone. Not much, but Shaffery was getting desperate. It was one of those famous mathematical problems that grad students played at for a month or two and amateurs assaulted in vain all their lives. It looked easy enough to deal with. It started with so elementary a proposition that every high-school boy mastered it about the time he learned to masturbate successfully. If you squared the sides of a right triangle, the sum of the squares of the two sides was equal to the square of the hypotenuse.

Well, that was all very well, and it was so easy to understand that it had been used to construct right angles by surveyors for centuries. A triangle whose sides were, say, 3 feet and 4 feet, and whose hypotenuse was 5 feet, had to make a right angle, because $3^2 + 4^2 = 5^2$; and it always had, since the time of Pythagoras, five hundred years B.C., $a^2 + b^2 = c^2$. The hitch was, if the exponent was anything but 2, you could never make the equation come out using whole numbers; $a^3 + b^3$ never equaled c^3, and $a^{27} + b^{27}$ did not add up to any c^{27}, no matter what numbers you used for a, b and c. Everybody knew that this was so. Nobody had ever proved that it *had* to be so, by mathematical proofs, except that Fermat had left a cryptic little note, found among his papers after his death, claiming that he had found a "truly wonderful" proof, only there wasn't enough room in the margin of the book he was writing on to put it all down.

Shaffery was no mathematician. But that morning, waking up to the

revolution in his stomach and the thunder in his head, he had seen that that was actually a strength. One, all the mathematicians of three or four centuries had broken their heads against the problem; so obviously it couldn't be solved by any known mathematics anyway. Two, Einstein was weak in mathematics too and had disdained to worry about it, preferring to invent his own.

So he spent the morning, between hurried gallops across the parking lot to the staff toilet, filling paper with mathematical signs and operators of his own invention. It did not seem to be working out, to be sure. For a while he thought of an alternative scheme, to wit, inventing a "truly wonderful" solution of his own and claiming he couldn't find room to write it down in the margin of, say, the latest issue of *Mathematical Abstracts;* but residual sanity persuaded him that perhaps no one would ever find it, or that if it was found it might well be laughed off, and anyway that it would be purely posthumous celebrity and he wanted to taste it while he was alive. So he broke for lunch, came back feeling dizzy and ill and worried about the meeting that was going on, and decided to take a nap before resuming his labors.

When Cyril came looking for him to tell him the Directors desired his presence, it was dark, and Shaffery felt like hell.

Coomray Hill was no taller than a small office building, but it got the mirror away from most of the sea-level dampness. The observatory sat on top of the hill like a mound of pistachio ice cream, hemispheric green copper roof and circular walls of green-painted plaster. Inside, the pedestal of the telescope took up the center of the floor. The instrument itself was traversed as low as it would go any more, clearing enough space for the Directors and their gear. They were all there, looking at him with silent distaste as he came in.

The inner sphere of the dome was painted (by Cyril's talented half-sister) with a large map of Mars, showing Schiaparelli's famous canals in resolute detail; a view of the Bay of Naples from the Vomero, with Vesuvius gently steaming in the background; and an illuminated drawing of the constellation Scorpius, which happened to be the sign of the constellation under which the Chairman of the Board had been born. A row of card tables had been lined up and covered with a green cloth. There were six places set, each with ashtray, note pad, three

sharpened pencils, ice, glass, and bottle of John Begg. Another row of tables against the wall held the antipasto, replenished by Cyril after the depredations of the night before, but now seriously depleted by the people for whom it was intended. Six cigars were going and a couple of others were smoldering in the trays. Shaffery tried not to breathe. Even with the door open and the observing aperture in the dome wide, the inside air was faintly blue. At one time Shaffery had mentioned diffidently what the deposit of cigar smoke did to the polished surface of the 22-inch mirror. That was at his first annual meeting. The Chairman hadn't said a word, just stared at him. Then he nodded to his right-hand man, a Mr. DiFirenzo, who had taken a packet of Kleenex out of his pocket and tossed it to Shaffery. "So wipe the goddamn thing off," he had said. "Then you could dump these ashtrays for us, okay?'

Shaffery did his best to smile at his Directors. Behind him he was conscious of the presence of their assistants, who were patrolling the outside of the observatory in loose elliptical orbits, perigeeing at the screen door to peer inside. They had studied Shaffery carefully as he came across the crunching shell of the parking lot, and under their scrutiny he had decided against detouring by way of the staff toilet, which he now regretted.

"Okay, Shaffery," said Mr. DiFirenzo, after glancing at the Chairman of the Board. "Now we come to you."

Shaffery clasped his hands behind him in his Einstein pose and said brightly, "Well, it has been a particularly productive year for the obseratory. No doubt you've seen my reports on the Leonid meteorite count and—"

"Right," said Mr. DiFirenzo, "but what we been talking about here is the space shots. Mr. Nuccio has expressed his views that this is a kind of strategic location, like how they shoot the rockets from Cape Kennedy. They have to go right over us, and we want a piece of that."

Shaffery shifted his weight uneasily. "I discussed that in my report last year—"

"No, Shaffery. This year, Shaffery. Why can't we get some of that federal money, like for tracking, for instance?"

"But the position hasn't changed, Mr. DiFirenzo. We don't have the equipment, and besides NASA has its own—"

"No good, Shaffery. You know how much you got out of us for equipment last year? I got the figures right here. And

now you tell us you don't have what we need to make a couple bucks?"

"Well, Mr. DiFirenzo, you see, the equipment we have is for purely scientific purposes. For this sort of work you need quite different instruments, and actually—"

"I don't want to hear." DiFirenzo glanced at the Chairman and then went on. "Next thing, what about that comet you said you were going to discover?"

Shaffery smiled forgivingly. "Really, I can't be held accountable for that. I didn't actually say we'd *find* one. I merely said that the continuing *search* for comets was part of our basic *program*. Of course, I've done my very best to—"

"Not good enough, Shaffery. Besides your boy here told Mr. Nuccio that if you did find a comet you wouldn't name it the Mr. Carmine J. Nuccio Comet like Mr. Nuccio wanted."

Shaffery was going all hollow inside, but he said bravely, "It's not wholly up to me. There's an astronomical convention that the discoverer's name goes on—"

"We don't like that convention, Shaffery. Three, now we come to some really bad things, that I'm sorry to hear you've got yourself into, Shaffery. We hear you been talking over the private affairs of this institution and Mr. Nuccio with that dick-head Nesbit. Shut, Shaffery," the man said warningly as Shaffery started to open his mouth. "We know all about it. This Nesbit is getting himself into big trouble. He has said some very racist things about Mr. Nuccio on that sideshow of his on the TV, which is going to cost him quite a bundle when Mr. Nuccio's lawyers get through with him. That is very bad, Shaffery, and also, four, there is this thing."

He lifted up what had seemed like a crumpled napkin in front of his place. It turned out that it was covering what looked like a large transistor radio.

Shaffery identified it after a moment's thought; he had seen it before, in Larry Nesbit's possession. "It's a tape recorder," he said.

"Right on, Shaffery. Now the question is, who put it in here? I don't mean just left it here like you could leave your rubbers or something, Shaffery. I mean left it here with one of those trick switches, so it was going when a couple of our associates checked the place out and found it under the table."

Shaffery swallowed very hard, but even so his voice sounded unfamiliar to him when he was able to speak. "I—I *assure* you, Mr. DiFirenzo! I had nothing to do with it."

"No, Shaffery, I know you didn't, because you are not that smart. Mr. Nuccio was quite upset about this illegal bugging, and he has already made some phone calls and talked to some people, and we have a pretty good idea of who put it there, and he isn't going to have what he thinks he's going to have to play on his TV show. So here it is, Shaffery. Mr. Nuccio doesn't find your work satisfactory here, and he is letting you go. We got somebody else coming down to take over. We'd appreciate it if you could be out by tomorrow."

There are situations in which there is not much scope for dignity. A man in his middle fifties who has just lost the worst job he ever had has few opportunities for making the sort of terminal remark that one would like to furnish one's biographers.

Shaffery discovered that he was worse off than that; he was frankly sick. The turmoil in his belly grew. The little saliva pumps under his tongue were flooding his mouth faster than he could swallow, and he knew that if he didn't get back to the staff toilet very quickly he would have another embarrassment to add to what was already an overwhelming load. He turned and walked away. Then marched. Then ran. When he had emptied himself of everything in belly, bladder and gut he sat on the edge of the toilet seat and thought of the things he could have said: "Look, Nuccio, you don't know anything about science." "Nuccio, Schiaparelli was all wrong about the canals on Mars." It was too late to say them. It was too late to ask the questions that his wife would be sure to ask, about severance pay, pension, all the things that he had been putting off getting in writing. ("Don't worry about that stuff, Shaffery, Mr. Nuccio always takes care of his friends but he don't like to be aggravated.") He tried to make a plan for his future, and failed. He tried even to make a plan for his present. Surely he should at least call Larry Nesbit, to demand, to complain, and to warn ("Hist! The tape recorder has been discovered! All is lost! Flee!"), but he could not trust himself so far from the toilet. Not at that exact moment. And a moment later it was too late. Half an hour later, when one of the orbiting guards snapped the little lock and peered inside, the man who might have been Einstein was lying on the floor with his trousers around his knees, undignified, uncaring and dead.

Ah, Shaffery! How disappointed he would have been in

his *Times* obit, two paragraphs buried under the overhang of a pop singer's final notice. But afterward. . .

The first victim was Larry Nesbit, airsick in his Learjet all the way back to New York, overcome during the taping of his TV show, and dying the next day. The next victims were the Board of Directors, every man. They started home, by plane and boat. Some of them made it, but all of them died: en route or in Las Vegas, Detroit, Chicago, Los Angeles, New York, and Long Branch, New Jersey. Some of the "assistants" died and some were spared. (Briefly.) The reason was not a mystery for very long. The source of the new plague was tracked down quickly enough to Mr. Nuccio's antipasto, and particularly to the preserved mushrooms that Shaffery had borrowed for his experiment.

The botulinus toxin was long recognized as the most deadly poison known to man. The mutated version that Shaffery and his dentist's X-rays had brought into being was not much more deadly, but it had another quality that was new and different. Old, established *Clostridium botulinum* is an organism with a feeble hold on life; expose it to light and air, and it dies. B. shafferia was more sturdy. It grew where it was. In anything. In Mr. Nuccio's antipasto, in a salad in a restaurant kitchen, in Mom's apple pie on a windowsill to cool, in the human digestive tract. There were nine deaths in the first five days, and then for a moment no more. The epidemiologists would not have bothered their heads about so short a casualty list if it had not been for the identities of some of the victims. But the bacteria was multiplying. The stain of

vomit under the boardwalk at Long Branch dried; the bacteria turned into spores and were blown on the wind until they struck something damp and fertile. Whereupon they grew. The soiled Kleenex thrown from a Cadillac Fleetwood on the road leading from O'Hare to Evanston, the sneeze between flights at Miami, expectorations in a dozen places—all added to the score. From the urine and feces of the afflicted men, from their sweat, even from their bed linen and discarded clothing, enspored bacteria leaped into the air and were inhaled, eaten, drunk, absorbed into cuts, in every way ingested into the waiting bodies of hundreds, then thousands, ultimately countless millions of human beings.

By the second week Detroit and Los Angeles were declared disaster areas. By the fourth the plague had struck every city in America and had leaped the oceans. If it had any merciful quality at all, it was that it was quick: an upset stomach, a sweat, a few pangs, and then death. None were immune. Few survived. Out of a hundred, three might outlive the disease. But then famine, riot and lesser ills took their toll; and of the billions who lived on the Earth when Shaffery exposed his antipasto in the dentist's office, all but a few tens of millions died in the outbreak that the world will never forget of the disease called Shaffery's Syndrome.

REPORT ON COMPETITION 2: In which we asked for misleading and funny blurbs and new titles for any sf book or movie or for any story in the March issue.

A couple of readers suggested that we award first prize to the Science Fiction Book Club for the blurb in their ad on page 3 of the March issue: i.e. *Stranger in a Strange Land*: "He knew the Martian love secret—and it spelled his doom." Which is not bad, but we thought you folks could do better.

The response overall was terrific, with many more entries than competition 1. Most popular subjects were Heinlein's *Stranger*, Asimov's *Foundation* series and Burgess's (and Kubrick's) *A Clockwork Orange*. Judging was difficult though; many entries had some lovely lines and new titles, but failed to sustain a funny and misleading tone. What we felt were the best entries appear below in no particular order. All will receive runners-up prizes of one year subs to F&SF; 1st and 2nd prizes will be awarded on some sort of random basis.

See Here, Dr. Strangelove

You won't be "fission" for laughs when the zaniest, wackiest bunch of flyboys in Uncle Sam's air corps lay the biggest "egg" in history! International relations will never be the same after these airborne bunglers "light the sky" with their own kind of enola-gaiety!

So—fall *in* at your neighborhood theater.

And—"*fall out*" of your seat... with laughter!

—MIKE EDDINGER

The Muckers-about From Mid-future "M" (Exegesis on Eventuality "E") By Brian Aldiss

Was it the lawn that stretched between the seemingly unexceptional gabled cottage and the toolshed set on a secant to the north northeast of it? Or was it something far more sinister—somehow slightly too green and *aware* in a manner both more and less than human? What was it that the voiceless Interloper from Intertemporality "I" had seen dimly reflected in the blade of a pair of pruning shears hanging on the wall of that same tiny shed where he stood motionlessly through the seasons, thinly disguised as a lawnmower? And what of the mysterious Onlooker from Otherwhen "O"? What was his game? Was it parchesi, or was it something infinitely more meaningless? And what creature from an unimaginable future passed on repassed behind the leaded panes of the cottage window on the sill of which the hellish avocado pit sent out its tender shoot. . .and waited? And, finally, what could possibly be the motives of the strange being buried up to its "neck" in the marigold plot? Only time could tell. And that, it seemed, it disdained to do.

RALPH C. GLISSON

Loss of Innocence (Love Is A Dragon-Fly) by Thomas Burnett Swann.

What causes a young girl to be attracted to a man old enough to be

her father? Can a girl brought up in an all-female society find happiness when she is uprooted? This story deals with the problems the ripening Mellonia faces when her love crosses the racial barrier. . .Find out the secret that lay hidden in her family for generations, until a stranger brought things to a climax! Was her lover half-god. . .or all man?

—F WILLIAM KUETHE JR
also from PAT ALBERT

If Dr. Sloan had published *Bug Jack Barron* in *Amazing Stories*, the editorial introduction might have read:

The Great Television Scandal by N. Spinrad.

We present a pleasing and diverting novel by a young man who is new to our pages. The story is amusingly written in a modern, indeed 'slangy,' style and the Editor confesses that a number of Mr. Spinrad's allusions are unfamiliar to him. The Editor, in fact, has never before encountered the verb 'to blow' in the colloquial sense used by this author and admits that he fails to understand its meaning. He has no doubt, however, that a number of the younger readers of *Amazing Stories*, who more closely approximate Mr. Spinrad's own age, will recognise this and other terms and will find their enjoyment of the story enhanced thereby.

The Editor admits that he had one misgiving about offering this work. He feared that some readers might take offence to one aspect of it; namely, the idea of a United States wherein "television" (vision at a distance) is an accomplished scientific fact. Although such a scientific advance could never take place in the twentieth century, the Editor of *Amazing Stories* has never shrunk from presenting super-scientific concepts and he trusts that the 'older school' of scientifiction readers will accept such an improbability for the sake of an entertaining story.

—J BURNE

Competition 3

We'll try something a bit different this time. Below, some samples of misprints caused by the substitution or ommission of *one* letter only.

The Spice Merchants by Frederik Pohl and C. M. Kornbluth

The Rest From Fantasy and Science Fiction, edited by Edward L. Ferman

"A root must not injure a human being, or, through inaction, allow a human being to come to harm."—Isaac Asimov's "Three Laws of Robotics".

Send us up to six similar misprints based on any titles or phrases associated with fantasy or science fiction. There will probably be repeats, so try to get away from the most obvious ones.

Rules: Send entries to Competition Editor, F&SF, Box 56, Cornwall, Conn. 06753. Entries must be received by August 1. Judges are the editors of F&SF; their decision is final. All entries become the property of F&SF; none can be returned.

Prizes: First prize, *Again, Dangerous Visions*, edited by Harlan Ellison, Doubleday, $12.95, 760 pages. Second prize, a Czech language anthology of sf, translated *from* English. Runners-up will receive one-year subscription to F&SF. Results of Competition 2 will appear in the November issue.

Fantasy and Science Fiction MARKET PLACE

BOOKS-MAGAZINES

SCIENTIFANTASY specialist: Books, magazines. Free catalog. Gerry de la Ree, 7 Cedarwood, Saddle River, N.J. 07458.

ONE issue of P.S. Magazine for $.75. Humor and nostalgia by Jean Shepherd, Nat Hentoff, Isaac Asimov, Alfred Bester, William Tenn, others. Mercury, Box 56, Cornwall, Conn. 06753.

SPECIALISTS: Science Fiction, Fantasy, Weird Fiction. Books, Pocketbooks. Lists issued. Stephen's Book Service, Post Office Box 321, Kings Park, L.I., New York 11754.

SF-FANTASY books (hardcover), mysteries, westerns. Scarce and OP titles. Free lists. Aspen Bookhouse, RD 1, Freeville, N.Y. 13068.

For Sale: Science fiction, westerns, others. Wanted: Doc Savage, Shadow, others. We buy collections. Send list, enclosing stamp. Magazine Center, Box 214, Little Rock, Ark. 72203.

SF-Fantasy books for sale. Gordon Barber, 35 Minneapolis Ave., Duluth, Minn. 55803.

"VOICELETS"—Love's cherished memorabilia. $2.00. Bookways, 436-FS Center, Fort Lee, N.J. 07024.

NEW ARKHAM HOUSE, MIRAGE, DONALD GRANT books at DISCOUNT PRICES! Free catalog. Sunset-Vine Bookmart, 1521 North Vine Street, Hollywood, Calif. 90028.

Catalogue of rare pulps and comic books: 25¢ Collections purchased! Terry Stroud, 3060 Descending Drive, Hacienda Heights, California 91745.

New fantasy fiction and features by Lovecraft, Howard, Norton, Carter, de Camp, others. 6 issues $3. #7 on sale. Back issues on request. Witchcraft & Sorcery, 1855 W. Main St., Alhambra, Ca. 91801.

"A Dream of Evolution," 45 pp., $2.50, revises that adv. in Oct. 1969 F&SF, Shumway, 1503 Paulding Rd., Ft. Wayne, Ind. 46806.

Out-Of-Print Fantasy, Weird Fiction, SF. Free lists. Ron Sigler, 321 Sherbourne # 607, Toronto, Canada.

KSK&DIJ: Two Years; soon to be published.

WANTED: Books published by Arkham House, Fantasy Press, etc. Pre-1950 pulp magazines. Singles, entire collections. Gerry de la Ree, 7 Cedarwood, Saddle River, N.J. 07458.

HPL — 144 pages, 120 illustrations, 24 articles, 20 stories. THE tribute to Lovecraft, $3. Frierson, Box 9032, Birmingham, Alabama 35213.

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Do you have something to advertise to sf readers? Books, magazines, typewriters, telescopes, computers, space-drives, or misc. Use the F&SF Market Place at these low, low rates: $3.00 for minimum of ten (10) words, plus 30¢ for each additional word. Send copy and remittance to: Adv. Dept., Fantasy and Science Fiction, P.O. Box 56, Cornwall, Conn. 06753.

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